A WORLD PERSPECTIVE OF ART APPRECIATION (GUSTLIN AND GUSTLIN) 2.0

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A World Perspective of Art Appreciation 2.0

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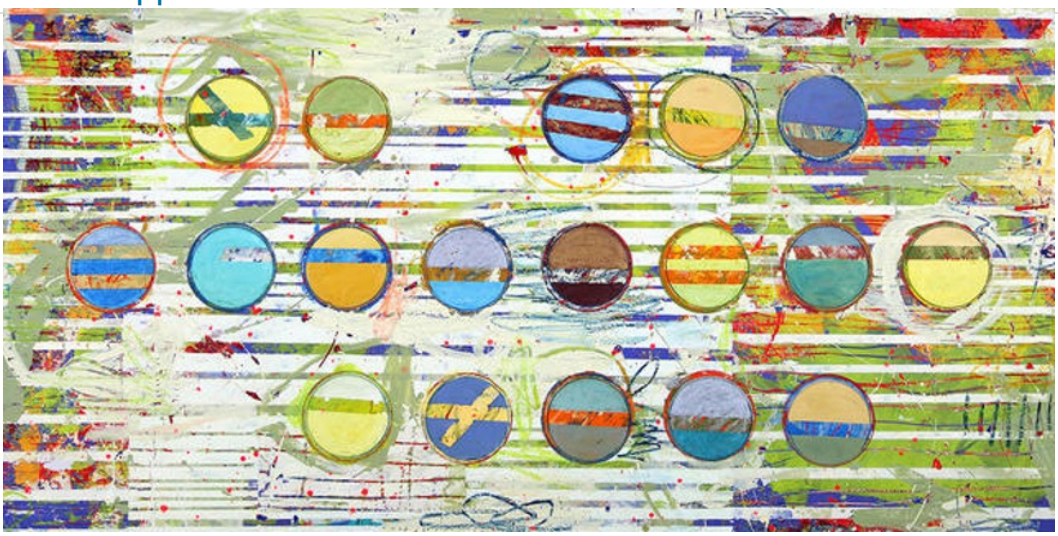
1.1: What Is Art Appreciation?



1.1 *Fibonacci 413* (courtesy of the artist) (CC BY Jylian Gustlin)

What Is Art Appreciation?

Appreciation of the visual arts goes beyond staring at a painting hanging on a museum wall—art is in everything and everywhere you look. Opening your eyes to the world of art is essential to understanding the world around you. Art is more than pretentious museums, where only a few enter and comprehend. Instead, art appreciation is:

- Gaining the knowledge to understand the art.
- Acquire the art methods and materials to discuss art verbally or by the written word.
- Ability to identify movements from ancient cultures to contemporary art.

Learning to appreciate art is a necessary cultural foundation, enabling people to critically analyze art, art forms, and how cultures use art. All it takes to understand art is to look!

Art appreciation centers on the ability to view art throughout history, focusing on the cultures and the people, and how art developed in specific periods. It is challenging to comprehend art without understanding the culture, its material usage, and its aesthetic sensibilities. Art is conveyed by the simple act of creating art for art's sake, and every person is born with the innate desire to create art. Art education broadens a person's comprehension, development, and vision of art. Art brings an understanding of diversity and how people lived in the past, connecting the issues of contemporary life to art today.

The history of the world is intertwined with the history of art. As humans roamed the earth for millions of years, evolution and environment shaped many different cultures depending on location, weather, natural resources, and food. These cultures formed the foundation of all art today. Art appreciation analyzes art using the methods and materials, allowing people to make connections to the context of art and the interactions of societies.

It is difficult to understand the art without understanding the culture. This video….

What is Art?

Every year, the city of Paris attracts 30 million tourists, of whom 20 million visit the Louvre. On every street corner, you are surrounded by sculptures, gardens, and incredible feats of architecture. Now imagine how many tourists would visit Paris if the city had no art. No paintings, no sculptures, no architecture. This is why we say art is priceless. We can't put a price on something that generates billions of dollars annually around the world. The economic impact of art alone is countless. Artists might not earn a lot compared to the average worker, but their contribution to society is immeasurable.

Why We Study Art

The average person only views each element for about thirty seconds when looking at art in museums, galleries, streets, or stores. How much do we miss in any piece of art in such a short time? However, if we look longer, we begin to see the context behind the art. You might notice the composition and how lines are positioned, textures in the artwork, materials the work is made from, or the colors an artist used to develop the piece of art. How you view any artwork is based on your personal and lived experiences and your cultural background. However, your perspective on art evolves as you learn about its creation in different cultures, and it becomes connected to the cultural context. Viewing artwork, along with its context and stories, allows us to deepen our understanding of art and the people and cultures behind it.

Why Does Art Matter?

Art history is much more than names, dates, and creepy babies. It helps us understand how history itself gets constructed and told. In this episode of Crash Course Art History, we'll learn how interpreting artwork reveals connections among all of us, across cultures and across time.

What is an Artist

An artist is a person from any culture engaged in one or more activities to create or practice art. Artists do not have to be professional; most of the time, art is relaxing and enjoyable, creating a sense of meaning in one's life. Artists throughout time were generally called artisans, a term used for someone who labored with their hands producing art. Art can be utilitarian, although gorgeous. For example, the pots created by the Jomon culture over 10,000 years ago were very utilitarian. Yet, they added unusual decorations to the outside of the pots with rope impressions to form different patterns.

Art historians have divided art into categories called art movements. A famous art movement known to many is the Renaissance. The Renaissance encompasses the art in Italy during the 14th and 15th centuries. The name Renaissance means "Rebirth," and it seemed an appropriate term to describe the dramatic evolution in art. Art movements usually consisted of the same style or

philosophy during a period. The movements usually were not named when they occurred; later, art historians arbitrarily assigned names based on similar styles and geographical groupings. Art movements have only been classified as movements by artists or commentators in the last 150 years, beginning with the Impressionists. Most art periods in the previous 150 years have been short, around ten years or less. The periods of art before modern art usually lasted 25-50 years.

Not all artists are famous or make a living selling art, but they still create interesting or different art. There are multiple employment opportunities in the broader field of art, as illustrated in Table 1.1.2. In the general art arena, jobs are vast and cover various opportunities for people from different backgrounds. Some areas may require a college degree, while others focus on informal training or experience. Jobs are varied; an artist may work for a large company, a small production group, or freelance. The artist's world is diverse and broad, with opportunities for personal enjoyment and self-expression.

Table of Jobs in the Fine Arts

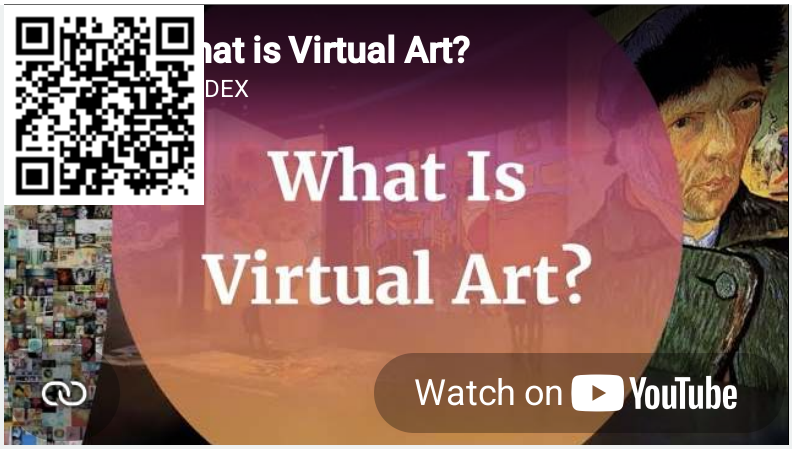
Applied Art	• Architect • Designers (Automotive, Furniture, Landscape, Industrial, Transportation, etc.)
Art and Art Studies	• Art Dealer • Art Historian • Professor • Teacher • Journalist • Writer • Poet • Museum Curator • Conservators
Fine Arts	• Caricaturist • Courtroom Sketch Artist • Ceramic Artist • Sculptor • Floral Designer • Glassblower • Metal Fabricator • Blacksmith • Graffiti • Mosaic • Muralist • Painter • Artists
Digital Arts	• 3D Animator or Modeler • Cartoon • Comic Book Artist • Computer Animator • Game Designer • Layout Artist • Logo Designer • Medical Illustrator • Multimedia and Print Designers • Video Games Development • Visual Effects • UI UX • Web Designers

Drama, Theater, and Performing Arts	• Actor • Director • Playwright • Screenwriter • Set Designer • Costume Designer • Comedian • Dancer • Singer
Fashion	• Designers (Accessories, Costumes, Clothing, Jewelry) • Makeup Artist • Textile Designer • Pattern Maker • Needleworker
Film and Television	• Cinematographer • Film Director • Film or Video Editor
Music	• Audio Engineer • Disc Jockey • Composer • Musician • Sound Effect or Voice-over Artists
Photography	• Advertising • Commercial • Fashion, Food, or Nature Photographers • Photo Retoucher • Photojournalist

Today's world is heavily influenced by technology, creating rapid changes in how people communicate, work, and create art. Contemporary artists increasingly use digital tools, computers, video, virtual reality, and interactive media instead of traditional materials such as paint or stone. Technology has expanded artistic possibilities, allowing artists to create immersive installations, manipulate images digitally, generate artworks through algorithms, and share their work instantly across the globe. The growth of the virtual world provides enormous opportunities for artists to experiment with new forms of creativity and continuously redefine the boundaries of artistic expression. As technology evolves, art also changes to reflect the ideas, challenges, and innovations of each generation. Digital media, animation, artificial intelligence, and interactive environments demonstrate how artistic practices continue adapting to new technological advancements. While traditional artistic methods remain important, contemporary artists now combine older techniques with modern technology to create entirely new visual experiences. This class explores the history of visual art beginning with prehistoric cave paintings and early civilizations, continuing through classical, medieval, Renaissance, modern, and contemporary movements, and ending with today's technological and digital art forms. By studying the evolution of art across time, students gain a deeper understanding of how human creativity reflects cultural beliefs, historical events, technological developments, and changing ideas throughout history.

What is Virtual Art?

Never before have people been exposed to so many different images and styles, as the world of imagery has changed quickly over recent years. And never before has how visual artists create images changed so fundamentally. The scale of encroachment of technology and media into work processes is a greater upheaval than other epochs we've known, and it has inevitably impacted large areas of art and its making. This video will explore the past, present, and future of virtual art.



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1.2: Art of the Past and the Origins of Creativity

Artistic Recurrence in Art History

Artists get their ideas from many places. Have you ever wondered where they come from? Why are they creating art, and what is the driving force behind their creation? Is it political, sacred, dreamscape, ceremonial, cultural, expression, therapy, illustrative, historical, literature, poetry, musical, theatrical, nature, narrative, exposing, thought-provoking, or experimental? Whatever it is, it comes from within the artist. The process is part of the journey, and the journey is the process. If a mistake happens, paint over it. There is no such thing as a mistake in art; it is just not finished. Art is only complete when the artist believes it is finished!

A common saying is, *"History always repeats itself."* In art history, this repetition is often visible through the phenomenon of artistic recurrence, where earlier styles and ideas resurface in new forms across different time periods. Artists are rarely working in isolation; instead, they look back to what has come before, reinterpreting older traditions to fit new cultural, social, or political contexts.

For instance, the Romans copied extensively from the Greeks, adopting their ideals of balance, harmony, and proportion. Early Cycladic figures (1.2.1) (c. 3000–2000 BCE) present abstracted, geometric bodies with simplified facial features and stiff, static postures. These minimal forms suggest both a symbolic and timeless quality. Centuries later, Michelangelo's David (1.2.2) demonstrates another moment of recurrence. While inspired by Greek classical sculpture, David shows Renaissance advancements: contrapposto stance, anatomical precision, and intense realism that breathe life into the marble. Here, the past (Greek influence) merges with the Renaissance focus on humanism.

Moving forward to the modern era, a 20th-century red abstract sculpture (1.2.3) may at first seem radically different. With free-form shapes and bold color, it appears divorced from the realism of earlier traditions. Yet, upon closer look, even this sculpture recalls ancient themes: its curves and dynamic forms suggest an animal figure, echoing humanity's long history of depicting creatures in art, from cave paintings to symbolic totems. In each case, the art of one period echoes the achievements of another. These echoes are not mere imitation but acts of reinterpretation—artists borrowing, transforming, and modernizing earlier ideas. This cycle of influence highlights that art is a continuous conversation across centuries.

Figure \(\PageIndex{1}\): Cycladic

(CC-BY-SA-4.0)

Figure \(\PageIndex{2}\): David

(David Gaya, CC BY-SA 3.0)

Figure \(\PageIndex{3}\): Red Sculpture

(Modern art, CC BY-SA 2.0)

Human Evolution and the Origins of Creativity

Over more than four million years, humans gradually evolved into the unique species we now call Homo Sapiens. One of the most remarkable aspects of this evolutionary journey was the steady increase in brain size and complexity, which allowed for advanced problem-solving, abstract thought, and eventually, artistic and cultural expression. Larger and more sophisticated brains enabled prehistoric humans not only to survive but also to form organized groups, develop communication, and pass knowledge across generations.

Among the most revolutionary achievements of the Stone Age was the discovery and controlled use of fire (1.2.4). Fire provided warmth, light, protection from predators, and the ability to cook food, which in turn enhanced nutrition and further supported brain development. While scholarly consensus suggests that humans mastered fire around 400,000 years ago, some researchers argue that

fire use may have begun much earlier, perhaps over a million years ago. Regardless of the exact date, fire fundamentally transformed human life, marking a turning point in both biological evolution and cultural development.

As the human brain evolved, its capacity began to reflect two complementary ways of understanding the world: through science (observation, experimentation, and practical problem-solving) and the humanities (storytelling, ritual, symbolic thought, and art). These divisions are not separate but deeply interconnected, and they originated eons ago as prehistoric people began making tools, creating cave paintings, and building social systems. Together, these early developments laid the foundation for the rich complexity of modern human culture. Did the stories about the chiaroscuro firelight, with singing, dancing, and chanting, lead to drawing on the walls of caves or rock outcrops, recording their epic hunts or daily lives? The unification of small nomadic groups of people required rules and regulations, which may have begun around the campfire.

Figure \(\PageIndex{4}\): Campfire (Tony Webster; CC BY-SA 2.0)

According to carbon dating methods, one of the earliest known artworks is the Venus of Willendorf (1.2.5), a small limestone figurine discovered in Austria. This work, along with cave art such as the paintings at Lascaux and Chauvet, reflects the symbolic and creative expression of Paleolithic peoples, long before the rise of formal civilizations. These artworks suggest early humans sought to represent fertility, ritual, and meaning in their lives through visual forms.

For much of the 19th and 20th centuries, anthropologists referred to Mesopotamia as the *"Cradle of Civilization,"* since it was the earliest known region where writing, urban life, and large-scale agriculture flourished. Cultural anthropologists have traditionally defined a civilization by the emergence of specific key characteristics: written language, agriculture, animal domestication, permanent settlements, and monumental public buildings. These developments marked a shift from nomadic hunter-gatherer groups to complex, organized societies.

Today, however, scholars recognize that Mesopotamia was not the only cradle. Independent centers of early civilization also developed in Ancient Egypt along the Nile River, the Indus Valley, Ancient China along the Yellow River, the Central Andes of South America, and Mesoamerica (including the Olmec and Maya). Each of these regions independently created writing systems, agricultural methods, social hierarchies, and monumental architecture, contributing to humanity's shared story of innovation and cultural growth. While early artworks like the Venus of Willendorf represent humanity's symbolic beginnings, the multiple "cradles of civilization" represent humanity's organized expansion into complex societies across the globe.

Figure \(\PageIndex{5}\): *Venus of Willendorf* (CC BY 2.5)

Expanding the Scope of Art Appreciation

As human creativity continued to evolve, societies used the natural resources around them to construct remarkable cultural achievements. From stone, clay, and wood, communities built palaces, temples, tombs, and monumental structures that rose out of the earth as lasting testaments to their beliefs, politics, and values. These works of architecture and art were not merely functional but reflected the identity and aspirations of entire civilizations. Traditional approaches to art appreciation often focus on a familiar canon: the art of Ancient Egypt, Greece, Rome, the Renaissance, and Modern Europe. While these cultures undeniably shaped Western traditions, such a narrow lens risks overlooking the rich artistic heritage of the wider world.

This textbook moves beyond that limited perspective, examining the art and culture of societies across all six inhabited continents. By doing so, it highlights that creativity is not the achievement of a single region but a universal human trait expressed in countless ways. From the textiles of the Andes to the carvings of Oceania, from African ritual masks to Native North American earthworks, the diversity of global art forms reveals the many ways cultures have sought to interpret their world. Exploring art outside the traditional canon is essential for a deeper appreciation of humanity's shared creativity. By understanding the origins of art and the ways it connects across time and place, students can recognize both the uniqueness of individual cultures and the common threads that bind artistic expression worldwide.

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1.3: What are BCE and CE?

Over time, ancient civilizations calculated and wrote about the passing of time differently from how we do today. In Mesopotamia and Egypt, the calendars were based on the king or the seasons, as dictated by their respective religious beliefs. In Rome, time was counted from the founding of Rome and changed periodically by rulers. In Mesoamerica, the Aztec Calendar (1.3.1) was the system used by the Pre-Columbian people, a 365-day calendar defining a century as 52 years long and based on the sun, a sacred symbol. Since time was established thousands of years ago by many different cultures, no single system has been used.

Figure \(\PageIndex{1}\): Stone of Five Suns (El Comandante, CC BY-SA 3.0)

In 1592, Pope Gregory XIII revised the Julian calendar and created the Gregorian calendar. The calendar is based on the Earth's rotation around the sun. Today, most of the world follows the Gregorian calendar because it is a global standard that facilitates worldwide businesses, international trade, and government interactions. However, other calendars still exist and are used for different activities. The Chinese calendar still defines dates for holidays and auspicious times for weddings and funerals. The Jewish and Islamic calendars also determine essential holidays and festivals. The Persian calendar parallels the Gregorian calendar and is still the official calendar in Iran and Afghanistan.

In the 6th century, Dionysius Exiguus, a Christian monk, established the Anno Domino (AD) and Before Christ (BC) as the reference date for the year zero in Europe based on the tenets of Christianity. The scholarly alternative to the current Christian designations for time is named Before the Common Era (BCE) and Common Era (CE). Academic and scientific publications and studies have adopted it to emphasize secularism and inclusiveness. The new designation removed the specific religious designation from the calendar; instead, the new naming convention is more meaningful across the globe.

Scholars have readily adopted the new BCE/CE designation for communication and modernizing a worldwide standard. Many cultures today use a dual calendar designation, the BCE/CE standard, and their unique historical calendars. This textbook uses BCE and CE as a contemporary designation for all cultures worldwide. For example, if art were discussed from Mesopotamia 5,000 years ago, it would state "in Mesopotamia, 3,000 BCE…". If discussing Gothic art, it would state "Gothic art, 1342 CE, the architectural style…". Using BCE for all dates to the year zero and CE for all dates after year zero is a simple clarification. Regardless of the calendar, all dates are based on estimations since no one knows when the year zero started.

BCE and CE Explained

Understand what the abbreviations AD, BC, CE and BCE mean.

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1.4: How to Compare and Contrast Art

> Art is everywhere you look, everything you wear, and art is beauty. Just look around...

Comparing modern and historic paintings brings an understanding of how the past influences the present. Learning the elements of art, design, and art methods will help you communicate and write in a new language to compare and contrast art. This chapter demonstrates the differences in ordinary images of horses, figures, sunflowers, and dots. Like a new language, comparing art becomes more familiar the more the terms used in written descriptions. Looking at art is the foundation of learning how to write descriptive essays. The longer you look, the more information you see, like the brush marks. Asking yourself questions about the brush marks can help you define the type of art you are looking at. Impressionism used significant broad-brush marks with visible slabs of paint. Meanwhile, Renaissance artists used oil paint with almost hidden brush marks, giving the painting a lifelike look. Distinctive observations will help you decide what period of art is defined in a painting.

Comparing Horses

The two paintings, *Relay Hunting* (1.4.1) and *Foundation Sire* (1.4.2), were created 170 years apart and are as realistic as yesterday's photographs. Both images portray horses predominantly facing away from the viewer, displaying sturdy hind legs and taut muscles. The shining sun marks their coats, reflecting highlights and emphasizing the muscle structure of the animals. Both artists realistically depict the horses, causing the viewer to take a second look at the exquisite details of the horses and the surroundings. Each painting has trees in the background against the blue sky to create depth and the horizon. Both artists used the horses' shadows to project the sun's position and how the light illuminates the scene.

Figure \(\PageIndex{1}\): *Relay Hunting* (Public Domain)

Figure \(\PageIndex{2}\): *Foundation Sire* (David Gustlin)

In realistic paintings, both artists focused on detail based on their study of horse anatomy. Rosa Bonheur, who painted the three horses in *Relay Hunting*, went to meat processing plants and studied the anatomy of the horses while she dissected the animals. Most artists study anatomy as part of their education. Understanding the body's muscle and bone structure benefits the artists' ability to draw realistic people and animals.

Figure \(\PageIndex{3}\): Image of a horse from Lascaux Caves (Public Domain)

Figure \(\PageIndex{4}\): *Study of Horses* (Public Domain)

The representation of horses throughout human time began on the cave wall with the Image of a horse (1.4.3) in the Lascaux Caves. We see horses immortalized in bronze statues, captured on film, or drawn as in *Study of Horses* (1.4.4) by Leonardo, painted in *Blue Horses* (1.4.6), etched and colored in *Knight, Death and the Devil* (1.4.5). Horses have been a mode of transportation for thousands of years, and the equine image has been traditional portraiture throughout the ages. These pictures of different types of horses demonstrate they can be drawn or painted in many styles. The details in the etched *Knight, Death, and the Devil* establish the artist as a detail-orientated person instead of *Blue Horses*, demonstrating a looser painting style with bold colors.

Figure \(\PageIndex{5}\): *Knight, Death, and the Devil* (Public Domain)

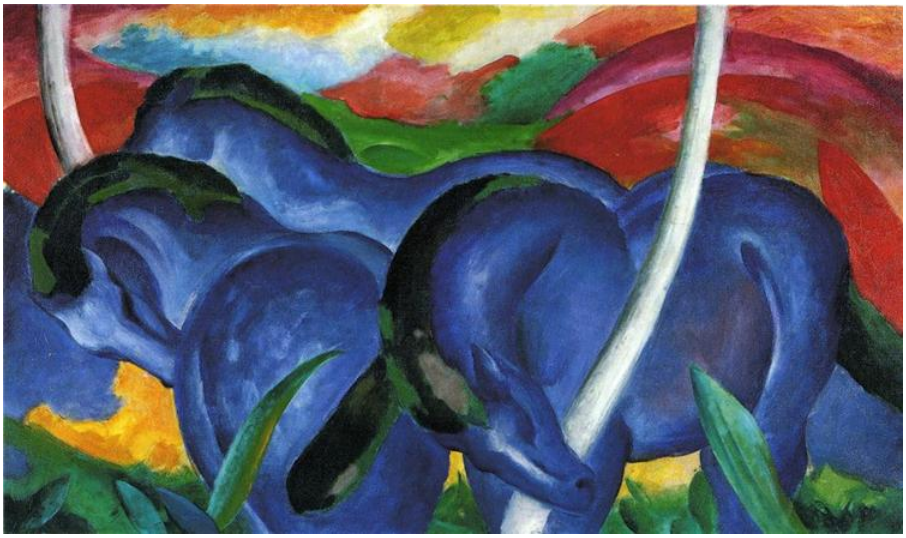

Figure \(\PageIndex{6}\): *Blue Horses* (Public Domain)

Comparing Figures

At first glance, *The Birth of Venus* (1.4.7) and *Rara Avis 19* (1.4.8) look entirely different, or are they? Take a closer look at the two figures—what is the one similar object in both paintings? The woman in the center! Both poses are similar and expressionless

except for what the viewer reads into it. The figures display no movement, a static pose with elongated legs and feet. Neither one of the artists gives any weight to the body or uses any type of deep perspective space. Both figures have an impossible pose, shifting weight over one hip. They appear to emerge from the water as if being born from the sea.

Figure \(\PageIndex{7}\): *The Birth of Venus* (Public Domain)

Figure \(\PageIndex{8}\): *Rara Avis 19* (Courtesy of the Artist)

They are both colorful and have the impression of a background, land, sea, and trees. However, these two paintings are over 500 years apart: the *Birth of Venus* by Sandro Botticelli in 1486 and *Rara Avis 19* by Jylian Gustlin in 2014. Botticelli painted in oils on canvas, and his Venus is aloof and uninterested in her surroundings. Gustlin works in acrylic and oil paints on board, using the effects of layers to achieve her distinct and intricate paintings. The figures in the landscape frequently show a moody and brooding figure, yet simultaneously depict a sense of the future. One figure is set in a literal translation and the other in a modern view, yet each one escapes from reality.

Comparing Sunflowers

These two pieces of art display the gorgeous sunflower at the height of its flowering. The yellow petals open up towards the sunshine, offering seeds to passing birds. The hint of brown color on the leaves tells the viewer that the fall weather is coming.

These two art pieces are about 140 years apart. One is in paint, and the other is on painted fabric. The *Sunflowers* (1.4.9) in the vase were by Vincent Van Gogh in 1887, and the sunflower quilt (1.4.10) was by an unknown quilter in 2004.

Figure \(\PageIndex{9}\): *Sunflowers* (Public Domain)

Figure \(\PageIndex{10}\): *Sunflower quilt* (Courtesy of the Artist)

The two pieces have many similar components; for example, the petals of the sunflowers are yellow with brown seed pods in the centers, both pictures fill the space, and both are painted. The differences are more significant because the quilted sunflowers highly contrast against the dark brown fabric; the flowers in the vase are against a pale blue background. The bright yellow flowers are contrasted by either a dark or light background. The quilt shows flowers arranged in a space not anchored to stems or in a vase, as seen in the painting. However, all of Van Gogh's are anchored, and some seem to float.

The painting process is also different. Van Gogh painted his sunflowers on canvas with oil paints. The painted quilt fabric became the palette for the sunflowers, with mostly yellows, browns, greens, and oranges in a random array of colors for highlights, cut into individual leaves and arranged on the background fabric. Both pieces are similar works of art created in different periods with different materials.

Comparing Dots

Dots or points are fundamental forms in art. In artistic work, dots can be single or thousands, creating images that we may or may not recognize. They can be spaced far apart or close together, in different colors, monochromatic, or just one color. All drawings start with a single dot from the tip of the pencil, and as the pencil moves, it forms a continuous line of dots, making the dot a key element in art.

Dots become the focal point of the art, and the space between them is just as important as the dot itself. The dot can create tension or harmony based on its color, size, and proximity to other dots. As dots are placed closer together, they form a recognizable object or shape.

Yayoi Kusama is considered the 'Princess of Polka Dots' for using large, distinct polka dots in her two sculptures, *Flowers* (1.4.11) and *Life is the Heart of a Rainbow* (1.4.12). In *Flowers*, the massive flowers are decorated with oversized, colorful dots on the outer petals and smaller, closely packed dots. Kusama used multiple colors to create contrast as viewers walk around the sculpture. The hanging yellow balls feature highly contrasting black dots spaced far apart. The dots come in two sizes. Each yellow ball can also be seen as a three-dimensional dot in space.

Figure \(\PageIndex{11}\): *Flowers* (Groume, CC BY-SA 2.0)

Figure \(\PageIndex{12}\): *Life is the Heart of a Rainbow* (Kgbo, CC BY-SA 4.0)

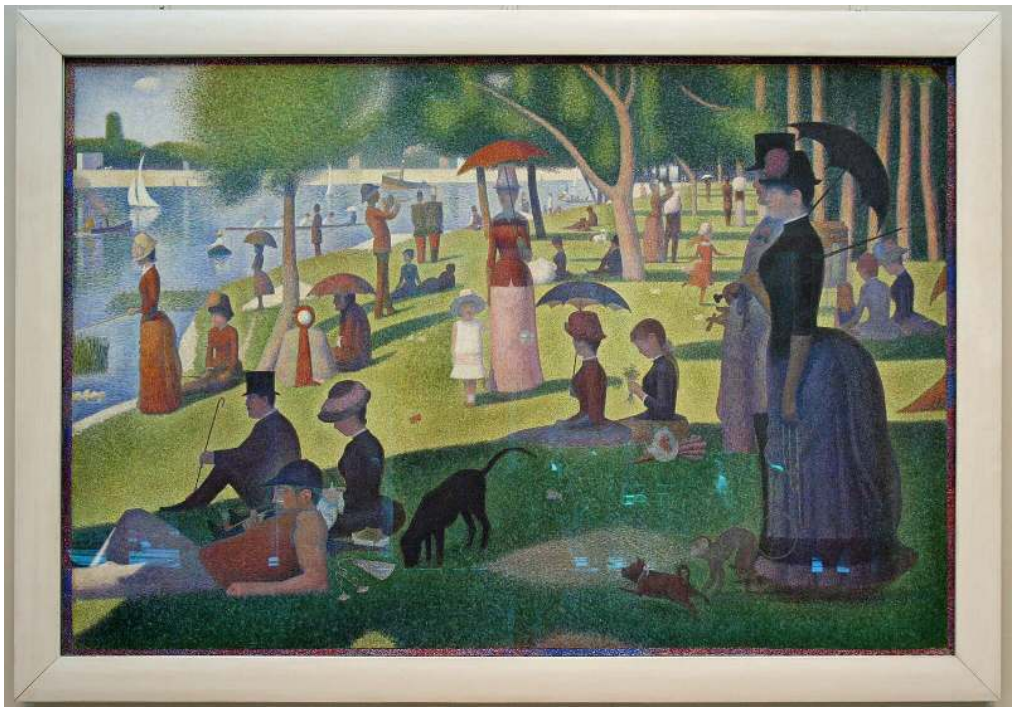

Figure \(\PageIndex{13}\): *A Sunday Afternoon on the Island of La Grande Jatte* (Bert Kaufmann, CC BY 2.0)

George Seurat pioneered a unique painting technique known as Pointillism, which he developed after branching out from the Impressionist movement. This innovative approach involves applying tiny, distinct dots of pure color onto the canvas. The technique relies on the viewer's eye and brain to blend these dots of color optically, forming a cohesive and detailed scene when viewed from a distance. When observed up close, the individual dots and brush strokes are clearly visible, revealing the meticulous craftsmanship behind the work. However, as the viewer steps back several feet, the individual points merge visually, resulting in a vibrant and lifelike image that captures the essence of the scene. One of Seurat's most famous works, **A Sunday Afternoon on the Island of La Grande Jatte** (1.4.13), exemplifies this technique and significantly transformed the art world at the dawn of the 20th century. This masterpiece not only demonstrated the scientific principles of optical blending but also inspired countless artists to experiment with dot-based techniques, leaving a lasting impact on modern art. The three paintings are all made from dots—small dots, large dots, and colored dots—on the canvas, on walls, suspended from the ceiling, or floating in space. The size and color of each dot matter and can create a completely different experience for the viewer.

How to do visual (formal) analysis in art history

Giovanni Bellini, Madonna of the Meadow, c. 1500, oil and egg on synthetic panel, transferred from wood, 67.3 x 86.4 cm (The National Gallery)

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1.5: What Are the Elements of Art?

Definition: Term

- **Color** – The element of art produced by light, including hue, intensity, and value. Color can create mood, emphasis, and meaning.
- **Value** – The lightness or darkness of a color or tone in an artwork. Value creates depth, shading, and contrast.
- **Form** – A three-dimensional object with height, width, and depth, such as a cube, sphere, or sculpture.
- **Line** – A mark made by a moving point that can vary in width, length, direction, and texture. Lines can outline shapes or create movement and emotion.
- **Shape** – A two-dimensional enclosed area defined by lines, colors, or textures. Shapes may be geometric or organic.
- **Space** – The area around, between, above, below, or within objects in an artwork. Space can create depth and perspective.
- **Texture** – The surface quality of an object that may appear rough, smooth, soft, or hard, either physically or visually implied.

Visual art terms describe the building blocks used by artists to create an image or composition. The terms are separated into the Elements of Art and Design and the Principles of Art and Design. **The Elements of Art and Design are color, value, form, line, shape, space, and texture.** The elements of design are the methods artists use to create a mood and evoke feelings by moving the viewer's eye into the artwork. **The Principles of Art and Design are balance, emphasis & contrast, movement, pattern & repetition, rhythm, proportion, unity, and variety.** The principles of design are concepts artists use to make artwork pleasing or controversial to the viewer. In addition to the elements and principles of design, the artist uses materials of any type, including traditional paint, clay, bronze, pastels, or nontraditional natural or artificial materials. Understanding art methods will help define and determine how the culture created art and the use of that art.

Over the years, art techniques have evolved; for example, the acrylic paint used today is different from the earth-based paint used in cave art 30,000 years ago. People have advanced and discovered new materials and methods to extract minerals from the earth to create art supplies. Humans have always sought new and better inventions, from the stone, bronze, and iron ages to the modern technology era. However, access to materials is the most important factor driving changes in civilizations. Almost every civilization had access to clay and could make vessels. But when specific raw materials were only available in certain areas, people traded with others who wanted that resource. For example, on ancient trade routes, China produced and processed raw silk into beautiful fabric, which was highly prized by the Venetians in Italy for making clothing.

Elements of Design

The art methods are considered the building blocks for any category of art. When artists train in art elements, they learn to overlap the elements to create visual components. Elements can be used in isolation or combined into one piece of art. Every piece of art must contain at least one element, and most art pieces have at least two or more. The elements are color, value, form, line, shape, space, and texture

The Elements of Art

Instructional video for art students. This video explains the seven elements of art.

Color

Color is the visual perception of light reflected off a surface as seen by the human eye. The modern color wheel is designed to explain how colors are arranged and how they interact with each other. The **primary colors** (1.5.1) are red, yellow, and blue. Blue, red, and yellow are foundational colors and cannot be made from any other color combination. All other possible colors are derived from these three colors.

The second circle illustrates the **secondary colors** (1.5.2) of orange, violet, and green, each based on mixing two primary colors. Red and blue mixed together form purple, red and yellow form orange, and blue and yellow create green. The **tertiary colors** (1.5.3) are a mixture of a primary color with an adjacent secondary color to create hues of yellow-orange, red-violet, blue-green, blue-violet, yellow-green, or red-orange.

Complementary colors (1.5.4) are opposite colors found on the color wheel across from each other. Complementary colors create highly contrasting colors. **Analogous colors** (1.5.5) are derived from three neighboring colors and bring a harmonious appearance. Colors are classified as warm or cool (1.5.6) based on their position on the color spectrum. Blues and greens are found on the cool side, and reds and yellows on the warm side.

Figure \(\PageIndex{1}\): Primary Color Wheel (thirtydaysweater, CC BY-NC-ND 2.0)

Figure \(\PageIndex{2}\): Secondary Color Wheel (thirtydaysweater, CC BY-NC-ND 2.0)

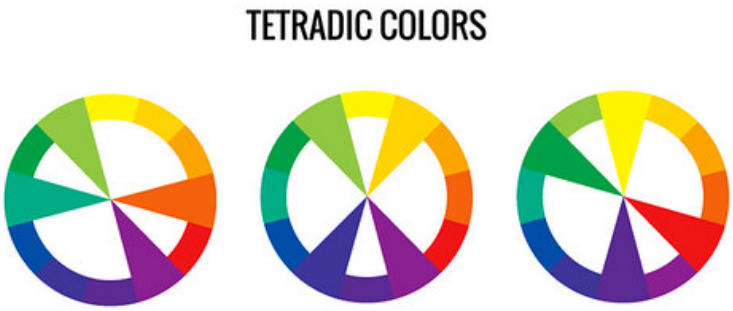

Figure \(\PageIndex{3}\): Tetradic Color Wheel (thirtydaysweater, CC BY-NC-ND 2.0)

Figure \(\PageIndex{4}\): Complementary colors (thirtydaysweater, CC BY-NC-ND 2.0)

Figure \(\PageIndex{5}\): Analogous Colors (thirtydaysweater, CC BY-NC-ND 2.0)

Figure \(\PageIndex{6}\): Warm and Cool Colors (Original by Maulucioni Vectorization by Guypeter4, based off BYR color wheel.svg by Sakurambo, CC BY-SA 4.0)

Introduction to Color Theory

Saturation? Hue? Let's get these definitions down right! Please note that the color wheel covered in this video is a more Traditional color wheel.

Value

Value refers to how adding black or white to a color changes its shade (1.5.7). Adding black makes a color darker, while adding white makes it lighter, providing artists with gradations for shading or highlighting in a painting. Contrasting value with various levels of dark and light separates and individualizes objects. The intensity of a color occurs when it is fully saturated and in its

purest form. Primary colors are the three fully saturated hues in their purest state. As saturation decreases, the color appears washed out when white or black is added.

The magnified views of the stamens and pollen in flowers (1.5.8) show various shades of yellow or black-and-white. Different black shades are added to the recessed areas in each image. Adding white enhances contrast and makes these areas stand out more. Gradation is quite clear in the black-and-white photos, as darker areas recede and help define each individual stamen.

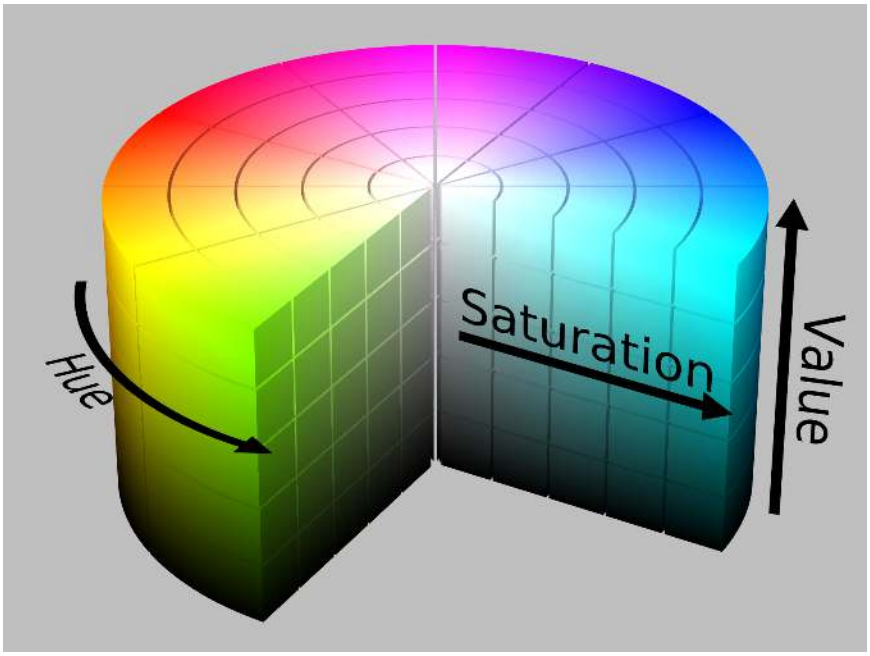

Figure \(\PageIndex{7}\): Hue, saturation, and value (CC BY-SA 3.0)

Figure \(\PageIndex{8}\): Examples of value and gradation (Engineering at Cambridge, CC BY-NC-ND 2.0)

The form gives shape to a piece of art, whether it's the constraints of a line in a painting or the edges of a sculpture. The shape can be two-dimensional or three-dimensional, limited to height and width, or free-flowing. The form also expresses all the formal elements of art in a work, which can be **geometric** or **organic**. The stones (1.5.9) are formal, each shaped into matching and perfect circles, creating a geometric form. The sculpture (1.5.10) is free-flowing and is not formed into perfect, uniform measurements.

Figure \(\PageIndex{9}\): Geometric form (infomatique, CC BY-SA 2.0)

Figure \(\PageIndex{10}\): Organic form (14GTR, CC BY-SA 4.0)

A line in art is mainly a dot or a series of connected dots. These dots form a line that can vary in weight (thickness or thinness), color, direction, or length. A line is two-dimensional unless the artist adds volume or mass to it. When an artist uses multiple lines, they develop into a more recognizable drawing than a single line, creating a shape that closely resembles its exterior form. Lines can also be implied, such as when an arrow points upward; the viewer's eyes follow the implied direction without an actual line.

The lines in the drawing (1.5.11) are dominant; however, each line has a different weight and direction. The line outlining the empty road is implied and guides the eye across the image and over the bridge. The lines forming the houses are similar in weight and create the main features of the drawing. The blurred lines behind the houses suggest a hillside, trees, or waving grasses. Some lines are heavy and dark to add depth and position the houses below the implied hills.

Figure \(\PageIndex{11}\): Lines (roberthuffstutter, CC BY-NC 2.0)

Shape

The shape of an artwork can have many meanings. Shape is defined as having an outline or boundary, whether it is two- or three-dimensional. Shapes can be geometric (predictable) or organic (free-form). Space and shape often work together in most artworks. The first image (1.5.12) shows different geometric shapes. Although the white circle shape dominates the image, an oval represents a shadow of the circle. The entire painting is based on a rectangle; the upper orange section is a square, and the blue section is a rectangle. Most shapes in the second image (1.5.13) are organic and free-form, as the blue shape moves around the painting. However, there are some clear geometric shapes, like the turquoise square, and a few partially hidden geometric shapes.

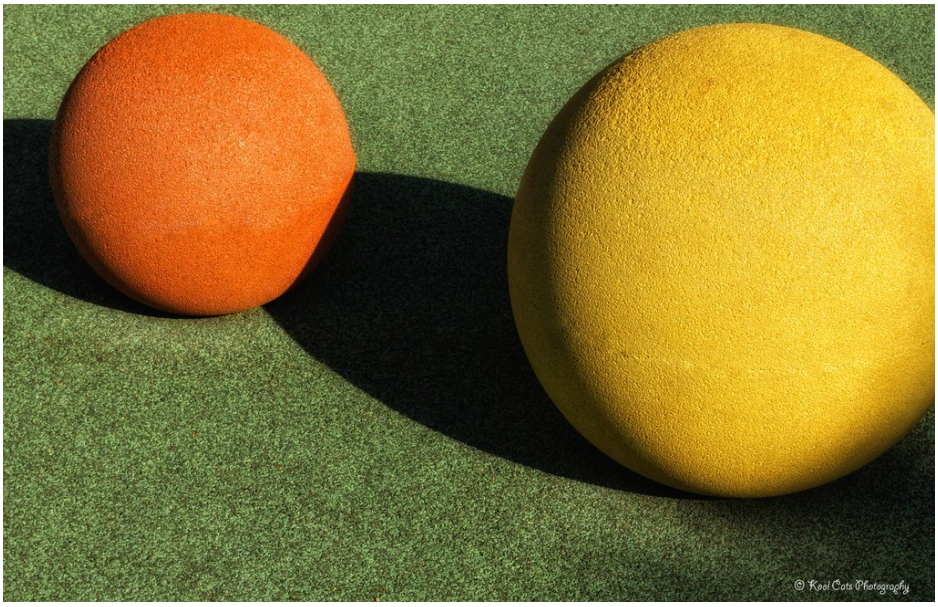

Figure \(\PageIndex{12}\): Sphere (Kool Cat, CC BY-NC 2.0)

Figure \(\PageIndex{13}\): Organic Shape (Vicki & Chuck Rogers, CC BY-NC-SA 2.0)

Space

Space surrounds the focal point of an artwork and can be positive or negative, shallow or deep, open or closed. The main shape or element in the piece occupies positive space, while negative space is the unfilled area. For example, the gold background on the Japanese screen (1.5.14) forms the negative space and makes up a large part of the artwork. The expansive space evokes feelings of tranquility and calmness. The cranes symbolize the positive space. Space can also be illusionary, with negative and positive spaces swapping places. In the image of interchangeable space (1.5.15), if the viewer focuses on the white shape, a cup appears. But if they focus on the two black areas, they look like two faces in profile.

Figure \(\PageIndex{14}\): Space (Fæ, CC BY 2.0)

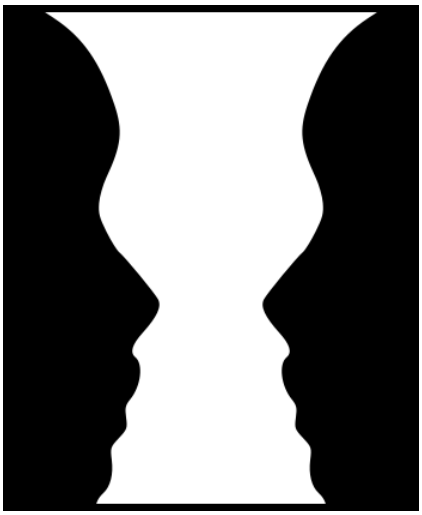

Figure \(\PageIndex{15}\): Interchangeable space (Bryan Derksen, CC BY-SA 3.0)

Texture

Texture can feel rough or smooth to the touch, mimicking a specific sensation. It also influences how your eye perceives a surface, whether flat with little texture or showing variations that resemble rock, wood, stone, or fabric. Artists add texture to buildings, landscapes, and portraits through brushwork and multiple layers of paint, creating an illusion of reality and demonstrating **tactile texture** (1.5.16). The bricks in the building, the grillwork on the windows, and the cobblestone streets all look real and touchable in the painting. The other type is **visual texture** (1.5.17), formed by painting techniques used on a two-dimensional surface to suggest a three-dimensional effect. The folds in the tablecloth, the rounded appearance of the fruit basket, and the realistic look of the fruit and flowers all produce visual texture.

Figure \(\PageIndex{16}\): Tactile texture (Public Domain)

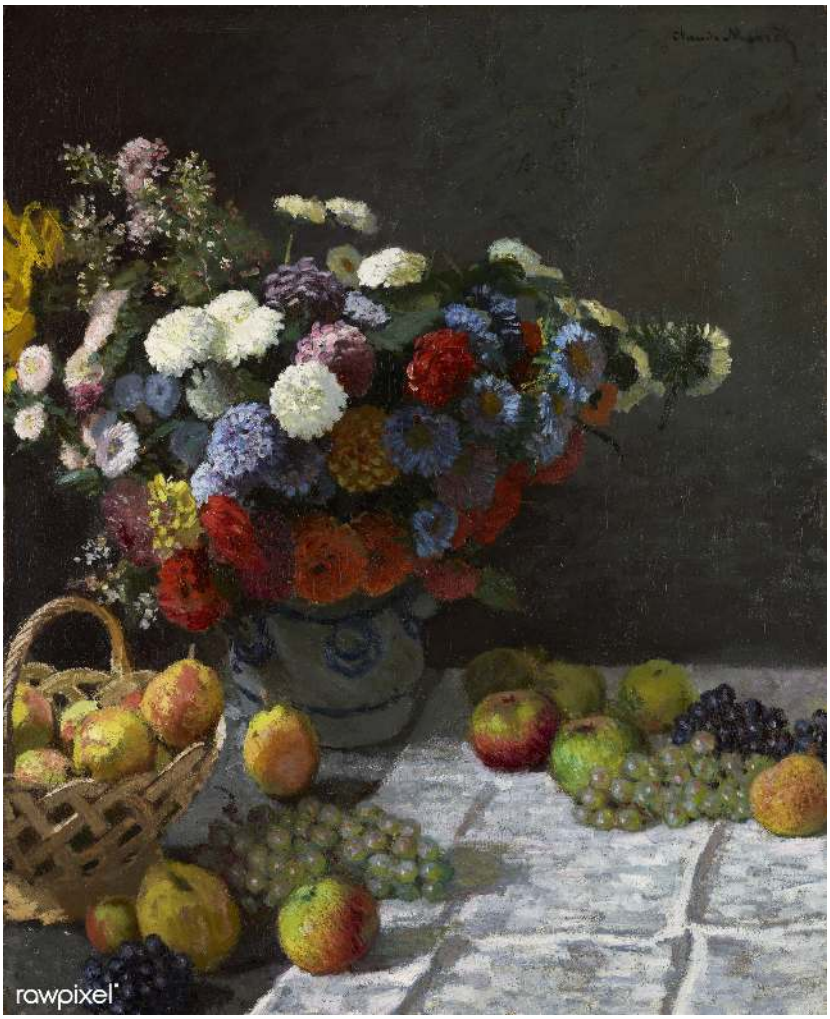

Figure \(\PageIndex{17}\): Visual texture (Rawpixel Ltd, CC BY 2.0)

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1.6: What are the Principles of Art

Definition: Term

- **Balance** – The distribution of visual weight in an artwork to create stability or equilibrium. Balance may be symmetrical, asymmetrical, or radial.
- **Emphasis** – The area or object in an artwork that attracts the viewer's attention first; the focal point of the composition.
- **Contrast** – The use of differences such as light versus dark, rough versus smooth, or large versus small to create visual interest and emphasis.
- **Movement** – The way an artist guides the viewer's eye through an artwork using lines, shapes, colors, or repeated forms.
- **Pattern** – The repeated use of elements such as shapes, colors, or lines in a predictable arrangement.
- **Repetition** – The reuse of visual elements throughout an artwork to create consistency and organization.
- **Rhythm** – A sense of visual flow or motion created through repeated elements and patterns, similar to rhythm in music.
- **Proportion** – The relationship of sizes between objects, figures, or parts of an artwork.
- **Unity** – The sense of harmony and completeness achieved when all parts of an artwork work together successfully.
- **Variety** – The use of different elements, details, or ideas to create visual interest and avoid monotony in an artwork.

Visual art terms describe the building blocks used by artists to create an image or composition. The terms are separated into the Elements of Art and Design and the Principles of Art and Design. **The Elements of Art and Design are color, value, form, line, shape, space, and texture.** The elements of design are the methods artists use to create a mood and evoke feelings by moving the viewer's eye into the artwork. **The Principles of Art and Design are balance, emphasis & contrast, movement, pattern & repetition, rhythm, proportion, unity, and variety.** The principles of design are concepts artists use to make artwork pleasing or controversial to the viewer. In addition to the elements and principles of design, the artist uses materials of any type, including traditional paint, clay, bronze, pastels, or nontraditional natural or artificial materials. Understanding art methods will help define and determine how the culture created art and the use of that art.

Over the years, art techniques have evolved; for example, the acrylic paint used today is different from the earth-based paint used in cave art 30,000 years ago. People have advanced and discovered new materials and methods to extract minerals from the earth to create art supplies. Humans have always sought new and better inventions, from the stone, bronze, and iron ages to the modern technology era. However, access to materials is the most important factor driving changes in civilizations. Almost every civilization had access to clay and could make vessels. But when specific raw materials were only available in certain areas, people traded with others who wanted that resource. For example, on ancient trade routes, China produced and processed raw silk into beautiful fabric, which was highly prized by the Venetians in Italy for making clothing.

Principles of Design

The principles of art and design include the methods artists use to organize the elements in their artwork. All of the principles are not incorporated in one image; however, the principles are intertwined, and how they are used is based on the dependency of another principle. An artist may use contrast to create emphasis. The principles include balance, emphasis & contrast, movement, pattern & repetition, rhythm, proportion, unity, and variety.

Principles of Design

This is an introduction to the Principles of Design.

Balance

The balance in a piece of art refers to the actual or apparent distribution of visual weight. It may be an illusion created by the art that gives a sense of balance; however, imbalance can cause discomfort for the viewer. How objects are arranged, the colors of different elements, and the relationship of objects to space all require balance. Balance can be symmetrical, asymmetrical, or radial.

The Taj Mahal (1.6.1) was designed and built with perfect symmetrical balance, as seen in the towers, the garden, and the placement of each element. The photograph is symmetrical, clearly reflecting the Taj Mahal in the pool. The yarn necklace (1.6.2) is off balance, with the balls on one side more prominent than on the other. The green ball in the middle could serve as the balance point, but the balls become smaller on one side and then fit in the same space as the two larger balls. Overall, the layout of the necklace shows some symmetrical balance. The peacock (1.6.3) has a stunning set of tail feathers forming a fan shape. Using the bird's body as the center point, the feathers fan out with perfect radial symmetry.

Figure \(\PageIndex{1}\): Symmetrical balance (Salva Boada, CC BY-NC-ND 2.0)

Figure \(\PageIndex{2}\): Asymmetrical balance (rRradionica, CC BY-NC-ND 2.0)

Figure \(\PageIndex{3}\): Radial balance (Mathias Appel, CC0 1.0)

Emphasis & Contrast

Emphasis can be created through color, unity, balance, or other principles and elements of art used to establish a focal point. Artists might use emphasis (1.6.4) by placing a red object on a blue background. The contrast between the gold and black makes the white graphics stand out, drawing attention as the focal point. The variation in the sizes of the white circles adds a sense of motion.

Contrast involves the use of differences in color and placement to create visual interest in art. For example, black and white provide a stark contrast that energizes a piece, but too much contrast can also ruin it. Conversely, contrast can be subtle when using monochromatic colors, adding variety and unity to the artwork. The green apple (1.6.5) stands out against the orange, creating a striking contrast, and it's impossible to miss the single contrasting element. Both emphasis and contrast can be used interchangeably, offering the artist different ways to draw focus to any part of the artwork.

Figure \(\PageIndex{4}\): Emphasis (Public Domain)

Figure \(\PageIndex{5}\): Contrast (TheBusyBrain, CC BY 2.0)

Movement

Movement is the pathway the artist intends the viewer to follow within the artwork or design. Movement also evokes a sense of action and can be created with any type of curvy or diagonal line, whether real or implied. It can create an illusion of space, be suggested by the placement of edges, or achieved through repeated elements. Features like the roadway, fences, and trees (1.6.6) all contribute to conveying movement in the image. Although the pathway is straight and clearly visible, the destination remains unknown, creating an illusion of where the viewer might go. The path through the flowers (1.6.7) shows a curved road with open views and a hypothetical destination—a large building. Both artists used movement to guide the viewer through their artworks.

Infographic movement uses dotted lines and arrows on charts (1.6.8) to guide viewers through an image. Arrows and lines are common ways to show movement in a chart. The lines help viewers follow and understand the parts of the charts in the correct order.

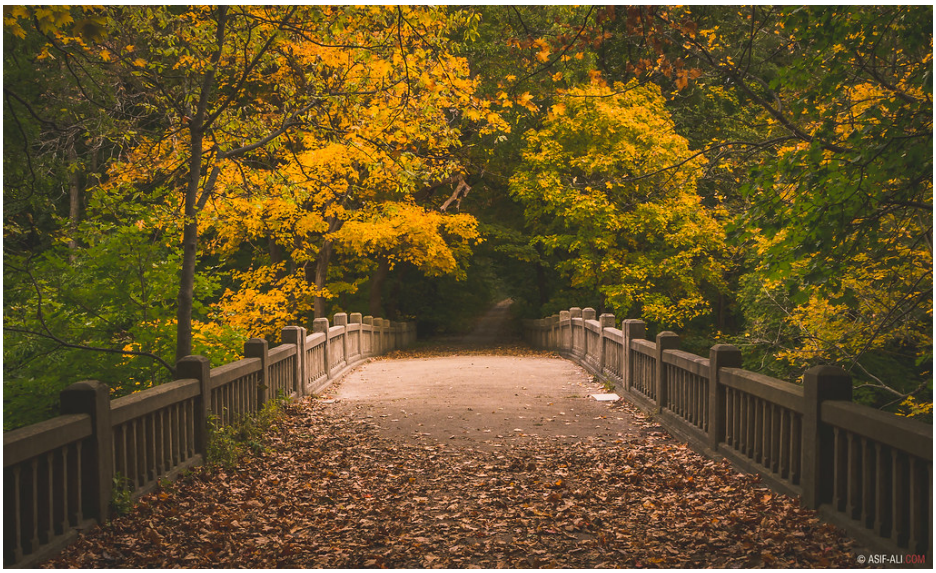

Figure \(\PageIndex{6}\): Movement through trees (Asif A. Ali, CC BY-NC-ND 2.0)

Figure \(\PageIndex{7}\): Movement through flowers (Jocey K, CC BY-SA 2.0)

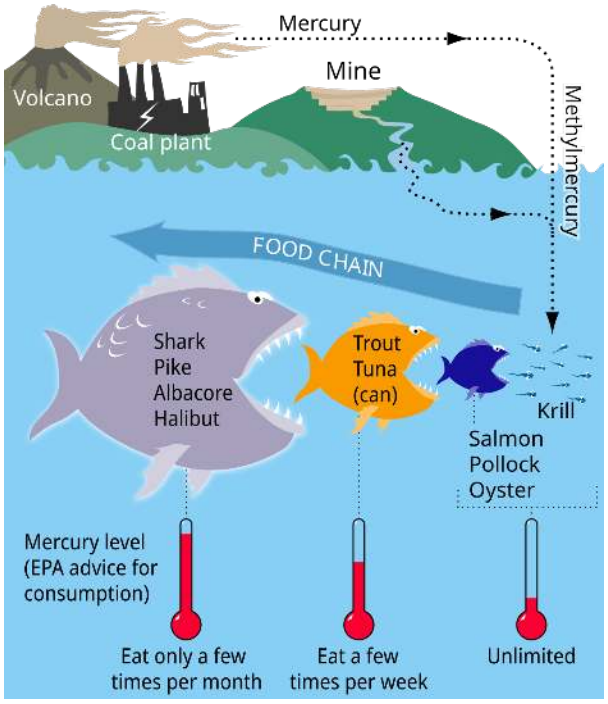

Figure \(\PageIndex{8}\): Infographic movement (CC BY-SA 3.0)

Pattern is how something is organized and repeated in its shape or form, and it can flow without much structure in random repetition. Patterns might branch out similar to flowers on a plant, form spirals and circles as a group of soap bubbles, or seem irregular in cracked, dry mud. All works of art have some pattern, even though it may be hard to discern; the colors, the illustrations, the shape, or other art methods will form the pattern. Patterns are common and repeatable and might be geometric or abstract, while patterns in nature are often chaotic in their formation. Repetition is recreating the pattern in some complete or partial form.

The patterns in William Morris' design, *Strawberry Thief* (1.6.9), repeat in perfect positioning. Each pattern reflects the other in color, shape, and placement detail. This design was used for wallpaper, and when hung on the wall, the same pattern was repeated around the room. In the free-form image (1.6.10), curvilinear lines and colors form the patterns and repeat themselves. The lines move the image, and the colors are randomly repeated. Trees are organically placed, ignoring the patterns.

Figure \(\PageIndex{9}\): Pattern (Public Domain)

Figure \(\PageIndex{10}\): Repetition (Jialiang Gao, CC BY-SA 3.0)

Rhythm

Rhythm in a piece of art refers to a type of repetition used to suggest movement or expansiveness. Bold and directional brushwork also conveys movement within a painting. In Mickalene Thomas's (Angelitos Negros or Black Angels), 2016 (1.6.11), the artist creates rhythm by repeating shapes, patterns, and their placement. The highly contrasting white and black squares, along with the yellow/orange squares on the floor, are repeated to guide the viewer around the room. Footstools and chairs are arranged on diagonals, adding another layer of rhythm. The wall screens feature patterns that draw the eye back and forth, and the incomplete images introduce tension. Multiple standalone and interconnected rhythms are present in the artwork, guiding the viewer from the floor to the wall, while competing and stimulating the mind. In music, rhythm results from changing notes, tempo, and sounds. In art, rhythm is implied movement created through the repetition of varied elements arranged in a certain way.

Figure \(\PageIndex{11}\): Rhythm (rocor, CC BY-NC 2.0)

Proportion

Proportion refers to the relationship of size and scale among different parts of a design. In the desert scene (1.6.12), the people, buildings, trees, and rocks are shown in proper scale and size, making the composition balanced. If one of the buildings were too large, it would look out of form, or if the mountains filled the sky, they would be out of scale because they should be in the background, not in the foreground. Correct proportions of size and scale are important for creating a balanced design. Artists can

also manipulate scale and proportion to exaggerate or emphasize certain elements or ideas. Advertisements often use oversized images to highlight a product or concept. An artwork that depicts danger might use different sizes to create emphasis.

Figure \(\PageIndex{12}\): Proportion (Public Domain)

Unity

Unity conveys a sense of wholeness and enjoyment when viewing the art, emphasizing the cohesiveness of the elements and how the patterns work together to bring unity to the picture or object. It creates a feeling of harmony in the design and a sense of completeness. Unity is achieved through the repetition of colors, shapes, and proportions.

Colors can create unity through matching color groups, complementary colors, or simply by adding a splash of one color to unify the image. Complementary colors like purples and yellows (1.6.13) produce a cohesive look in the graffiti art. The artist also repeated shapes using lines, arrows, and curves to build the image and link different parts. Proportion (1.6.14) is crucial in the sculpture, especially with the decreasing sizes of figures and the length of their arms to hold hands. Color is also used to unify the image through white, gray, and black tones.

Figure \(\PageIndex{13}\): Unity of color (alwyn22, CC BY-NC-ND 2.0)

Figure \(\PageIndex{14}\): Unity of proportion (HockeyholicAZ, CC BY 2.0)

Variety

Variety captures the viewer's attention and helps move the eye across the image, creating shifts and awareness of different elements. It is based on using multiple design elements to draw attention and guide viewers through the artwork. Variety relies heavily on shapes, colors, proportions, or lines to present contrasting elements. The artwork (1.6.15) has a sense of unity with square-shaped backgrounds for each image. It also features a unifying yellow-green color spread throughout the piece, providing a background for the variety of different pops of color across the image. Multiple types of color, some subtle and others bright, direct the eye around the artwork. Dark and sometimes heavy lines also encourage the viewer to look beyond a single point.

Figure \(\PageIndex{15}\): Variety (Adrian Wallett, CC BY-NC-ND 2.0)

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1.7: Art Methods

Definition: Term

- **Aquatint** – A printmaking technique using acid and powdered resin to create tonal effects similar to watercolor washes.
- **Atmospheric Perspective** – A technique creating depth by making distant objects appear lighter, blurrier, and less detailed.
- **Bas Relief** – A type of sculpture in which figures project only slightly from a flat background surface.
- **Carving** – A subtractive sculptural process in which material is cut or removed to create a form.
- **Chiaroscuro** – The use of strong contrasts between light and dark to create the illusion of volume and depth.
- **Collage** – An artwork created by attaching different materials such as paper, photographs, or fabric onto a surface.
- **Composition** – The arrangement and organization of visual elements within an artwork.
- **Drawing** – The creation of images using lines, shading, and marks with tools such as pencils, charcoal, or ink.
- **En Plein Air** – A French term meaning "in the open air," referring to painting outdoors from direct observation.
- **Foreshortening** – A technique used to create the illusion of an object receding sharply into space.
- **Fresco** – A mural painting technique in which pigments are applied to wet plaster.
- **Function** – The intended purpose or use of an artwork or object.
- **Harmony** – The pleasing arrangement of related visual elements that create a sense of unity.
- **Impasto** – A painting technique using thick layers of paint to create texture and visible brushstrokes.
- **Linear Perspective** – A system using converging lines and vanishing points to create the illusion of depth on a flat surface.
- **Depth** – The illusion of distance or three-dimensional space in an artwork.
- **Lithography** – A printmaking process using a flat stone or metal plate treated so ink adheres only to the drawn areas.
- **Mass** – The physical bulk, weight, or solidity of a form in sculpture or design.
- **Metal Casting Process** – A sculptural technique in which molten metal is poured into a mold to create a form.
- **Modeling Process** – A sculptural method of shaping soft materials such as clay or wax by adding and manipulating material.
- **Mosaic** – An image or design created by assembling small pieces of colored glass, stone, or tile.
- **Photography** – The process of capturing images using light-sensitive materials or digital technology.
- **Photomontage** – A composition made by combining multiple photographs into a single image.
- **Pointillism** – A painting technique using small dots of pure color that blend visually from a distance.
- **Silk Screening** – A printmaking method forcing ink through a mesh screen onto a surface; also called screen printing.
- **Sfumato** – A painting technique using soft transitions between colors and tones to create a smoky or hazy effect.
- **Sketching** – A quick, informal drawing used to plan or study an idea.
- **Volume** – The amount of three-dimensional space occupied by an object or form.
- **Weaving** – The process of interlacing fibers or threads to create textiles or decorative forms.
- **Welding** – A sculptural process that joins metal pieces together using heat or pressure.

The Art Methods are Aquatint, Atmospheric Perspective, Bas Relief, Carving, Chiaroscuro, Collage, Composition, Drawing, En Plein Air, Foreshortening, Fresco, Function, Harmony, Impasto, Linear Perspective and Depth, Lithography, Mass, Metal Casting Process, Modeling Process, Mosaic, Photography, Photomontage, Pointillism, Silk Screening, Sfumato, Sketching, Volume, Weaving, and Welding.

Art methods and materials are anything an artist uses to create art in any combination. Methods and materials can also be defined as manufacturing or fabricating a piece of art, such as bronze, which needs to be melted and poured into a mold to be a finished piece of art. The stone must be quarried, transported, and carved before it can be considered a piece of art. Cotton will be picked, cleaned, wound into thread, dyed, and woven into the fabric before a quilter creates a quilt. Mined minerals are ground, mixed, and put into tubes before an artist creates a painting. Art materials are the tools of an artist. This list is by no means complete; however, it does cover most of the art in this textbook.

Art Methods

Art methods are processes an artist uses to create art. Artists may use direct observation or imagine what they plan to create and can use diverse processes to achieve distinctive results in each work. Art methodology is unlike science methodology, where scientists try to accomplish a specific and consistent result. An artist follows a conceptual journey where an outcome might differ from the

original idea based on the artist's methods. The artist's studio (1.7.1) demonstrates the versatility an artist has to use multiple different methods. The methods described below discuss some of the significant art methods.

Figure \(\PageIndex{1}\): Art Studio (Katey Nicosia, CC BY-NC 2.0)

Aquatint

Aquatint is a specialized technique used in intaglio printmaking, a process that involves creating detailed and textured marks on a metal plate. In this method, the artist presses the engraved metal plate together with paper, allowing ink to transfer from the etched surface onto the paper, thus producing a print. To achieve intricate designs, an artist typically uses a mordant to carefully etch specific patterns onto the plate. Additionally, resin is applied to the surface to create tonal variations, which add depth and richness to the final image. The primary goal in using aquatint is to produce a range of tonal effects on the plate, resulting in a print that exhibits varying shades and textures, making this technique highly valued for its ability to generate subtle gradations and complex visual effects.

Atmospheric perspective

The effect of perspective and distance in landscape painting is often achieved by painting the mountains in the background with a lighter, more subdued, and grayer color compared to the mountains in the foreground. This technique is widely used by landscape artists to create a sense of depth and spatial recession, enhancing the realism and visual interest of the scene.

What is Atmospheric Perspective

Atmospheric perspective, method of creating the illusion of depth, or recession, in a painting or drawing by modulating colour to simulate changes effected by the atmosphere on the colours of things seen at a distance.

Bas-relief

Bas-relief is derived from a French word meaning to carve in "low relief" in stone, wood, or rock, which gives the carving a three-dimensional appearance. The word relief comes from the Latin verb "relevo," meaning to raise. A sculpture appears as if it emerges above the background. However, the artist cuts away the background, adding varying degrees of depth to determine how far the sculpted section projects from the background.

What is a Relief?

Jessie answers your Frequently Asked Art Questions in this new Becoming Artsy segment! First up, what is a relief sculpture? What is High Relief? Bas Relief? Who was John Deare?

Carving

Carvers employ a variety of tools to shape and craft materials by meticulously cutting, scraping, and removing sections from the original block or piece. This process allows them to create detailed and intricate sculptures from a wide range of substances, including wood, stone, clay, bone, ivory, and other suitable materials. Throughout history, countless civilizations have developed their own specialized tools tailored to their specific resources and artistic goals. These tools can vary greatly in size, shape, and complexity, reflecting the technological advancements and cultural preferences of each society. The mastery of carving techniques and the development of diverse tools have enabled artists to produce some of the most remarkable and enduring works of art in human history.

Chiaroscuro

Chiaroscuro is the Italian term that translates to "light-dark," a technique that employs stark contrasts between light and dark shades to create a striking visual impact. This artistic approach was especially prominent during the Renaissance and Baroque periods, where artists used bold contrasts to craft dramatic compositions. The use of dark and light colors in their paintings brought scenes to life, infusing them with depth and emotion. Interestingly, the deep colors used in chiaroscuro were not limited to black; artists often mixed other hues with black to achieve the desired effect, depending on the particular mood or outcome they aimed to

convey. This method allowed for a richer, more dynamic portrayal of subjects, enhancing the overall dramatic intensity of the artwork.

Meaning of Chiaroscuro

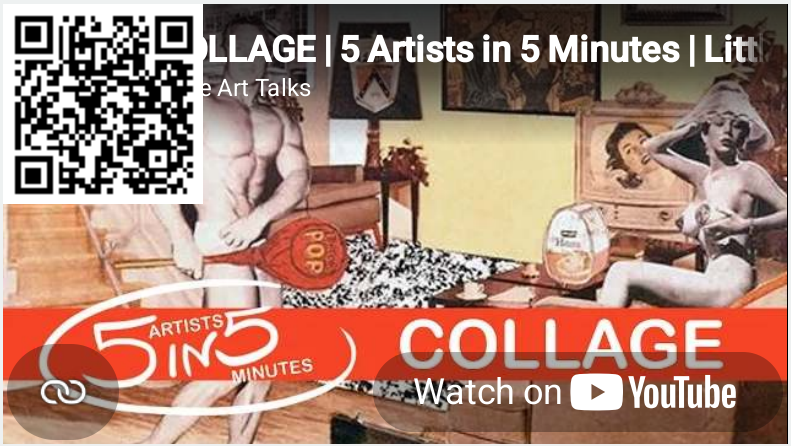
What is Chiaroscuro and how has it been used in painting throughout history? Also learn about the master of the Chiaroscuro himself, Caravaggio.

Collage

Collage is an innovative and expressive art technique that involves assembling various pieces of material into a single, cohesive artwork. The term 'collage' derives from the French word 'coller,' meaning "to glue," which highlights the fundamental process of adhering different elements together. Artists often incorporate a diverse array of materials such as newspapers, magazines, paint, photographs, and found objects, carefully gluing them onto a surface like paper or canvas to create visually compelling compositions. The origins of collage can be traced back to the period shortly after the invention of paper in China around 300 BCE, marking it as a relatively ancient art form that has evolved significantly over centuries. Today, collage is valued for its versatility and capacity to blend different media and textures, making it a popular technique across various artistic styles and movements.

Collage in 5 Minutes

What is collage?



Composition

In the realm of the visual arts, the term 'composition' encompasses the deliberate placement and arrangement of various visual elements within a painting or artwork. This involves organizing not only the physical objects, such as people, fruit, or landscapes, but also considering how vignettes and lighting are orchestrated to create a cohesive and compelling whole. Composition is a fundamental aspect of artistic creation, vital whether the artist is depicting intricate scenes with multiple figures or capturing the

vastness of a landscape, as it guides the viewer's eye, emphasizes the intended focal points, and conveys the overall mood or message of the piece.

Drawing

Drawing is often considered the fundamental skill upon which all other forms of art are built. It is, in essence, an intuitive process, rooted in the natural functions of our brains, which are wired to apply marks to surfaces as a means of expression. Almost everyone has engaged in drawing at some point in their lives, whether during school lessons, at home, or during casual moments. Drawing serves as a simple yet powerful exercise for conveying thoughts, sharing experiences, or communicating ideas to others. While it can be straightforward in its basic form, drawing can also become a complex and challenging discipline that requires patience, skill, and practice to master. Like any other skill, improvement in drawing comes gradually over time and with consistent effort.

En Plein Air

This is a detailed description of an artistic approach that originates from a French term used to characterize artists who create their artwork outside, directly observing the scene before them. The expression, known as 'Peinture Sur le motif,' translates into English as 'painting what the eyes see,' highlighting the importance of capturing the scene through immediate and direct observation. This method underscores the artists' commitment to portraying their subjects with realism and spontaneity, often capturing natural light, weather conditions, and the atmosphere of the environment in their paintings.

Meaning of En Plein Air

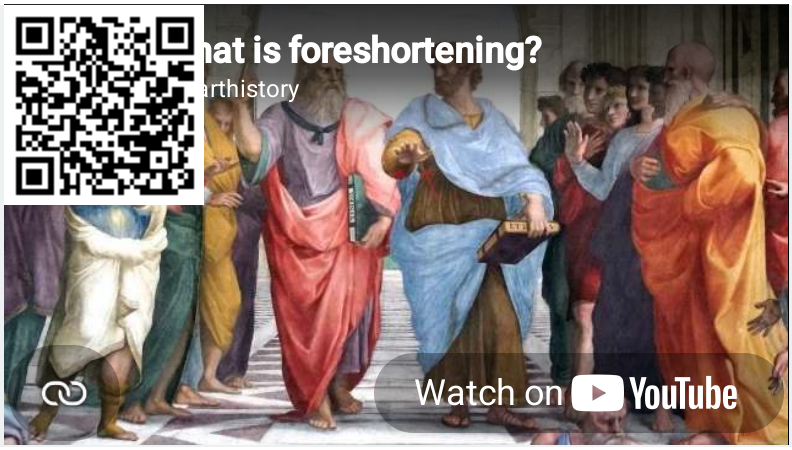
What is en Plein Air and how did it impact art history? This video will go over what happened to allow artists to paint en PleinA ir and how this impacted the type of art they created.

Foreshortening

Foreshortening is an artistic technique that manipulates perspective to create a realistic sense of depth. It involves exaggerating the proportions of the parts of an object that are nearest to the viewer, making them appear more prominent and closer, while the parts that are farther away seem smaller. This technique enhances the three-dimensionality of the work, bringing a dynamic and immersive quality to the artwork.

What is Foreshortening?

Renaissance artists used foreshortening to create naturalistic art. This technique compresses long objects to appear shorter, giving the illusion of depth. Raphael's 'School of Athens' showcases foreshortening, with Aristotle's hand and Diogenes' thigh appearing closer. This tool was crucial for Renaissance artists to depict a convincing natural world.

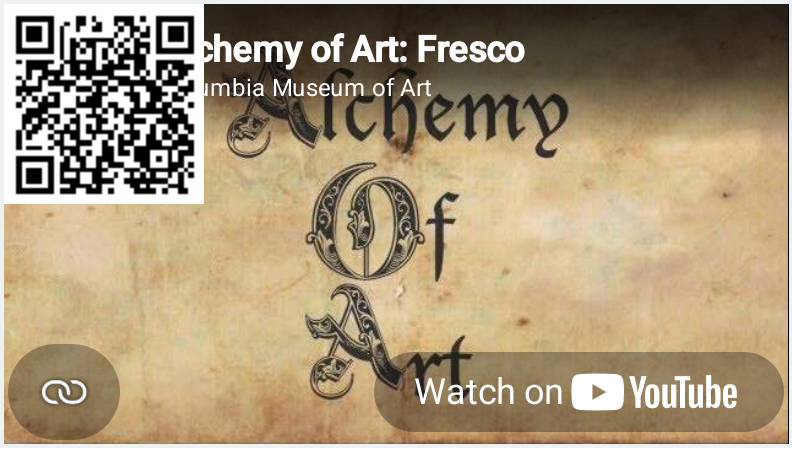


Frescos

Fresco painting is an ancient artistic technique that involves applying wet lime plaster onto walls or ceilings using a trowel. Once the plaster dries, the artist applies pigments directly onto the surface, creating vibrant and lasting images. Because the paint becomes an integral part of the wall as the plaster dries, frescoes are highly durable and can survive for centuries, provided the plaster remains intact. This method was famously used during the Renaissance to produce some of the most renowned murals in history.

Alchemy of Art

A demonstration of the process of Buon Fresco.



Function

When creating architectural drawings, a fundamental rule of design is that form follows function. A visual principle in architecture states that the shape of a building or structure should primarily reflect its intended purpose. Builders used straight, angled, curved, or connected lines to create houses, villages, or city layouts. Those planning the city often formed a grid system when designing settlements. Architects develop ideas and define concepts for new buildings, representing the multiple layers of a structure in three-dimensional sketches drawn in the dirt, on paper, or today, with a computer.

Harmony

Harmony in art involves combining elements like color, shape, line, and texture to create a sense of unity. This is achieved by blending similar or related components, as well as by using contrast to keep the artwork interesting and lively. The result is a balanced and attractive composition that conveys a sense of order and connection, making the entire piece feel harmonious and welcoming.

Impasto

Impasto is a painting technique that involves applying thick layers of paint to create rich textures and vibrant depth in artworks. This method has been a favored approach among artists since the 16th century, beginning with Renaissance masters who pioneered its use.

The Importance of Impasto

What is impasto and why is it important to talk about in art history? Watch to learn how impasto has been used in art throughout history, and how it sparked a new conversation about modern art.

Linear Perspective and Depth

A set of parallel lines that recede into the horizon seem to get closer until they meet. Linear perspective creates the illusion of three-dimensional space on a paper or painting. An artist who paints landscapes on a flat piece of wood or panel uses this depth illusion, giving a three-dimensional feeling and a sense of reality, drawing the viewer into the scene. Three-dimensional drawings typically depict a building, shape, or object with multiple dimensions.

Introduction to Linear Perspective

This video begins by challenging students to try drawing boxes that look 3D. Then it explains the concept behind linear perspective and shows some examples to illustrate how it works.

Lithography

A Greek word meaning "stone" and "writing." Lithography is a print of text or pictures made from an etched stone or metal plate, based on the principle that oil and water do not mix. Using a grease pen, the artist draws directly on the stone, then adds acid to etch the unprotected parts of the design into the stone. Mixed ink is spread over the damp stone, with the water attracted to the non-etched areas and the ink to the etched parts. The stone and paper are pressed together, transferring the image to the paper.

Mass

The mass is the three-dimensional volume of a piece of artwork. It is the volume and density that give the art a perceived weight. One principle of architecture and a requirement for builders is understanding the resistance of gravity and how to use natural materials in any culture to construct a building. Isaac Newton demonstrated how gravity works as a force, and Albert Einstein proposed that gravity is a curvature of space-time; however, ancient civilizations did not have that knowledge.

Metal casting process

The most common form of metal casting is the lost wax process, which dates back to 4000 BCE. Casting a bronze statue can be a complex process; however, many sculptures can be produced from a single mold. Bronze is perhaps the most popular metal for sculpture casting. Typically, bronze consists of 10% tin and 90% copper, which are heated, mixed, and poured into molds. Early civilizations discovered that bronze tools and weapons were more effective than Stone Age tools, leading to inventions that advanced their societies.

Modeling process

Modeling clay consists of malleable materials such as plastic or traditional clay, which are commonly used for sculpture and modeling purposes. Modeling is an additive process in which the artist adds material to create forms, as opposed to carving or subtractive techniques.

Mosaic

Mosaics are intricate artworks created by assembling tiny pieces of colored tile, stone, or glass to form detailed images. They are frequently utilized on walls, ceilings, and floors due to their exceptional durability and capacity to endure for centuries. Artists craft mosaics by carefully gluing small pieces of glass or stone onto surfaces, and once the adhesive sets, grout is applied over the surface to seal and secure the pieces, enhancing their longevity and appearance.

Photography

Photography is the art of capturing an image and creating a photograph from it. It involves recording light at a specific moment, using highly sensitive materials to preserve the image. Before film was invented, photographic plates were used to capture images. These plates were coated with a thin layer of emulsion containing sensitive silver salts. When light hit the plate, it recorded the image on the glass.

Photomontage

A photomontage is an art form that involves combining multiple photographs into a single composition. This can be achieved by physically cutting out and pasting images onto paper or through digital means using software like Adobe Photoshop. The final creation can appear as a realistic, seamless photo or as an abstract, artistic arrangement.

Photomontage

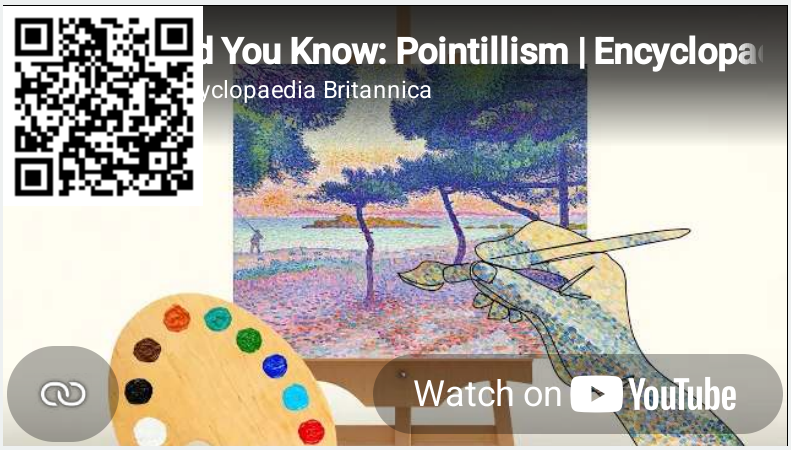
What is a photomontage? It's a way of joining two or more images to create a new work. The individual parts can simply overlap or they may be cut and joined in intricate ways. Some artists even photograph the finished photomontage so that it appears as a single, seamless image. Whether it's created by hand or by digital tools, artists choose the process to communicate an idea visually that is otherwise difficult to capture in a typical photograph.

Pointillism

Pointillism is a distinctive painting technique characterized by the use of tiny dots rather than traditional brush strokes. Artists apply small dots of pure, vibrant colors—often complementary ones—laid very close to each other. When viewed from a distance, the human eye naturally blends these dots, creating a cohesive and luminous image. This method relies on optical blending and allows for a unique vibrancy and detail that is different from conventional painting techniques.

Did You Know: Pointillism

Learn about pointillism, a painting art style used by Georges Seurat notably in A Sunday on La Grande Jatte-1884.



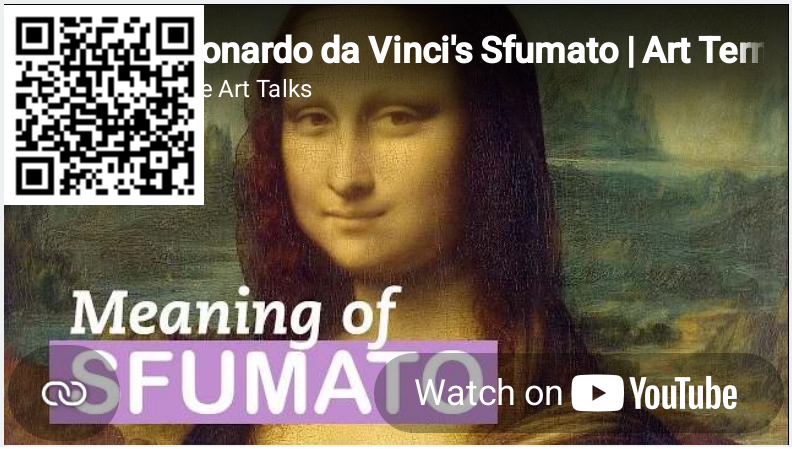
Silkscreen printing, also known as serigraphy or screen printing, is a versatile printing technique that involves creating a stencil (or multiple stencils for multi-colored designs) on a fine mesh fabric, traditionally silk, which is stretched tightly within a wooden or metal frame. This process works by forcing ink or paint through the open areas of the stencil onto the surface beneath, which can include a variety of materials such as fabrics, paper, plastics, or metal. It is widely used in producing vibrant graphics on T-shirts, posters, signage, and many other products, due to its durability, vivid color richness, and ability to produce large quantities efficiently.

Sfumato

Sfumato is a Renaissance painting technique that originates from the Italian *word 'sfumare*,' meaning 'to evaporate like smoke.' This method involves the use of soft, delicate shading to seamlessly blend tones and colors, creating a smoky, atmospheric appearance. Artists employed sfumato to produce subtle transitions between light and shadow, which enhanced the depth and realism of their works. It was particularly effective in softening facial features and creating a hazy, three-dimensional depth that mimics the natural way our eyes perceive distance and form.

Meaning of Sfumato

What is Sfumato? Watch to learn more about Leonardo's masterful technique and his famous painting of the Mona Lisa.



Sketching is a form of freehand drawing that captures the artist's initial vision. It serves as a preliminary and rough version of an idea, which can be refined into a more detailed and finished artwork later.

Volume

The volume of artwork can mean different things, especially when comparing a 2-dimensional painting to a 3-dimensional vessel. Volume typically applies to 3D works and refers to the space they occupy. A vessel of the same kind and size usually has the same volume and may take up the same amount of shelf space, but it can still have space around it.

Weaving is a traditional craft that involves the interlacing of two sets of yarns at right angles to produce fabric or cloth. The primary components include the warp, which is the set of yarns attached to the loom, and the weft, which is woven through the warp yarns to create various patterns and textures. This process has been used for centuries across different cultures and continues to be a vital part of textile production today, with variations that range from handwoven textiles to modern industrial fabrics.

Welding is a sculptural and artistic fabrication process that involves joining metal materials through the application of heat and solder, creating strong bonds. Various fuel sources can be employed in welding, including gas, electricity, and laser technology, each offering unique advantages. Historically, forge welding has been a fundamental technique used for thousands of years by blacksmiths to seamlessly connect iron and steel pieces, showcasing its longstanding significance in metalworking.

[1] Retrieved from https://www.tate.org.uk/art/student-...help/materials

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1.8: Art Materials

Definition: Term

Art materials are essentially everything around us that artists can use to create artwork. Different materials provide unique textures, colors, surfaces, and structural qualities that influence the final appearance of a work of art. Common art materials include:

- **Brick** – A building material often used in architecture and sculptural construction.
- **Brush** – A tool used to apply paint, ink, or other media.
- **Ink** – A liquid or paste used for drawing, writing, and printmaking.
- **Camera** – A device used to capture photographic images.
- **Chalk** – A soft drawing material often used for sketches or temporary markings.
- **Clay** – A soft, moldable earth material used in ceramics and sculpture.
- **Concrete** – A durable construction material used in architecture and large-scale sculpture.
- **Cotton** – A fiber commonly used in canvas, paper, and textiles.
- **Gesso** – A primer applied to surfaces before painting to prepare and protect the support.
- **Glass** – A material used in stained glass, mosaics, sculpture, and decorative arts.
- **Jade** – A hard ornamental stone often carved into jewelry and sculpture.
- **Linen** – A strong fabric commonly used as a painting surface.
- **Marble** – A smooth stone frequently used in sculpture and architecture.
- **Paint** – Pigment mixed with a binder used to create images on surfaces.
- **Paper** – A surface used for drawing, painting, printmaking, and writing.
- **Pastels** – Colored sticks made of powdered pigment used for drawing.
- **Silk** – A smooth fabric often used in textiles, painting, and screen printing.
- **Stone** – A natural material used in sculpture, architecture, and carving.
- **Terracotta** – A fired clay material often used for pottery and sculpture.
- **Vellum** – A fine writing or painting surface traditionally made from animal skin.
- **Wool** – A fiber used in weaving, textiles, and tapestry creation.

Art Materials are bascially everything around us. They include brick, brush, ink, camera, chalk, clay, concrete, cotton, gesso, glass, jade, linen, marble, paint, paper, pastels, silk, stone, terracotta, vellum, and wool.

Art materials cover the gamut of everything around us. "Materials are what things are made from. Materials have different qualities: smooth or rough, hard or soft, heavy or light, and fragile or indestructible. Artists choose materials because of their particular qualities. The same material can be used in very different ways to achieve very different results. The twentieth century saw artists experimenting with unexpected materials (1.8.1). Everyday objects, textiles, industrial substances, natural phenomena, and even things we can't touch or see (such as sound) found their way into art."[1] An artist may use sticks cut from a tree to add to some work, or a painter may decide between oils, acrylics, or pastels for a painting. When starting a statue, a sculptor must choose between marble, clay, stone, or concrete. Many of the materials are interchangeable yet cause different results. All the choices are up to the artist and the desired outcome.

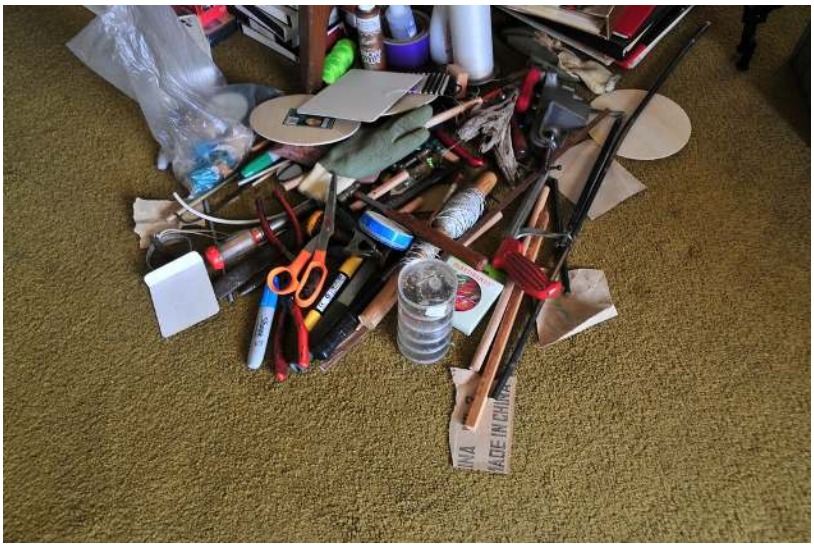


Figure \(\PageIndex{1}\): Art Materials (KCET Departures, CC BY-NC-ND 2.0)

Brick dates back to Mesopotamia around 7000 BCE and is still used today. Early bricks were made in warm regions by mixing clay, straw, and water, then pouring the mixture into molds and drying it in the sun. The most significant advancement in brick making was firing bricks in kilns instead of drying them in the sun. The Romans perfected brickmaking for roads and buildings and used mobile kilns to produce bricks while moving across the region. In Central America, adobe bricks were common building materials. Clay, straw, and water were mixed and sun-dried to create impressive structures like the Pyramid of the Sun, which still stand today.

Brush and ink

Ink drawing with brush and ink was widely developed during the Tang Dynasty from 618 CE to 900 CE. Artists created various tones depending on how saturated the ink was. Calligraphy was another form of brush and ink used in early Chinese art. During the Renaissance, artists used ink to produce precise anatomical drawings.

Brushes were crafted from various materials, including bamboo, wood, bone, and feathers, with metal tips to regulate the ink flow. Early ink was produced from plant dyes, insects, lamp oil, or other natural sources. Iron gall ink is a purple-black color made from tannic acids of certain vegetables and iron salts. Dip pens were used to transfer ink from the bottle to the paper for drawing.

Camera

The camera is a device used to record images visually. The word "camera" originates from the Latin term 'camera obscura,' which means 'dark chamber.' An analog camera captures an image on photographic film, while a digital camera captures it on an electronic sensor. The first portable camera was the Daguerreotype in 1839, named after its inventor, Louis Daguerre. It was bulky and required a person to stay perfectly still for thirty minutes. By 1840, the mirror camera was developed based on photo-sensitive plates, allowing a person to sit still for only five minutes. The mirror camera marked the start of commercial photography.

Chalk

Chalk is similar to pastels, but instead of grinding the rock into a fine powder, the chalk remains in its natural state. Chalk is limestone formed about 100 million years ago, originally under the sea. Today, chalk is mined from the earth and is compacted into cylindrical shapes familiar in classrooms. Chalk drawings have been made in caves since Paleolithic times. During the late Renaissance, chalk became a popular medium for drawings.

Charcoal has played a significant role throughout human history. It is primarily produced by burning wood in a controlled manner. During the Paleolithic era, early humans found it easy to use pieces of burnt wood as drawing tools in caves, which served as some of the earliest forms of expression and communication. Moving into the Bronze Age, advancements in technology allowed for the production of more refined and usable charcoal by slowly burning wood in kilns that were covered with dirt to regulate the process and prevent rapid combustion. This traditional method of charcoal production is still employed today, highlighting its enduring relevance and importance across millennia.

Clay

Over millions of years, the earth's crust has been melted, moved, squeezed, cracked, and worn down by weather to form a layer of topsoil with various deposits of rock and clay. Rivers near the first civilizations cut through the topsoil, exposing the clay layers and providing easy access to the raw material. The fine silt particles in the clay give the material its plasticity, and when water is added, it becomes a cohesive product. Silt consists of feldspar (the most abundant mineral on earth), silica, and alkalis like iron, which give the clay a reddish-brown color.

Making Greek Vases

In ancient Greece, the phrase "to make pottery" meant to work hard. While all Greek pottery was made by similar methods, the pottery techniques of Athens are especially well understood. The typical Athenian pottery workshop was a small establishment consisting of a potter and several assistants. The potter prepared the clay, threw or formed the vases, and oversaw their firing. He may also have decorated the vases himself, or employed vase-painters to decorate his wares.

Concrete

Lightweight concrete has played an important role in construction for hundreds of centuries, with its usage evolving significantly over time. In recent history, especially over the past hundred years, its reliability and predictability have markedly improved, making it a preferred choice in various building projects. This type of concrete is typically composed of lightweight coarse aggregates combined with fine materials such as shale, clay, or slate. The benefits of modern lightweight concrete are numerous; it helps reduce the overall structural load, enabling faster construction. Additionally, it is more durable and provides superior thermal insulation compared to traditional brick, making it an excellent material for energy-efficient buildings.

Cotton has been cultivated and utilized by humans for thousands of years, with its origins dating back to around 4500 BCE. It is primarily grown for its fibers, which are derived from the seed hairs of the cotton plant. These cellulose fibers are carefully harvested through a process that involves picking, ginning, and cleaning to prepare them for use.

Once processed, the cotton fibers are washed to remove impurities, then dyed in various colors to produce a wide range of fabrics. Cotton is highly valued for its durability and strength, as it does not stretch or deform easily, making it an ideal material for clothing that requires longevity and resilience. Moreover, it is a highly versatile fabric, finding applications beyond clothing, including art canvases, textiles for household items, and other artistic and decorative elements. Its adaptability and natural properties have cemented cotton's status as one of the most widely used fibers in the world.

Gesso

Traditionally, gesso was made from a white pigment base, with chalk and a binder derived from animal hides added. It was used to prepare the surface on wood panels or canvas before the artist applied paint. Modern gesso incorporates acrylic polymers, latex, and pigments, making it more flexible when applied.

Silica is the most abundant component in glass, which is an amorphous solid material commonly known as sand. When silica-rich sand is heated to high temperatures, it melts and becomes transparent; the addition of certain colorants can alter its hue without compromising clarity. Once melted, glass can be formed into various shapes and sizes through different techniques. One common method involves floating molten glass onto a bed of molten tin to produce flat, uniform sheets, a process used extensively in window manufacturing. Another traditional technique, known as glass blowing, has been practiced for approximately 3,000 years. This method involves heating silica-based glass until it reaches a workable molten state, then shaping it by blowing air into a gather of molten glass at the end of a long metal tube, which causes the material to expand and form various objects such as bottles, vases, and ornaments. Skilled artisans often manipulate the shape further by hand or with tools before the glass cools and solidifies, creating both functional and decorative items.

The mineral jade is a captivating and complex metamorphic rock mainly made up of various silicates. It exists in two main varieties: nephrite and jadeite. Nephrite consists of a silicate blend of magnesium and calcium, giving it a unique composition, while jadeite is made from a silicate of sodium and aluminum, which contributes to its distinctive properties. Jade has been highly valued by human societies for thousands of years, dating back to ancient times. Archaeological evidence shows that around 1600 BCE, during China's Shang dynasty, artists began carving small, intricate decorative plaques from jade, highlighting its cultural importance. Not only is jade known for its durability and striking beauty, but it is also relatively rare, which has helped establish its status as a treasured material. Throughout history, artisans and civilizations have used jade for various artistic, ceremonial, and ornamental purposes, reflecting its lasting appeal and cultural significance across centuries.**Linen**

Linen is made from flax plant fibers and is known worldwide for its absorbency and ability to stay cooler in hot weather. It is also the oldest cultivated plant in the world. The durable flax fibers are woven into the most supple, fine, and highly sought-after material ever manufactured.

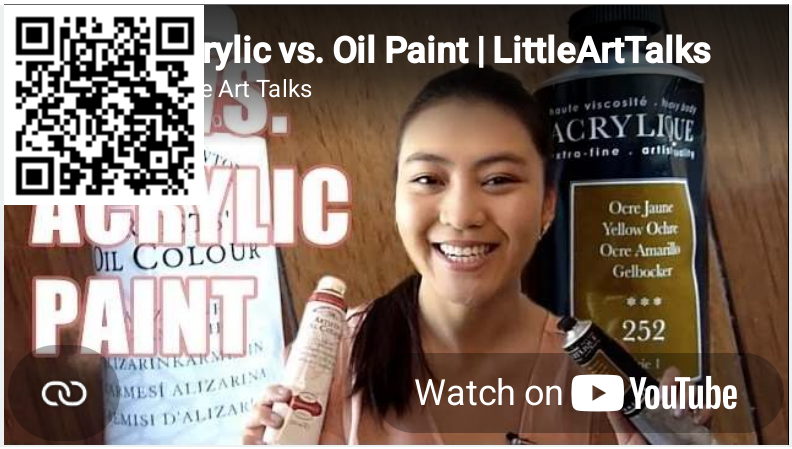
Marble

Marble forms when limestone undergoes heat and pressure, causing it to recrystallize into a light-colored rock, often white. Typically, marble is derived from dolomite or calcite and involves recrystallized carbonate minerals transforming into a harder rock through heat, compression, or pressure. Impurities in the limestone create colorful veining. Marble occurs in large deposits, usually hundreds of feet deep across mountain ranges. People have mined marble for centuries in both underground mines and open quarries, using it for buildings and sculptures. Marble was soft enough to carve and a popular material for sculptors. It is mined from quarries and used to create statues by removing unwanted material with a hammer and chisel, revealing the figure as it emerges from the marble.

Paint is a versatile substance that combines a binder and pigment to create a liquid formulation, which, when applied to surfaces, dries into a solid coating. Throughout history, humans have developed a wide array of paint types to suit various artistic, decorative, and practical needs. These include traditional paints used by early civilizations, such as natural pigments and clay-based mixtures, as well as more modern formulations like oil paints, acrylics, and watercolors. Oil paints, known for their durability and rich textures, have been favored by artists for centuries. Acrylic paints, prized for their quick drying time and versatility, emerged in the 20th century and revolutionized the painting world. Watercolors, valued for their delicacy and transparency, have long been used in fine art and illustration. Additionally, in contemporary settings, paint is often stored in pressurized cans, where pressing the valve releases a fine mist or spray of paint, making it convenient for quick applications and touch-ups. The evolution of paint technology continues today, with innovations aimed at improving durability, environmental safety, and ease of use.

Acrylic vs. Oil Paint

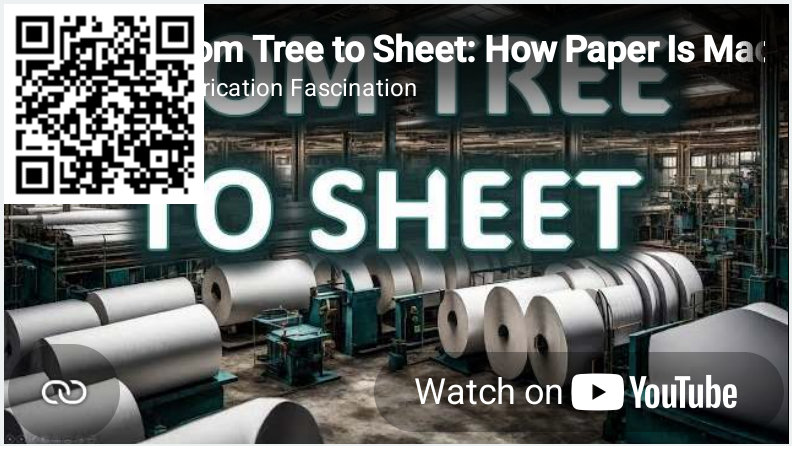
Which type of paint is perfect for you?



Paper was invented in ancient China, with evidence dating back to the 2nd century CE, although it did not become widely known or used outside of China until several centuries later. The technique of making paper involved a meticulous process: raw materials, typically linen rags, were collected and left to rot in large vats filled with water, a process that helped break down the fibers. These rags were then repeatedly stamped, using a pounding or beating process, transforming them into a viscous pulp. The pulp was subsequently poured into molds or frames, often woven from bamboo or other materials, allowing excess water to drain away. The molds were then pressed and left to dry in the sun, forming large, thin sheets of paper. Importantly, paper production was relatively inexpensive compared to earlier writing surfaces like vellum or parchment, making written information more accessible to the broader population. The spread of paper across Europe and other parts of the world facilitated increased literacy, record-keeping, and the dissemination of ideas, marking a significant step forward in human communication.

From Tree to Street

Join us on a journey through the fascinating Manufacturing Process of paper, exploring the intricate Production Steps that transform wood fibers into the versatile material we use every day. From the assembly line to the Artisan Craftsmanship that brings sheets to life, witness the captivating process from creation to final use.



Pastels

A pastel is a finely ground powdered pigment that is mixed with a binder to create a vibrant and easily manageable coloring medium. Historically, pastels have been used by artists for centuries, and their development dates back to the 17th century when they were first invented. Modern pastels are typically manufactured using machines, which ensures that each stick is produced with a consistent texture and quality, making them reliable tools for artists. These sticks are usually formed into manageable sizes that fit comfortably in the hand, allowing for precise and expressive application. Pastels are generally applied to textured paper, which has enough surface roughness to hold the pigment in place, enabling artists to create a wide range of effects and detailed artworks. The versatility and ease of use of pastels have made them a popular choice among artists for both preliminary sketches and finished masterpieces.

Silk is a luxurious and highly prized fiber that is produced by silkworms during their cocoon-spinning process. These silkworms, which are the larvae of the silkworm moth, feed primarily on mulberry leaves, which contribute to the quality and texture of the silk. Once the silkworm has spun its cocoon, the process of extracting the silk begins: the cocoon is carefully immersed in hot water, which kills the silkworm inside and softens the sericin glue holding the cocoon's fibers together. This allows the silk fiber, which appears as a thin, shimmering, prism-shaped thread, to be carefully unraveled. The raw silk threads undergo thorough washing, are spun into fine threads, and then dyed using a vast array of vibrant colors, resulting in textiles that are both beautiful and durable. Historically, the finest silk threads from China were highly valued and formed the basis of silk trading along the legendary Silk Road, a network of trade routes that facilitated commerce and cultural exchange across Asia, the Middle East, and into Europe for centuries.

Stone

Stones are solid pieces of mineral matter used for building structures. Stones are readily found throughout the planet, and many civilizations still use stone for construction. Limestone is a sedimentary rock primarily composed of calcite and aragonite and usually has skeletal pieces of marine organisms. Buildings were designed and engineered to accommodate corners, supports, open spaces, columns, roofs, height, and width, depending on the variety of stones available. Quarry marks in surviving structures reveal how most people used wooden wedges soaked in water to split the stone into its natural fault lines. Stones last a long time, and stone sculptures are some of the only surviving parts of civilization.

Terracotta, which means "baked earth" in Italian, is a versatile type of clay-based earthenware that has been utilized by numerous ancient civilizations. Its origins trace back to Chinese pottery around 10,000 BCE and Greek pottery from approximately 7,000 BCE, among other cultures. Known for its durability and resilience, terracotta has played a significant role in the creation of enduring structures and pottery, many of which have survived thousands of years, attesting to its lasting properties and historical significance.

Vellum

Vellum originates from the Latin word "vitulinum," meaning "made from the calf." They used calfskin vellum to create books or scrolls. Vellum is smooth, durable, and usually white, making it an excellent writing medium. Vellum was produced in Europe because they lacked access to the paper used in China. In Europe, vellum was the main material for making books and religious texts.

Wool

Wool is a versatile and natural fiber derived from the fleece of sheep, llamas, yaks, and other similar animals. This fiber is prized for its exceptional insulation properties, making it an ideal material for creating warm clothing and textiles. The process of obtaining wool involves shearing the animals' coats, which are then carefully washed to remove dirt and impurities. After cleaning, the wool is spun into yarn, a process that transforms loose fibers into strong, thread-like strands suitable for weaving or knitting. Wool fabrics are renowned for their ability to retain warmth even when wet, enhancing their practicality in cold, damp conditions. Typically, the wool is dyed in a variety of colors to improve its appeal, and large industrial looms are often used to weave the yarn into a range of textile products, including clothing, blankets, and upholstery. Wool's natural elasticity, breathability, and durability make it one of the most comfortable and long-lasting fabrics available, valued throughout history and across diverse cultures.

Figure \(\PageIndex{2}\): Learning about art (HomeSpot HQ, CC BY 2.0)

Art appreciation is a journey of learning, discovering cultures and their art, which has endured long after they abandoned ancient settlements. Art (1.8.2) is a form of creative human expression that outlasts cultures, buildings, governments, or religions, offering a window into the past. Art is a tangible remnant of a bygone culture that we can hold today, even if it is 30,000 years old—just a small piece of past life.

We study art to learn responsibility for human cultural expressions and to embrace people's diversity and lifestyles. Looking at history, we see how civilizations and time influence culture and art today. For example, silk was produced and woven in China, but how long did it take to spread across Asia and into Europe? The Silk Road was a trade route that supported the transportation and sale of art over thousands of miles. Today, the internet influences us, allowing access to millions of products on our computers. Research happens faster and travels in light seconds, enabling us to see the world and its art, creating opportunities to learn and appreciate art rather than passing by with preconceptions. When you understand the culture, you can truly enjoy the art; this applies to cave art and remains relevant to our technological culture today.

JUST LOOK

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CHAPTER OVERVIEW

2: The Dawn of Art (40,800 BCE – 5000 BCE)

How did humans initiate their desire to create art and why? Undoubtably, this query will never be resolved by cultural anthropologists, however, the more archeological sites discovered and excavated the more our discovery of humans and their creativity continues. When an ancient settlement is established, archeologists take great care in removing artifacts, piecing together what the art meant to the culture. If the foundation of a great building is discovered, researchers study the architecture, imagining how the great buildings were designed and built without the aid of today's technology or heavy equipment. How were the great pyramids constructed? How were the stones moved to build Stonehenge?

2.1: Overview
2.2: Geology of Caves
2.3: Cave Art
2.4: Handheld Art
2.5: Conclusion

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2.1: Overview

How did humans first develop their desire to create art, and why? Undoubtedly, this question will never be fully answered by **cultural anthropologists**; however, as more archaeological sites are discovered and excavated, our understanding of humans and their creativity grows. When an ancient settlement is uncovered, archaeologists carefully remove artifacts and interpret what the art meant to that culture. When archaeologists find foundational ruins of magnificent buildings, they study the architecture, imagining how these important structures were designed and built without the modern technology or heavy equipment we have today. How were the great pyramids built? How were the stones transported to construct **Stonehenge**?

The word "prehistoric" generally refers to the period before humans began keeping written records. Does that make history any less valuable? No. The term 'pre' means before the earliest evidence of written language. Today, we have not found any signs of early written language from prehistoric eras. However, such evidence might exist in some unknown region that modern humans have yet to discover. Prehistoric times are divided into two periods: the Paleolithic, roughly 2.5 million to 12,000 BCE, and the Neolithic, beginning at 12,000 BCE and continuing until 4500 BCE.

Paleolithic Period (2.5 million years ago – 12,000 BCE)

The **Paleolithic period**, also called the Old Stone Age, saw climate and geographic changes that eventually affected all human societies on Earth. The word 'Paleolithic' comes from Greek, where 'paleo' means old and 'lithic' means stone. Homo sapiens, our ancestors, appeared sometime between 200,000 BCE and 60,000 BCE. During this time, nomadic groups traveled across large regions, foraging for food. Their diet included fruits, plants, and meat from any animals they could catch and kill. These groups typically lived in small bands of ten to fifty people and moved constantly to find food, depending on the seasons and what's available. They started using fire for cooking, warmth, and light. Building fires also kept animals away and made social gatherings. The small, nomadic groups usually claimed a specific area and built camps near streams, lakes, springs, caves, or other shelters.

Inside the Lives of the First Humans

The evidence left behind by early humans gives us a vivid picture of their lives.

Prehistoric cave people generally lived in sheltered places, hunted animals, and painted on rock walls. Caves were a safe place to stay protected from the weather or large animals. Although called cave people, most did not actually live inside caves. Typically, the indigenous people lived in rock shelters or outcrops (2.1.1) with overhanging roofs for protection from rain or snow but were open on at least two sides or built primitive huts for shelter. Caves were dark and damp, animals hibernated in them, and caves were not always accessible. However, people did use caves that were safe or hidden for multiple purposes (2.1.2), and in those hidden places, we have found an impressive array of art.

Figure \(\PageIndex{1}\): Rock outcrop (Chris Wimbush, CC BY-SA 2.0)

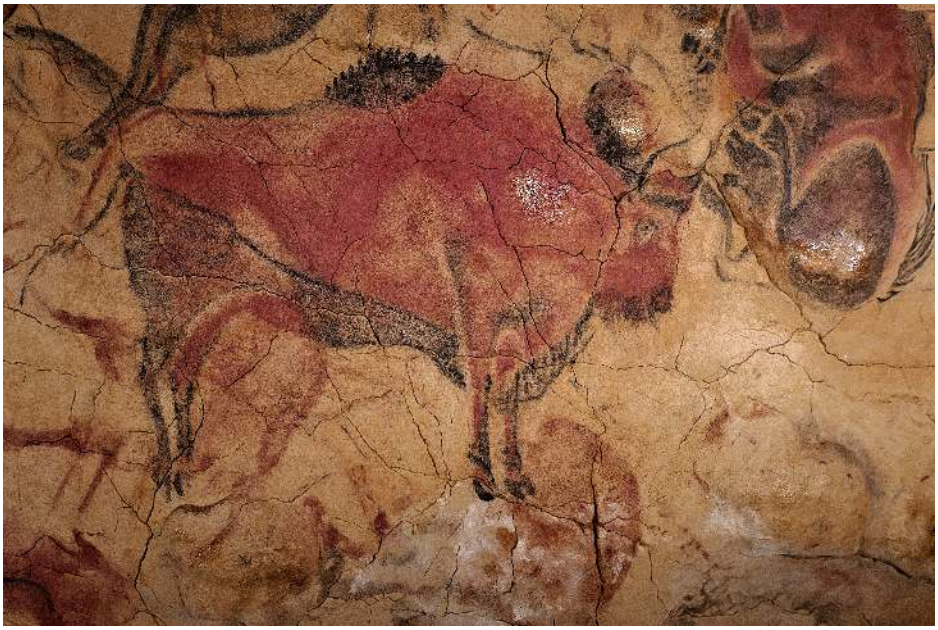

Figure \(\PageIndex{2}\): Altamira Bison (Jl FilpoC, CC BY 4.0)

People during the Paleolithic period created art using clay, bones, or stones to make small **sculptures** or jewelry. Everything had to be portable and easy to carry because of their nomadic lifestyle, which required them to move frequently in search of food and resources. They also made art in caves, where they painted detailed images on cave walls using natural pigments to document their environment, journeys, and beliefs, offering us a glimpse into their world and spiritual life. In addition to art, they crafted simple hand tools from stones, bones, leather, or natural fibers. These tools were essential for their daily activities such as hunting, scraping, sewing, and digging, helping them survive and adapt to their environment. Over time, stone tools evolved from simple flakes to more sophisticated implements, reflecting technological advancements. These improvements increased their efficiency and the variety of food they could access, supporting their nomadic way of life. As shown in the video, the progression from basic to complex stone tools illustrates their ingenuity and adaptability during the Paleolithic era.

How Our Ancestors Made Razor Sharp Tools

Join Dr. Nicholas Toth as he demonstrates how early humans created the first stone tools over 2.5 million years ago. See how these tools shaped survival strategies and how they showcase the evolution of human innovation.

Neolithic Period (12,000 BCE – 4500 BCE)

The Paleolithic period was long, lasting over two million years, and included the earliest times when different pre-human species used stone tools up to the development of Homo sapiens (our ancestors). As the population of Homo sapiens groups grew, the area needed for foraging expanded beyond manageable nomadic boundaries, leading to a new way of accessing food—growing it in one place, or agriculture. **Agriculture** began around 12,000 to 11,000 BCE, when people still used stone tools. With the rise of agriculture, human nomadic patterns changed. People developed specialized skills as farmers, toolmakers, or hunters. As they stayed in one location instead of constantly moving, the progress and refinement of tools advanced during the Neolithic Period. The Greek word for new is 'neo,' and 'lithic' means stone.

Based on tools found in archaeological **stratigraphy**, the final era of prehistoric times is further divided into a three-age system based on the type of tools used: the later part of the Stone Age (2.1.3), the Bronze Age (2.1.4), and the Iron Age (2.1.5). The Stone Age is the largest of the three, during which humans mainly used stones to make arrowheads, jewelry, small sculptures, and clothing, and it lasted about 2.5 million years.

Video Title

How, why, and when did agriculture first emerge, and what were its implications on human society?

Figure \(\PageIndex{3}\): Stone Age tools (CC BY-SA 4.0)

Figure \(\PageIndex{4}\): Bronze Age tools (Gary Todd, CCO 1.0 Universal)

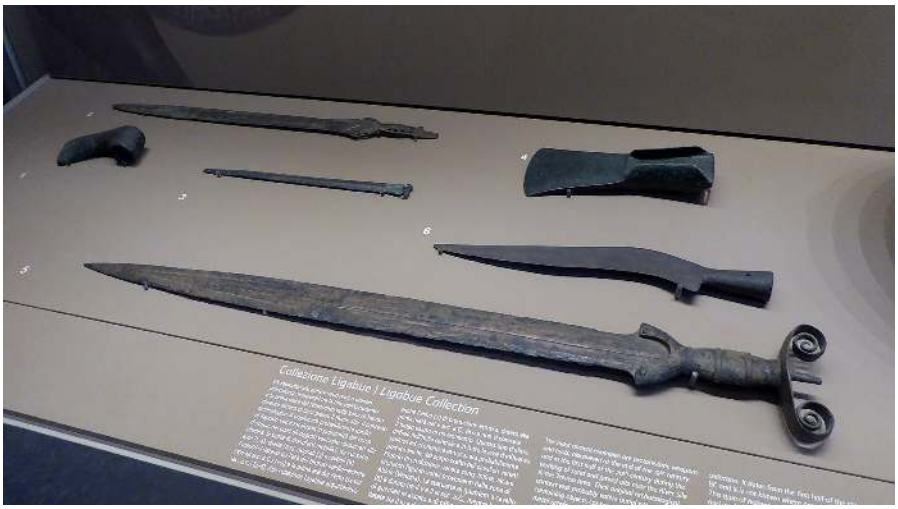

Figure \(\PageIndex{5}\): Iron Age tools (Ethan Doyle White, CC BY-SA 4.0)

With the growth of agriculture and the improvement of **stone tools**, the **Bronze Age** was marked by the use of bronze, an alloy of tin and copper. Making and using bronze items did not happen simultaneously worldwide. Researchers believe it began in the Middle East around 3600 BCE and lasted until 1200 BCE. Bronze enabled the start of urban civilization, metal tools, government, and proto-writing. Bronze weapons replaced stone weapons and allowed complex urban societies to develop. However, bronze weapons could not be sharpened, and the metal had to be melted and recast when dull. Humans domesticated animals for food and other uses work.

The **Iron Age** was the third major period, beginning around 1500 BCE and ending around 600 BCE. This period marked the transition to smelting different types of metals to produce iron and steel for weapons and agricultural tools. Iron tools and weapons were also developed at various times across the world. During the Bronze Age, tin and copper had to be melted together to make bronze. In contrast, with iron, only the iron was needed; however, the furnace used to melt the iron had to reach very high temperatures. The adoption of iron transformed regional stability, trade routes, and social structures from China to the Mediterranean. Iron was abundant and easy to shape into weapons for warfare. Metal could be poured into molds, enabling the quick production of inexpensive weapons. These weapons could also be sharpened in the field, unlike bronze weapons.

As people lived in settled communities, they built houses from available materials such as stone, mud brick, timber posts, or reeds for the walls and foundations, and hay, clay, or tree parts for the roofs. The original houses had only one room, but later structures had multiple rooms. The fireplace was often moved indoors for cooking and warmth. With the rise of agriculture, storing crops required some kind of structure as part of the community for shared assets. They also domesticated animals and built shelters to keep them safe. Domesticated pigs were originally wild boars, and goats were likely ibex. Each region had different types of animals, and people chose the animals that could be tamed and were valuable to the community.

What were the prehistoric indigenous people like? Researchers are explorers of the past, and they gather their information from archaeological findings unearthed in caves that have been sealed for thousands of years. These artifacts provide us with a unique window into the lives and culture of our distant relatives, offering invaluable insights into their way of life. Perhaps one of the most important sources of information are the drawings and paintings found on the walls of these caves, which depict scenes of daily life, spiritual beliefs, and environmental surroundings. By studying these ancient artworks, researchers can piece together a more detailed picture of who these people were, their beliefs, and their relationship with the world around them, helping us to better understand the origins of human civilization.

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2.2: Geology of Caves

Definition: Term

Limestone: A sedimentary rock made mainly of calcium carbonate, commonly used in architecture and sculpture because it is easy to carve.

Photosynthesis: The process by which plants use sunlight, water, and carbon dioxide to make food (glucose) and release oxygen.

Carbon Dating: A method used to determine the age of organic materials by measuring radioactive carbon-14.

Pigments: Substances that give color to paint, ink, and other materials, made from natural or synthetic sources.

Cave Formation

Most caves are formed from **limestone**, a porous rock through which water can pass. As water flows through the rock, it clings to the ceiling. Droplets of water drip down, and a chemical reaction occurs, leaving behind a ring of **calcium carbonate**, also called calcite. These deposits accumulate over time, creating large columns or stalactites. The tiny droplets also collect on the cave floor, causing small bumps to grow into **stalagmites**. Water drips from the ceiling and walls, forming other unusual shapes. Growth is slow; over a million years, it can take up to a thousand years to add just a couple of centimeters.

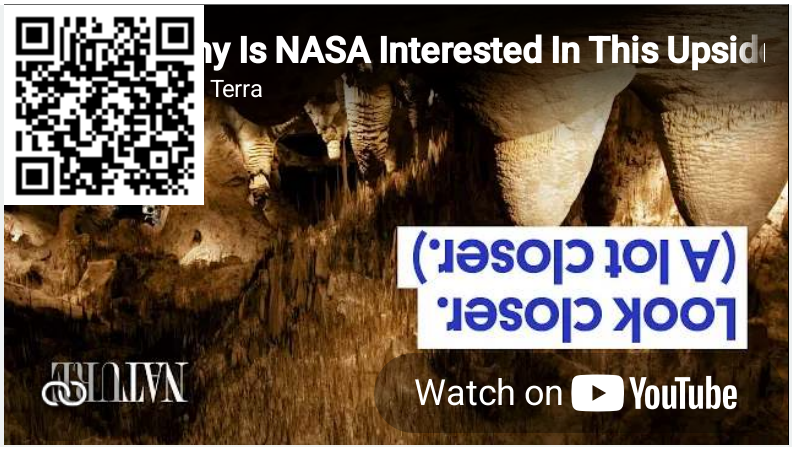
Caves are openings in the earth caused by the erosion of limestone (2.2.1). Limestone is a naturally occurring sedimentary rock and accounts for 10% of all the rock on the planet. It typically consists of marine skeleton fragments from coral reefs, along with silica, chert, clay, sand, and silt grains. Limestone erodes quickly when exposed to water.

The caves formed when melting glacier water or rainwater mixed with carbon dioxide, creating carbonic acid that reacted with the limestone, causing it to dissolve. Caves usually have an entrance for water or some opening and an exit or spring where the water flows out. Over time, water eroded the limestone, forming the extensive cave systems we see today. Rocks are unstable, and cave entrances are typically blocked by erosion and rockslides, which helps preserve the caves until other civilizations discover them.

Figure \(\PageIndex{1}\): Limestone worn by wind, sand, and water (James St. John, CC BY 2.0)

Why is NASA Interested In This Upside Down Cave?

Below the Chihuahuan Desert in southeastern New Mexico, lies an extensive system of limestone caves, among them the pristine Lechuguilla Cave and the famed Carlsbad Cavern, home to one of North America's largest underground chambers. But there’s more to this subterranean world than gigantic geological formations. It's also ground zero for a microbial war that’s been raging for thousands of years, right beneath our feet.



How Do Caves Form?

Caves are some of the most interesting and perplexing features on our planet. Here's how they form!

Carbon Dating

Many people are curious about how scientists determine the approximate ages of ancient artworks and artifacts. This question has intrigued scholars and enthusiasts alike for centuries. In the late 1940s, the University of Chicago pioneered an innovative method called radiocarbon dating, which relies on measuring the amount of carbon present in an object and comparing it to the levels in the atmosphere at the time the organism was alive. This form of carbon, known as **C-14**, is continually produced in the atmosphere through interactions between cosmic rays and atmospheric nitrogen.

Plants absorb C-14 during **photosynthesis**, and animals obtain it by eating plants; thus, C-14 becomes integrated into the biological makeup of living organisms. When an animal or plant dies, the intake of C-14 stops, and the isotope begins to decay at a predictable rate. Specifically, C-14 has a half-life of approximately 5,730 years, which provides a reliable timeframe for dating objects up to around 50,000 years old. To measure the remaining C-14 in a sample and determine its age, scientists utilize advanced analytical tools such as a mass spectrometer. This technology allows for precise analysis of the isotope's concentration within artifacts, enabling researchers to establish accurate dates and better understand the timeline of human history and prehistoric art.

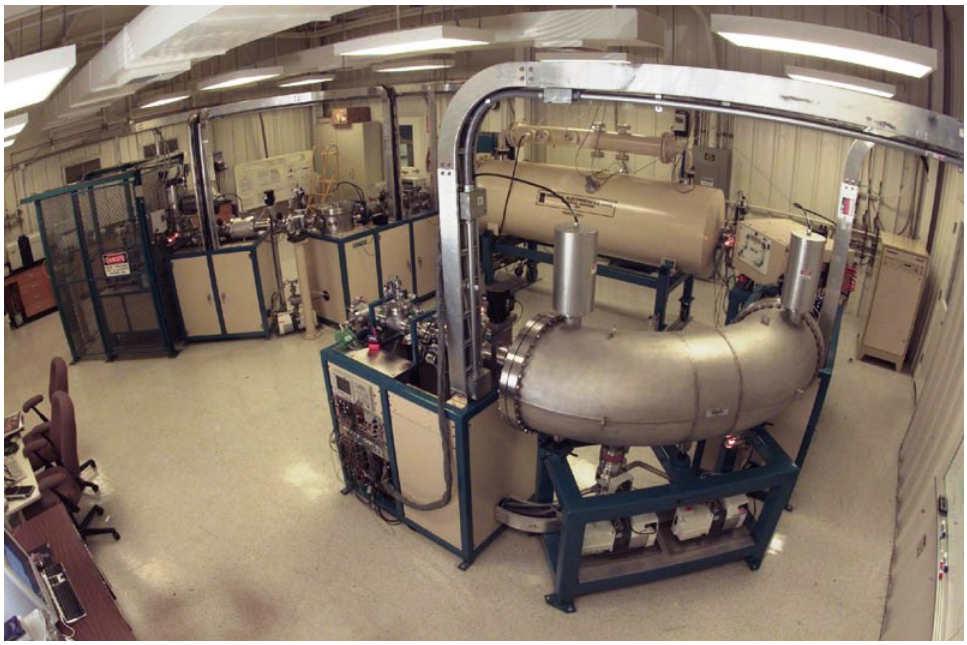
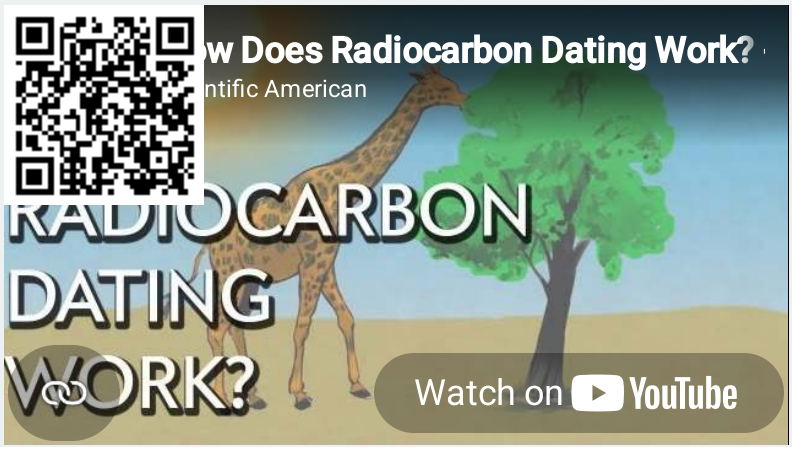


Figure \(\PageIndex{2}\): Mass accelerator spectrometer for radiocarbon dating (Public Domain)

How Does Radiocarbon Dating Work?

How do scientists determine the age of fossils that have been under the surface of the earth for thousands of years? Scientific American Editor Michael Moyer explains the process of radiocarbon dating.



Carbon dating is a widely used technique for determining the age of archaeological and paleontological samples that are less than approximately 60,000 years old. Its effectiveness diminishes for older objects because the amount of residual radioactive carbon-14 becomes too small to accurately measure. Consequently, scientists turn to alternative methods such as **uranium-lead dating** when investigating much older geological formations and artifacts. Uranium-lead dating involves measuring the decay of uranium isotopes within minerals like zircon crystals found in rocks. Since uranium decays into lead at a very predictable rate over long periods, this method allows researchers to determine the age of a rock from its formation. The decay process of uranium to lead is much slower compared to carbon-14 decay, making uranium-lead dating suitable for estimating the ages of ancient geological samples, often spanning billions of years.

How Old is that Rock?

Uranium-Lead Dating using Zircon Crystals.

Cave Materials

The earliest known cave paintings were simple line drawings created using dark charcoal, which is a residue produced when wood is burned. These drawings primarily depicted primitive symbols and served as some of the first forms of human expression. Prehistoric people had easy access to ample supplies of charcoal since they relied heavily on wood for essential activities such as cooking fires and providing warmth, regardless of their geographic location. Over time, as their artistic skills and understanding of their environment improved, they began to enhance their cave art by incorporating natural elements from the ground or rocks to add color and detail to the animals and scenes they depicted on the walls, demonstrating an evolving artistic approach.

Figure \(\PageIndex{3}\): Line drawing (ell brown, CC BY-NC-SA 2.0)

The **colors** used in the cave drawings are classified as earth tones because the artists made their paint from clay and natural materials. Prehistoric people pioneered the use of color, and this practice continues today. Clay-like rocks contain mineral-based oxides that provide a variety of colors; for example, rocks with iron oxide produce a reddish-brown hue. These rocks could also be ground into a powder and mixed with a binder. The different colors of “paint” depended on the raw materials they had available. Earlier paintings were created with found rocks containing minerals such as kaolin, manganese, or iron oxide, resulting in primary colors: black, brown, white, yellow, and various shades of red (2.2.4), (2.2.5), (2.2.6), (2.2.7), and (2.2.8).

Different **pigments** and colors were used around the world because the rocks and soil in each area had slightly different compositions. In Australia, the palette included charcoal, yellow ochre, and red ochre. The pigments used in Africa were red and orange, made from ochres; whites, made from zinc oxides; black, made from charcoal; brown, made from hematite; and blue, made from iron, which was unique to Africa. Kaolin for white is commonly used in China, and a variety of blacks made from manganese oxides are used in France. Most of the rocks and minerals used in these paintings come from the local environment. In some

regions, the rocks used in the drawings were traded from distant places, indicating the existence of trade routes. The prehistoric people also stockpiled minerals they needed for future paintings.

> “Recent archaeological work has uncovered some of the tools these people used. One notable find is a shell (abalone shell) used to hold the pigment and a quartzite stone for grinding up the pigments like charcoal and ochre, and for the paintbrush, the artist used one of the thin bones from the front leg of a wolf with one end dipped in ochre.”[1]

The different colors of “paint” depend on the raw materials available. The two main colors are red, usually made from iron oxide, and black, produced from charcoal or manganese oxides. Some of the most common colors are:

Figure \(\PageIndex{4}\): Red ochre (marcofantoni84, CC BY-NC-SA 2.0)

Figure \(\PageIndex{5}\): Yellow ochre (Geoff Whalan, CC BY-NC-ND 2.0)

Figure \(\PageIndex{6}\): Lime white rock (Ponor, CC BY-SA 4.0)

Figure \(\PageIndex{7}\): Umber (James St. John, CC BY-SA 2.0)

Figure \(\PageIndex{8}\): Black carbon or charcoal (Public Domain)

Prehistoric people probably did not know about the color wheel as we understand it today. Instead, they relied on mixing the colors they had available to them in their environment to create new hues. By blending these primary colors with black, white, or grey, they could produce a variety of secondary colors and shades, expanding their palette. All colors possess three distinct properties: hue (the basic color), value (the lightness or darkness), and intensity (the brightness or saturation). When artists or early humans experimented with adding black or white to primary colors such as red ochre, these properties would change accordingly: mixing white with red ochre lightened the color, increasing its value or creating a tint; mixing black with red ochre darkened it, reducing its value or producing a shade; and blending grey could alter the tone, making the color appear more subdued. In the context of cave paintings, mixing red ochre with black could add depth, shadows, and realism, especially when viewed in the flickering glow of firelight, helping the images seem more lifelike and three-dimensional.

[1] Retrieved from https://edu.rsc.org/resources/prehis...s/1540.article

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2.3: Cave Art

Definition: Term

Cave Artists: Prehistoric people who created images on cave walls using natural materials to depict animals, humans, and symbols.

Charcoal: A black drawing material made from burned wood, commonly used in early cave art.

Natural Earth Pigments: Coloring materials made from minerals, clay, and soil found in nature, such as red and yellow ochre.

Chalk: A soft white stone or mineral used for drawing and marking on surfaces.

Cave artists pioneered the creation of artistic methods and the use of materials that continue to influence art today. While modern products are often streamlined and packaged in convenient forms such as paint tubes or sticks, the fundamental components for making paint—namely a binder combined with powdered or ground minerals—have remained largely unchanged since prehistoric times. Early artists utilized **charcoal** obtained from fire pits to sketch outlines of animals on cave walls, then filled in these outlines with **natural earth pigments** (2.3.1). Some would also incise the rock surface to produce a permanent line, then add pigment to enhance and decorate their artwork. These ancient techniques laid the foundation for artistic expression and pigment use that persists in various forms to this day.

Figure \(\PageIndex{1}\): Handprint painting (Public Domain)

To produce paint, cave dwellers began by grinding rocks or clay by hand. Many caves feature hollowed-out spots in the rock floor, with stains indicating where people once extracted fine powders from minerals. To transform these powders into usable paint, they employed various natural binders such as animal fat, blood, bone marrow, spit, urine, or water. By mixing these ingredients into a paste and shaping it into sticks, they could directly apply the paint to cave walls. Throughout their exploration, they likely experimented with different natural resources to develop a paint that would not only spread evenly and adhere well to the surface but also endure for thousands of years, preserving their artwork for generations to come.

Living in the Stone Age: Making Stone Age Art

The Living in the Stone Age team create a piece of artwork on deerskin using natural pigments made from charcoal, chalk and ochre.

Today’s pastels are made from finely ground powdered pigment mixed with a binder. Through experimentation, prehistoric people were actually the first to create **pastels,** though they did not receive credit. Modern pastels, invented in the 17th century, were produced by machines, resulting in a uniform product. However, prehistoric artists often took lumps of the colored mixture and shaped them into sticks. Then, they drew directly on the wall, much like we do today with a pastel crayon.

Chalk is very similar to pastels, but instead of being made from grinding rock into a fine powder, chalk is in its natural form. Chalk was formed from **limestone** about 100 million years ago, originally under the sea. Today, chalk is mined from the earth and shaped into cylinders that are common in classrooms. Many cave paintings were created with lumps of chalk they found naturally in their environment.

The **cave dwellers** were very inventive in the ways they applied paint to the walls. Historians believe they used their fingers, animal skin pads, or moss clumps to pat or dab the paint. Sometimes they made more advanced “brushes” from twigs and animal hair or fur to apply the paint. They even crafted spraying tools from hollow bones to blow the paint through, like a straw, or they blew the paint directly from their mouths. These methods helped create the stencil-like handprints found in many caves.

Patterns in art relate to how the surface of the artwork is designed. For example, cave art often uses patterns; these are drawn or carved directly into rock surfaces. Some caves have more textured, rocky, or bumpy surfaces, while others are smooth or slightly uneven. The key aspect of the texture in caves is that the drawing surface had enough roughness to hold onto charcoal or pigment, leaving it embedded in the rock and creating a coarse design. The rough texture of the drawing feels different to the touch, and this uneven pattern makes the cave art distinctive and sets it apart from other types of art.

Drawing might have helped prehistoric people understand their world and communicate with others. Some drawings were simple, while others were more intricate and detailed. A basic drawing could be created with red ochre and stood out against the white walls of the cave, often featuring simple figures. Most caves showed images of animals local to the area, **handprints**, and other symbols. It’s unclear if these symbols were just decorative or held some meaning. If the caves had remained open and exposed to the elements instead of being sealed off, the artwork likely would have been destroyed or affected by natural forces like mold, causing it to disappear over time.

Cave Art 101

From human hands to now-extinct animals, cave art gives us a glimpse into prehistoric life. Who created cave art, and what was its initial purpose? Explore the paintings of Chauvet-Pont d'Arc and Lascaux Grotto, and learn what prehistoric art can tell us about our world thousands of years ago.

African Caves

Blombos Cave in South Africa, located at the southern tip of the continent, is a significant archaeological site that dates back to between 70,000 and 100,000 years ago. This site has provided valuable insights into the behaviors and cognitive development of early Homo sapiens. Researchers have uncovered a variety of remarkable artifacts, including engraved materials, sophisticated bone and stone tools, and even cave paintings. Notably, an ochre painting (2.3.2) on the walls was dated to approximately 73,000 years ago, making it the oldest known rock art. The drawing itself is small, but it is believed that it was originally much larger than the small section of rock currently uncovered, suggesting that early humans may have created larger and more complex artworks.

> Archaeologist Christopher Henshilwood said, “The abrupt termination of all lines on the fragment edges indicates that the pattern originally extended over a larger surface.”[1]

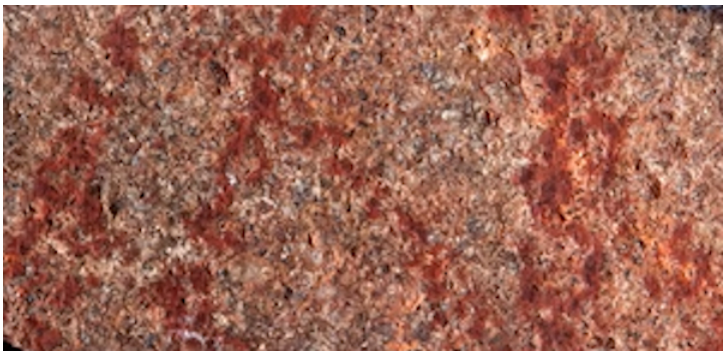


Figure \(\PageIndex{2}\): Oldest known drawing by human hands (Public Domain)

Ladder to the Stars

See the first laboratory on Earth - Blombos Cave. Here our ancestors conducted the first chemistry experiments.

Apollo II – Namibia

Apollo II – Namibia: A cave known to natives as **Goachanas** is located in **Namibia, Africa,** situated high on a ridge overlooking the **Nuob River** in the **Huns Mountains**. It was used for thousands of years by indigenous people, and only through British imperialism did it become known to the world. The English name was given to the cave by a British archaeologist who was inside when he heard that Apollo 11 successfully landed on the moon in 1969. One of the oldest images in the world resides in the Apollo 11 Cave (2.3.3). The cave contains one of the world's oldest pieces of **transportable art**, a quartzite stone slab depicting an animal. The “paint” used by the Bushmen was a mixture of ostrich egg yolk and ground ochre. Also discovered was an incised ocher dating back to 100,000 BCE, used to draw and paint animals on stone walls. Most of the artwork was damaged and fell off the wall, buried deep in the cave's debris. So far, seven pieces of rock with animal figures have been found in the cave. The images were created with charcoal, ochre, and white pigment.

Figure \(\PageIndex{3}\): Stone slab from Apollo 11 (Public Domain)

Asian Caves

Damaidi

Damaidi – China: The **Damaidi Cave** is a remarkable archaeological site that contains an astonishing collection of over 3,170 sets of **petroglyphs** and more than 8,000 individual pieces of rock art. These ancient carvings and drawings are considered by historians as a vital piece of the puzzle in understanding the origins of Chinese characters used in modern times. While many of the images depict hunting scenes similar to those found in other caves, the Damaidi Cave also uniquely reveals a cultural fascination with the night sky and celestial phenomena. Situated on a meander of the **Yellow River**, the cave served as a refuge and recording space for nomadic peoples who traversed the region. They utilized the natural rock surfaces and outcrops to inscribe images that captured their daily lives and environment by etching figures of animals, humans, and geometric symbols, often filling these carvings with pigment to enhance visibility. If these early carvings and symbols are indeed the precursors to written language, then they hold the potential to significantly alter our current understanding of the origins and development of writing systems in human history.

Bhimbetka

Bhimbetka, located in India, is home to the oldest known cave art in the country, with origins dating back approximately 30,000 BCE. The intriguing wall paintings at the Bhimbetka rock shelters provide a vivid glimpse into ancient Indian culture and daily life. These images depict a range of scenes starting from early representations of animals, which were likely significant to the people's environment and sustenance. Over time, the artwork evolved to include depictions of human figures, musical instruments, and geometric patterns, illustrating both survival and cultural expression. Among the detailed illustrations are scenes of people riding horses and wielding weapons (2.3.4), highlighting aspects of warfare or hunting, and confrontations where a person is shown being attacked by an animal (2.3.5), emphasizing the dangers of early life. The paintings are remarkably vibrant and striking, with colors derived from natural sources: the dark orange hued **pigment** was created using hematite and iron oxide, mixed with kaolin and animal fat to ensure durability. These artworks, spanning tens of thousands of years, serve as a profound record of daily life, societal changes, and spiritual beliefs in ancient India, preserved on the walls and ceilings of the caves for millennia.

Figure \(\PageIndex{4}\): People on horses (Michael Gunther, CC BY-SA 4.0)

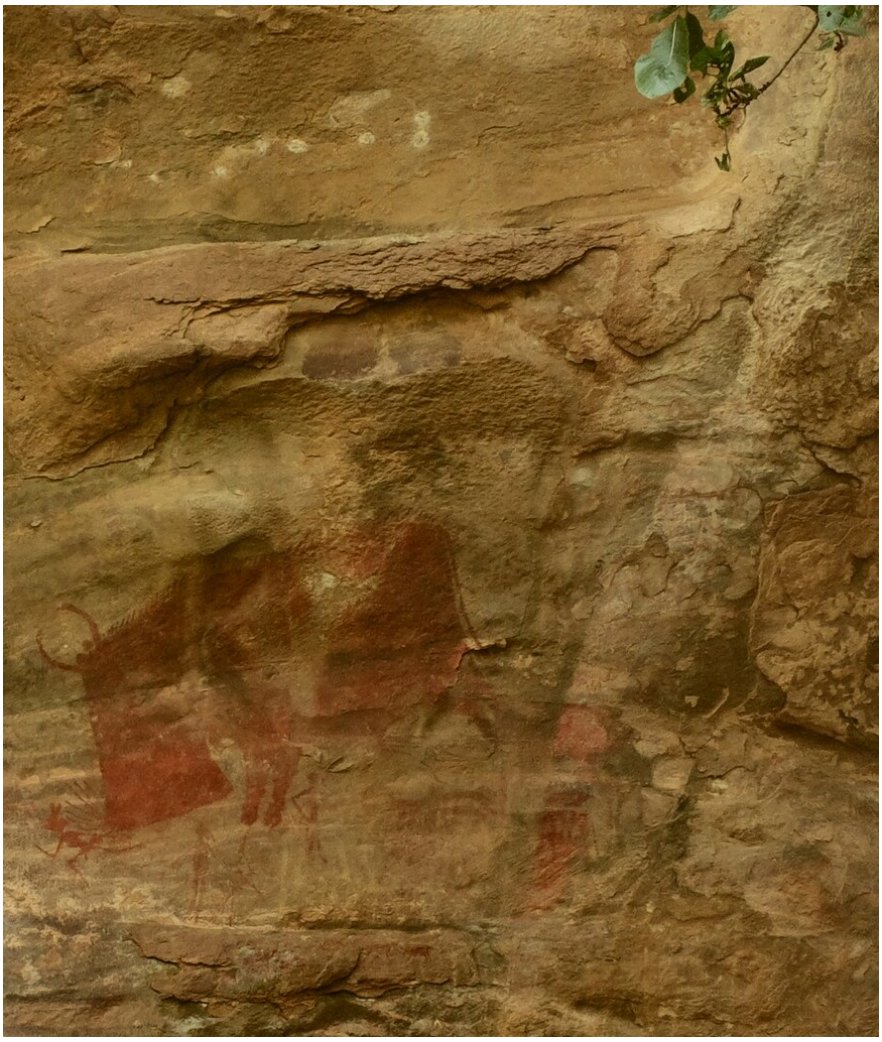


Figure \(\PageIndex{5}\): Person under attack (solarisgirl, CC BY-SA 2.0)

Bhimbetka Rock Shelters

The well-known prehistoric caves which were once the home of early men now treasures the stunning paintings made by them on the rock shelters of Bhimbetka. Visit this remarkable UNESCO approved World Heritage Site located just 45 km from Bhopal.

European Caves

Chauvet

Chauvet – France: In 1994, **Jean-Marie Chauvet** explored and finally discovered one of the most significant prehistoric caves in the world. The cave had been sealed for over 36,000 years and contained more than 100,000 drawings, offering valuable insights and helping us better understand the lives of the region's prehistoric people.

> *"We found ourselves in front of a rock wall covered entirely with red ocher drawings" as they (Chauvet, Brunel, and Hillaire) tunneled their way into the Chauvet Cave for the first time, a world frozen in time.*

Imagine crawling through a hole no wider than a human body in pitch-black darkness with only a single headlamp. The air inside the cave is over 30,000 years old; your eyes try to adjust to the dim light, and then, finally, you see the chalky outline of a prehistoric animal. You're looking directly into a time capsule, a moment from when people were hunter/gatherers, lived in small tribes, and took the time to draw on cave walls. Why did these prehistoric people draw on the walls? Were their motives religious, was it art for art's sake, or were they telling stories about their lives?

The **Chauvet Cave** stands out from other cave art because the prehistoric artists scraped or cleaned the surface of the walls before drawing on them. This cleaning helped the paint adhere to the wall, preserving the quality of the drawings over time. The Chauvet Cave also contains animal drawings showing interactions between the animals, as seen in the painting of lions (2.3.6). In most caves, single animals are randomly scattered across the walls without any interaction.

Figure \(\PageIndex{6}\): Paintings of lions (Public Domain)

The Chauvet Cave is not the only cave in the world with animal drawings, nor is it the most unique. Discovering caves is challenging because of time passing, rockslides, or plant growth blocking the entrances from exploration. The cave is sealed to protect the artwork on its walls and the artifacts from the indigenous people from being destroyed. Many caves contain artifacts left by animals that lived there, including their sleeping beds, etched into the cave floor.

Chauvet Cave: Preserving Prehistoric Art

The Chauvet cave, in the Ardeche region of southern France, contains some of the oldest and most remarkable cave drawings ever found - yet it's been sealed shut since its discovery to preserve this precious art. Now a vast replica of the cave and its spectacular paintings has been built. Our science correspondent, Rebecca Morelle, can compares the two versions, because she's been given extremely rare access to the original cave.

Lascaux

Lascaux – France: Throughout history, archaeologists and explorers have been uncovering prehistoric caves, often discovering these mysterious underground worlds quite unexpectedly. These discoveries have added invaluable insights into early human life and artistic expression. One particularly famous site is the **Lascaux Cave in France**, which has captured the imagination of many. According to historical accounts, in 1940, a significant accidental discovery occurred when a fallen tree created a large depression

in the ground. During a hike, three boys and their loyal dog stumbled upon this hole. The dog fell into the hidden cavity, and curiosity drove the boys to follow. They entered the dark depths and uncovered a breathtaking world that scientists later dated to be approximately 17,000 years old. Remarkably, the boys and their dog continued to explore and play inside the cave for about two years. Eventually, they decided to report their incredible find to an archaeologist, which sparked widespread interest. The Lascaux Cave's discovery marked a milestone in prehistoric archaeology and became an immediate tourist attraction, celebrated worldwide as one of the most important finds of P**aleolithic cave art**, adorned with intricate and extraordinary images created by early humans.

Figure \(\PageIndex{7}\): Wild Horse (Public Domain)

The Lascaux Cave is geologically similar to the Chauvet Cave, and the painted animals (2.3.7) are alike. The Lascaux Caves, which were discovered much earlier, allowed people to enter the unprotected cave. They are now sealed off to tourists because breathing can damage the art. A team of artists and engineers used laser photography to map the entire Lascaux Cave, and with a computer-aided program, they created a reproduction site that looks, smells, and sounds just like the original cave. The cave is a large reproduction of the Great Hall of the Bulls and lets people explore the beauty of cave art without destroying the original.

Virtual Tour of Lascaux Cave

A walk through the Lascaux Cave using virtual reality.

El Castillo

El Castillo – Spain: Several caves in Spain, including the **El Castillo Cave** (2.3.8), were explored to determine if sound or music played a role in the cave painting rituals. The research team entered the caves and used items accessible to prehistoric people to create music by playing the stalactites. Different **stalactites** produced unique sounds depending on their size, width, and length. They also blew through animal horns to produce loud bass sounds. The research thoroughly confirmed that prehistoric people could and likely did create music alongside their art. One of the paintings in El Castillo, dated to 40,000 BCE, is a primitive red stippled disk. The cave also contains many **handprints**, and a study of finger length ratios led scientists to suggest that stenciled handprints are mainly from women's hands, challenging the idea that only men created cave art.

Figure \(\PageIndex{8}\): Main room El Castillo (CC BY-SA 3.0 ES)

Oceania Caves

Nawarla Gabarnmang Rock Shelf

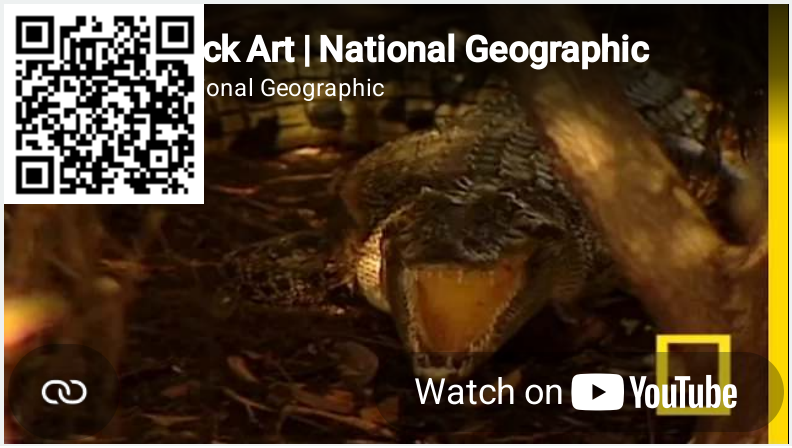
Nawarla Gabarnmang Rock Shelf – Australia: The Aboriginal people are indigenous to the continent of Australia and surrounding islands, descendants of those who migrated out of Africa over 125,000 years ago and survived and thrived in peaceful coexistence with the harsh, drylands. They were **nomadic tribes** that moved as needed to hunt and trade, a prehistoric people who created extensive murals on the rocks, a tribute to an artistic society.

The Nawarla Gabarnmang Shelter in Kakadu National Park, Australia, is another example of detailed rock art, including drawing, painting, and carving. **Carbon dating** indicates that humans occupied the cave around 43,000 BCE. The walls, ceilings, and shelter columns feature murals depicting crocodiles, wallabies, kangaroos, and humans. The artists found a mulberry ochre and turned it into a **paintstick,** giving the art its reddish-purple hue. The area includes several rock and cave formations, all decorated with detailed artwork of people. The figure on the wall, made with ochre and chalk (2.3.9), seems to be celebrating.

Figure \(\PageIndex{19}\): Cave Painting (Thomas Schoch, CC BY-SA 3.0)

Rock Art

Australia's true colors can be found in artwork that dates back to the time of Neanderthal man.



Sulawesi Cave

Sulawesi Cave in Indonesia is home to prehistoric paintings that date back to approximately 39,900 BCE, making them some of the oldest known artworks in the world. When explorers first discovered the cave, they were skeptical of its age, dismissing the possibility that such ancient art could have survived in the humid, tropical climate of the region. However, subsequent reviews and modern scientific analyses have confirmed that these murals are indeed among the oldest in existence. Originally, the paintings covered the ceilings of the cave, but today, only fragments—designated as (2.3.10, 2.3.11)—remain visible. This discovery not only provides invaluable insights into early human artistic expression but also challenges previous assumptions about the preservation of ancient art in tropical environments.

Figure \(\PageIndex{10}\): Handprint Sulawesi Cave (CC BY-SA 3.0)

Figure \(\PageIndex{11}\): Handprints (Sanjay P. K., CC BY-NC-ND 2.0)

South American Caves

Cueva de las Manos

Cueva de las Manos – Argentina: The term 'pattern' can also mean repetition, and at the remarkable site of Cueva de las Manos in Argentina, the intricate pattern of handprints (2.3.12) decorates the walls, offering a fascinating glimpse into prehistoric art. These handprints were created thousands of years ago by ancient people who sprayed pigment and water from their mouths onto a hand pressed against the rock surface. When they withdrew their hand, the surrounding paint formed a silhouette, giving the impression that multiple individuals were waving their hands in the air, almost as if communicating or marking their existence. Besides the handprints, the caves feature numerous other images, including detailed depictions of animals and scenes of hunting, which were created between approximately 13,000 and 9500 BCE. The **primary colors** used in these artworks were red, yellow, white, ochre, and black, with animal fat and blood serving as binders to help the pigments adhere to the rock surfaces. These ancient artworks not only represent early human creativity but also provide valuable insights into the lives, beliefs, and environment of the people who once inhabited this region, making Cueva de las Manos a significant site for understanding prehistoric art and culture.

Figure \(\PageIndex{12}\): Hand art (Public Domain)

[1] Retrieved from https://www.bbc.com/news/science-environment-45501205

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2.4: Handheld Art

Definition: Term

Handheld Statuettes: Small sculpted figures made to be held in the hand, often representing humans or animals.

Mammoth Tusk: Long curved ivory tooth from a woolly mammoth, used in prehistoric times for tools and carvings.

Reindeer Antlers: Branched bone structures from reindeer, used by prehistoric people to make tools, weapons, and art.

Prehistoric People: Humans who lived before written records and relied on tools, hunting, gathering, and early forms of art.

Small **handheld statuettes** were crafted from ivory, bone, stone, or antlers and have been discovered across Africa, Europe, and the Middle East. These small, picturesque carvings were typically found in caves or near multi-user campsites. Archaeologists classify portable art as reflective of culture, livelihood, and social organization. Most objects depicted animals that people hunted or coexisted with, except for the rounded representations of females. However, some objects were abstract or engraved with patterns. **Prehistoric people** used specialized tools to carve these forms, including some with specific points for drawing, cutting, shaping, or puncturing. Bone needles dating back over 20,000 years have been found. **Tools** to create these miniature statuettes had to be made before artists could begin shaping the objects. While discovering these sculptures is a significant find, it raises more questions than answers. What were they used for? These small pieces challenge our understanding of prehistoric people and their desire to create beautiful art, and many of these carvings likely remain undiscovered.

The stereotype of **Ice Age female figures** is often and inappropriately called 'Venus' women. Early archaeologists used this term to describe small, female-like sculptures. The purpose of these figures remains unknown; they may be fertility symbols, representations of ordinary women, or based on the shape of the original material they were carved from. Most figures have been found in caves or sites of repeated campsites used by prehistoric people. These figures date from 50,000 to 10,000 BCE and usually measure between 2 cm and 11 cm, carved from bone, antler, or stone. They lack facial features, have small arms and legs, and feature exaggerated characteristics.

Ice Age Art

A new exhibition at the British Museum features sculptures made up to 40,000 years ago. Dr. Alice Roberts meets curator Jill Cook to discuss three artefacts in the collection; the Lion Man, a group of female figurines from Siberia, and the oldest known flute. Despite being made thousands of years ago, the objects show that the minds of their creators - our ancestors - were incredibly similar to our own.

Figures

The ***Lion Man*** **figure** (2.4.1) was part of a large amount of broken ivory pieces found in 1939. Because of the pending World War II, the pieces were stored in a box and not located again until 1969. Using over 200 broken pieces, researchers assembled the image of a humanoid topped with a lion's head. The cave lion was the fiercest of the animals, and the artist combined it with the human figure. Historians estimated the figure took about 400 hours to produce. "The stance and muscularity of the shoulders suggest a man standing on tip toes with arms to his sides. The left upper arm is marked with incisions, which might represent tattoos or

scarring. The head faces forward in an alert stare emphasized by a powerful jawline and upright ears. Is this a man wearing a lion headdress or a mythical or supernatural being?"[1]

Figure \(\PageIndex{1}\): *Lion Man* (mammoth ivory, 28.1 cm high, 6.3 cm wide, 5.9 cm thick) (Dagmar Hollmann, CC BY-SA 4.0)

Found in Austria, the ***Venus of Willendorf*** (2.4.2) statuette is one of the most famous portable objects from the prehistoric period. The figure is made from limestone and covered with red ochre. Her head appears bowed and decorated with braids or a fur hat. She has small shoulders and arms that enclose her substantial breasts. Her stomach is also prominent with a large navel and overhangs a defined sexual triangle. She seems to have sturdy thighs and unusually short legs. The figure's interpretation remains uncertain, but it is often described as pregnant, obese, or both.

Figure \(\PageIndex{2}\): *Venus of Willendorf* (Limestone, red ochre, 10.6 cm high, 5.7 cm wide, 4.5 cm thick) (Bjørn Christian Tørrissen, CC BY-SA 4.0)

The ***Brassempouy figure*** (2.4.3) is a remarkably detailed and captivating image of a woman, meticulously carved from a **mammoth tusk**. This prehistoric artifact showcases the artistic skills and cultural significance of early humans, offering a fascinating glimpse into their creative expression and daily life. "Scraped and polished in outline, the eyebrows, nose, and chin are carved in relief, and the pupils in the eyes are marked by little holes. The hairstyle has been created with incised horizontal and vertical lines that form a square pattern. The hairstyle is perhaps indicative of braiding, although when the figure was first discovered, it was thought to be a decorative hood, giving rise to the title 'Dame à la capuche.'"[2]

Figure \(\PageIndex{3}\): *Venus of Brassempouy* (Ivory, 3.56 cm high) (Public Domain)

The ***Savignano figure*** (2.4.4) stands out as the tallest among all known figures from its collection, showcasing remarkable craftsmanship. Carved from **steatite**—a notably soft and easily workable type of rock—the figure exhibits a distinctive and unique form. Its shape is characterized by an unusually pointed design at both ends, which might mirror the original material's natural form or an intentional stylistic choice made by the artist. The head of the figure is pyramidal, featuring a prominent ridge where a face might typically be located, suggesting a stylized or abstracted representation. While the shoulders and arms are not rendered with great precision, the arms appear to curl inward, emphasizing the figure's full, prominent breasts, a defining feature of the figure.

Figure \(\PageIndex{4}\): Venus of Savignano (steatite, 22.5 cm high, 5.0 cm wide, 6.5 cm thick) (CC BY-SA 2.5)

Carved around 23,000 BCE, the figure (2.4.5) from the **Kostenki** cave is made of mammoth bone and depicts a pregnant woman. From the back, she seems to be wearing a fringe or garment. She is faceless as her head bends forward and her arms are held close to her body. Her head is topped with a hat or unique hairstyle. Her hair hangs in a braid down her back, and a large necklace is looped around her neck.

Figure \(\PageIndex{5}\): *Kostenki Venus* (limestone, 10.2 cm high) (CC BY-SA 4.0)

Animals

The ***Vogelherd Horse*** (2.4.6) was discovered in a German cave where the culture existed between approximately 35,000 and 28,000 years ago. This small horse figure is intricately carved from ivory and likely had extended legs, although these have broken off over the millennia, leaving only traces. Its head features detailed carvings of the mouth, nostrils, and eyes, providing a vivid sense of realism. The neck of the figurine is elegantly arched, adding to its dynamic appearance. Additionally, a mane is depicted by crossing and hatching with diagonal cuts, which contribute to the impression that the horse is in motion. This artifact offers valuable insight into the artistic and cultural practices of early humans during the Paleolithic period.

Figure \(\PageIndex{6}\): *Vogelherd Horse* (mammoth ivory, 2.5 cm high, 4.8 cm wide, 0.7 thick) (CC BY-SA 4.0)

The small carving known as the ***Vogelherd Lion,*** (2.4.7) is believed to depict either a snow leopard or a lion. Made from **mammoth ivory,** this figure showcases pointed ears and distinctive markings that help identify its possible species. Its detailed features and the material suggest it has significant archaeological and artistic importance.The figure is made from mammoth ivory

and has pointed ears and distinctive markings. "The markings include crossed lines, a pattern of dots arranged in horizontal lines along the back and thighs, and vertical lines on the front legs. These marks may indicate wounds, or perhaps targets for hunting as proposed in the sympathetic magic theory of Paleolithic art."[3]

Figure \(\PageIndex{7}\): *Vogelherd Lion* (mammoth ivory, 34 mm high, 8.8 cm wide (CC BY-SA 3.0)

The figure of a **bison** (2.4.8) was intricately carved from **reindeer antler**, capturing the animal as it turns its head to the side. The craftsmanship shows the bison's head and neck in low relief, which adds a subtle yet effective sense of dimension and depth to the figure. This small but detailed carving was discovered in the depths of the **La Madeleine** cave in France, providing valuable insight into the artistic skills and cultural expressions of the people who created it at that time.

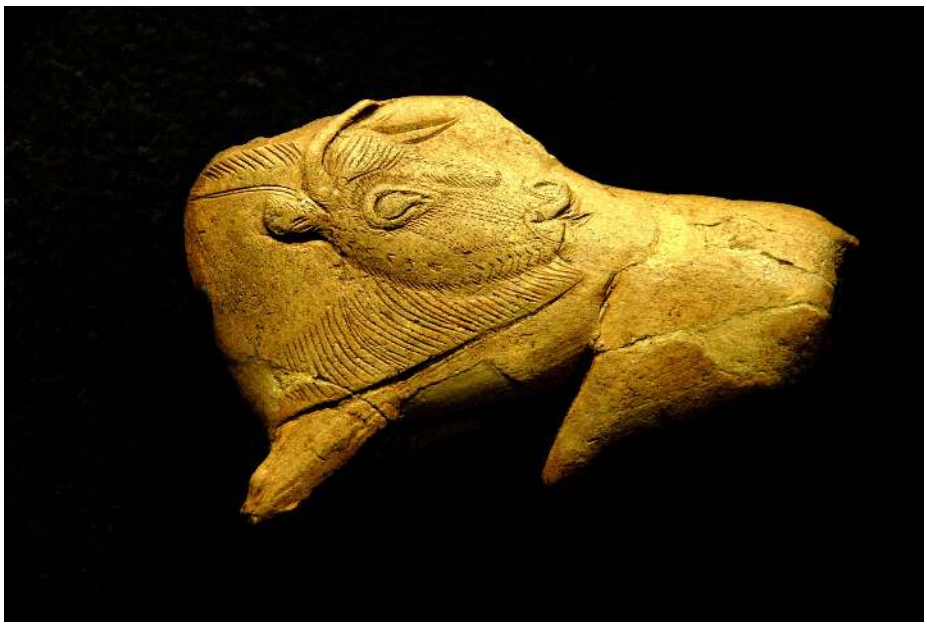

Figure \(\PageIndex{8}\): La Madeleine Bison (reindeer antler, 10.5 cm wide) (Jochen Jahnke, CC BY-SA 3.0)

Patterns

Various art discovered inside these caves ranges from engraved bones, necklaces of marine shell beads, and engraved ochre remains to over 500 fragments of stone tools. The findings inside the **Blombos Cave** resulted in a paradigm shift in cultural anthropologists' understanding of human behavior. Over 8,000 pieces made from ochre-like material were found in the cave, and many were consciously engraved. It is unknown if the symbols are abstract or meaningfully depicting something. The carved piece of **ochre** (2.4.9) demonstrates a repetitive pattern of parallel and cross-hatched incised lines in a thick piece of ochre rock. The inscribed piece of ochre has been dated at 70,000 years old or older. This type of discovery links a relationship to modern human behavior and demonstrates the complex cognitive development of prehistoric humans.

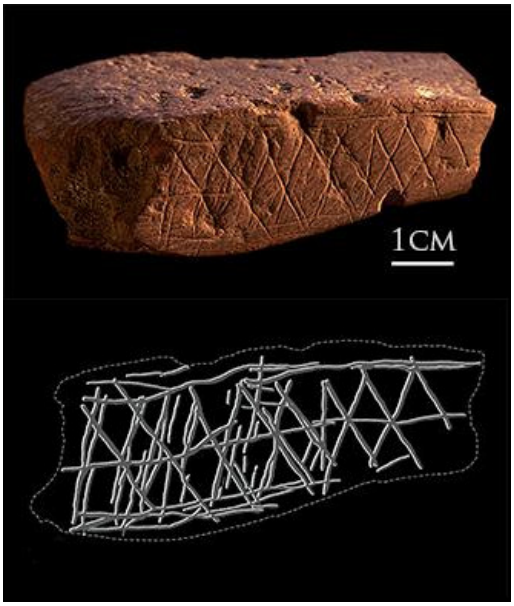

Figure \(\PageIndex{9}\): Blombos handheld art (CC BY-SA 4.0)

Scientists believe the shell from the **sea snail** (2.4.10) was deliberately punctured through the opening with a small bone tool. Wear patterns on the shells demonstrated that the prehistoric people used a cord or sinew to string the shells together for decorative use on clothing or personal ornaments. It indicates the possibility of some social convention. The ability to drill the shell, make the cords, thread the shells, and tie knots in the cord indicated some interaction between people and the use of personal ornaments. Beads were also made from bone, ivory, or teeth and made into bracelets, pendants, and necklaces, as found in different burial sites.

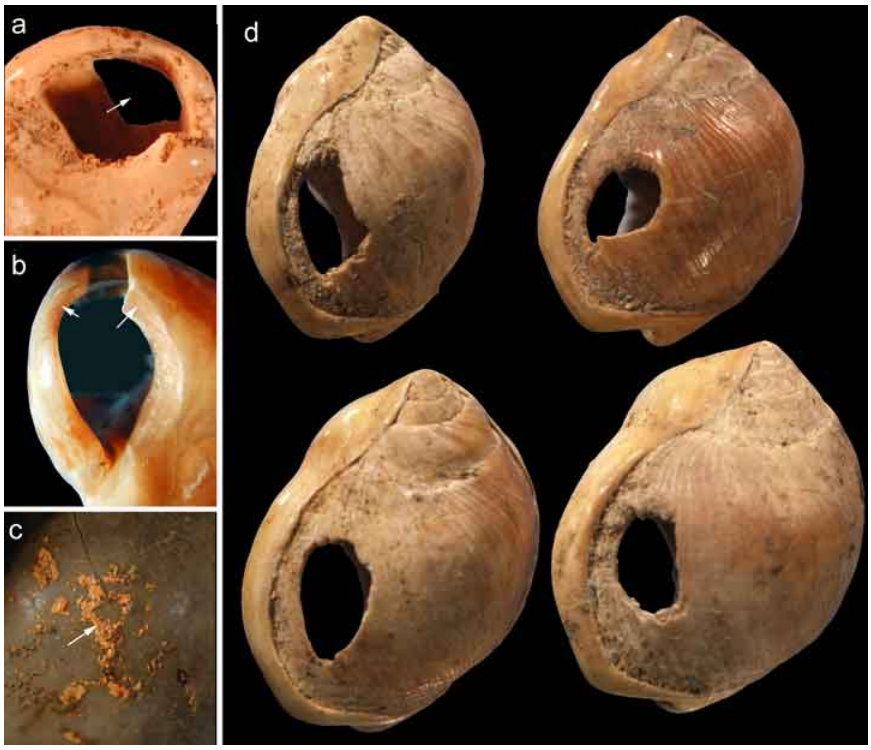

Figure \(\PageIndex{10}\): Shell beads (sea snail shell) (Chenshilwood,CC BY-SA 3.0)

[1] Retrieved from https://www.bradshawfoundation.com/s...e/lion_man.php

[2] Retrieved from https://www.bradshawfoundation.com/s...rassempouy.php

[3] Retrieved from https://www.bradshawfoundation.com/s...re/big_cat.php

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2.5: Conclusion

About 40,000 years ago, indigenous people roamed the planet, living on six different continents and drawing on caves' walls. People decorated their caves' walls for multiple purposes, including communication with others about the animals available for hunting or leaving a message about dangers, or for spiritual meanings. Some of the caves have well-developed images, and in other shelters, the images are more primitive, but all of them display the inhabitant's desire to create. Although geographically scattered around the world, people used similar materials and symbols in their caves, even using their hands as a template to spray pigment around them and leave a record of themselves.

The **cave drawings** across the world have many similarities, like color, pigment, charcoal, and rock walls. However, there are still several regional differences, as well. Some drawings are more childlike and primitive, and some drawings, such as the fish from the **Kakadu, Australia**, show great detail, fish with a backbone, fins, and embellishments not usually seen in cave art. The fine lines are delicate and different colors used to define the skeleton of the fish. The caves' art reflected their daily life, ensuring success in hunting, paranormal, religious, or educational stories.

To think of cave art is to imagine a hostile world where people hunt for food, escape from wild animals, seek shelter in caves, and survive as best as possible. Nevertheless, they had time for art, time to make the art materials, and time to improve and perfect their craft. Putting together a few dots on the walls has turned cave art into a line of several hundred thousand art pieces, recently rediscovered so today we can appreciate the art. Unfortunately, cave art cannot be seen in person today because our presence destroys the atmosphere in the caves. Most caves are not open to the public, but many countries have created authentic reproductions for visitors to explore and enjoy the wonders of art from our prehistoric ancestors.

Caves Around the World

Place	Name	Years	Pictures	Materials
Namibia, Africa	Apollo 11	27,500 – 25,500	Red & white paintings, geometric patterns, bees, animals	Charcoal, ochre, kaolin
France, Europe	Chauvet Cave	32,000 – 30,000	13 species of animals, lions, panthers, bears, hyenas, hand prints, scenes	Red ochre, charcoal
France, Europe	Lascaux Caves		2,000 figures, animals, human figures, abstract signs, large animals	Mineral pigments
DeCabrerets, France	Pech-Merle Cave	25,000	Polychrome painting of Dappled/Spotted Horses, hand stencils, abstract signs, dots and circles, engravings	Black manganese oxide, red ochre
Spain, Europe	El Castillo	40,800	Deer, bison, ibex, cows, handprints, red discs	Red iron oxide
Verona, Italy	Fumane Cave	35,000	Animals, abstract signs, unusual figures	Hematite, titanium, red & yellow ochre
Romania, Europe	Coliboaia Cave	32,000 – 30,000	Animals, bison, bears, rhinos	Charcoal
India	Pachmari	9,000 – 3,000	Animals, humans, scenes	Hematite, iron oxide, kaolin

Indonesia	Sulawesi	35,000	Animals, hand prints	Ochre, ironstone, hematite
China	Damaidi Caves	8,000 – 7,000	Chinese characters, people hunting, herding, fighting, sun, moon, animals, scenes	Carving, iron ore ochre
Northern Territory, Australia	Nawaria Gabarnmang Rock Shelf	26,000	Collage of mural paintings with human and spiritual figures, crocodiles, kangaroos, wallabies	Charcoal, ochre of mulberry, red, orange, white, colors
Kakadu, Australia	Kakadu Rock	20,000	Scenes, animals, ceremonials, people	Hematite, Limonite, ochre, Kaolin, manganese oxide, charcoal
RioPinturas, Argentina	Cueva de las Manos	13,000 – 9,500	Hand outlines, animals, hunting scenes	Iron oxides, kaolin, natrojarosite, manganese oxide

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CHAPTER OVERVIEW

3: The First Civilizations and their Art (5000 BCE – 1900 BCE)

By 5000 BCE, people were living around the globe in small family groups, tribes or larger communities. Some people were still in the Stone Age, some were transitioning to the Bronze Age and the rest were well entrenched in the Bronze Age. The Bronze Age reflected a more sophisticated time when civilizations learned to mix copper and tin to form bronze and the ability to create tools and weapons. Agricultural and societal development was distributed through four major areas; Mesopotamia, Mesoamerica, the Andes, and China. Progress in these broad areas included, farming, irrigation, pottery, written word and some form of government.

3.1: Overview
3.2: Aegean (3000 BCE – 1000 BCE)
3.3: Early Egyptian Dynasty (3150 BCE – 2686 BCE)
3.4: Early Mesopotamia (3100 BCE – 2000 BCE approx.)
3.5: Indus Valley (3300 BCE – 1700 BCE)
3.6: Longshan (3000 BCE – 1700 BCE)
3.7: Early Jomon Period (5000 BCE – 2500 BCE)
3.8: Neolithic England (3100 BCE – 1600 BCE approx.)
3.9: Conclusion and Contrasts

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3.1: Overview

By 5000 BCE, human societies across the globe were organized into a variety of social structures, ranging from small family groups and tribes to larger, more complex communities. During this period, some groups remained in the **Stone Age,** while others were transitioning into the Bronze Age, and a few had already fully entered the Bronze Age. Development in agriculture and society was concentrated in four major regions: **Mesopotamia, Mesoamerica, the Andes, and China**. Advances in these areas included improvements in farming techniques, irrigation systems, pottery, writing systems, and forms of governance, reflecting a broad spectrum of cultural and technological progress.

Origins of Agriculture

The video recreates the timelines of prehistoric human history and how people moved to agriculture.

As part of the **Neolithic period** and the final stage of the Stone Age, groups of people still used stone tools; they also adopted agriculture, transitioning from food gathering to food production. The Neolithic use of stones was advanced; people made stone into grinding tools, as well as for chopping and cutting. Harvesting or moving large rocks required cooperation between groups. In other parts of the world, civilizations either began to form or continued to remain in a **hunter-gatherer culture**. Still, they might have settled into small communities and used their surroundings for food. Historians generally find more information from the more developed civilizations; for example, written language or logograms convey details about daily life instead of the speculation left by less developed artifacts.

How Did Agriculture Grow

The video describes where agricultural products began and how and when agriculture spread throughout the world

As human societies transitioned from the era of **nomadic hunter-gatherers** to more settled life in stable population centers, they began to develop a wide range of sophisticated methods and techniques for managing their environment, particularly in controlling river waters, constructing specialized structures such as dams, bridges, and irrigation systems, and creating advanced tools for agriculture, construction, and daily life. During this transformative period, not only did their technological capabilities improve, but also their cultural expressions, with the development of increasingly complex and diverse forms of art that reflected their evolving social structures and technical skills. The core principles and design elements that characterized these cultures included a focus on shape, volume, and balance, which were evident in various art forms and architectural structures. For instance, the iconic pyramids feature distinct triangular shapes that form solid structures, with secondary profiles created within the spaces, such as inverted triangles or secondary shapes. These pyramid features often carry multiple layers of symbolism, boundaries, and meanings, serving both functional and spiritual purposes within their cultural contexts.

Archaeologists use shape clues to identify artifacts; for example, **Jomon** vessels have a distinct form; they are mainly round with steep sides, coil rope imprints, and an open top. The shape is a key part of the design. Different cultures used similar materials to build structures or make pots; however, each culture used these materials in different ways. Most civilizations used riverbed silt for clay, but the shape and size of their pottery varied. How an object was used influenced the effort needed, and each culture designed its pottery size based on storage or cooking needs. Some civilizations extensively used rock to build specialized structures. The stones of a pyramid were cut to fit and form a triangular shape without mortar; a desert ziggurat made of mud bricks had stones set in mortar for stability. The massive stones of Stonehenge were balanced to evenly distribute weight.

These cultures used natural materials like clay, marble, and stone, which were found locally or transported over long distances using some mechanism for buildings, daily needs, and artwork. Clay was the most plentiful and was found along waterways, making it a convenient and natural resource to gather and use. Using clay pots played a significant role in human development by enabling the cooking of raw grains. These vessels are also vital for archaeologists trying to understand how these ancient cultures lived. Early vessels were likely coil pots—clay rolled into long strips, coiled into

layers, and tempered in open fires—later evolving into more advanced techniques with potters' wheels and kilns. In some regions, marble was quarried, providing a durable, long-lasting material for structures or sculptures, especially in cultures around the islands in the Aegean Sea. Alongside clay, stone was another common material easily accessible in many locations, used for carving sculptures, stacking into buildings, or forming walls. Many parts of these ancient structures still exist today, allowing archaeologists to study the civilizations.

This chapter, *The First Civilizations and Their Art (5000 BCE – 1900 BCE)*, discusses seven different growing civilizations or tribal groups, including:

Civilization	**Approximate Time Frame**	**Starting Location**
Aegean	3000 BCE – 1000 BCE	Aegean Sea, Sea of Crete, Greece and Turkey
Early Egyptian Dynasty	3150 BCE – 2686 BCE	Nile Valley, Egypt
Early Mesopotamia – Sumerian, Akkadian	3100 BCE – 2000 BCE approx.	Arabian Plateau
Indus	3300 BCE – 1700 BCE	Pakistan/India
Longshan	3000 BCE – 1700 BCE	China
Early Jomon Period	5000 BCE – 2500 BCE	Japan
Neolithic England	3100 BCE – 1600 BCE approx.	England

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3.2: Aegean (3000 BCE – 1000 BCE)

Definition: Term

Aegean Civilizations: Early cultures that developed around the Aegean Sea, known for their art, architecture, and seafaring.

Cycladics: People of the Cycladic Islands, famous for simple, geometric marble figurines.

Minoans: An early civilization on the island of Crete known for palaces, frescoes, and maritime trade.

Frescoes: Wall paintings made on wet plaster so the pigment becomes part of the wall.

White Marble: A fine-grained white stone commonly used for sculpture and architecture.

The ancient **Aegean** civilizations inhabited the area around the Aegean Sea, which is located between the modern countries of Greece and Turkey. The region includes over 2,000 islands, with Crete the most important—two main cultures developed in this area. The **Cycladics** (3200 BCE-1050 BCE) lived in the southern part of the region on a group of islands near the entrance to the Aegean Sea, including the major islands of Grotta, Phylakopi, Keros, and Syros. The **Minoans** (2600 BCE-1400 BCE) lived on Crete and controlled Rhodes and Thera. Since the islands are close to each other and visible from one another, communication and trade were easier. Both civilizations laid the foundation for the later Greek civilization.

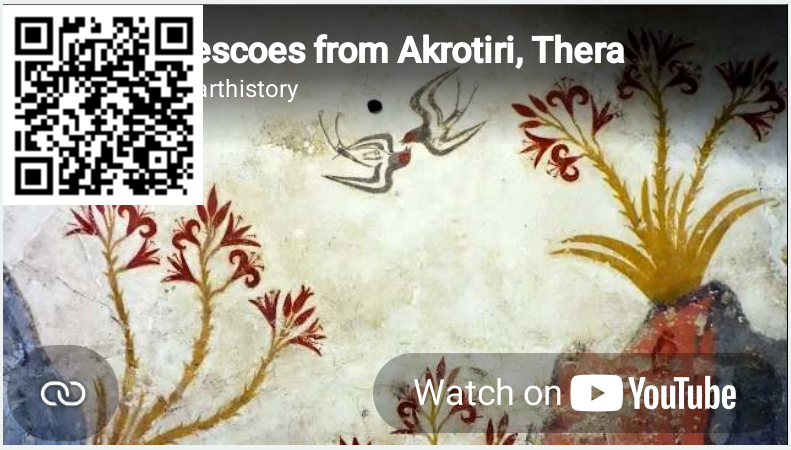
> "The later Greeks called these islands Cycladic, from the Greek *kyklos* (circle), as they encircle Delos, the sacred birthplace of the Olympian twins Artemis, goddess of nature, fertility, and childbirth, and Apollo, god of music, medicine, and the sun."[1]

The Cycladic and Minoan cultures relied heavily on the seas for travel, trade, food, and everyday materials, as well as transportation between islands for commerce. People lived in small farming villages and built stone structures from the abundant stones available on the islands. Crops grown on the islands included figs, grapes, wheat, various vegetables, and a range of spices and herbs. One of the most well-known finds from the Aegean period in the 1960s was the settlement of **Akrotiri** on **Santorini island**. Akrotiri became a key point on trade routes, which led to the rapid development of the island and its evolution into a sophisticated settlement. However, the Theran volcano erupted and covered the settlement around 2000 BCE, preserving its remains (3.2.1).

Figure \(\PageIndex{1}\): Akrotiri ruins (Curtis Gregory Perry, CC BY-NC-SA 2.0)

Frescoes from Akrotiri, Thera

Frescoes from Akrotiri, on the Cycladic island Thera (Santorini), Greece, 16th century B.C.E., Aegean Bronze Age (National Archaeological Museum, Athens).



Researchers discovered many **frescoes** on the walls of Akrotiri, with mineral-based paint pigments helping to preserve the images. The technique used for frescoes involves painting on wet plaster, which becomes a permanent part of the wall once it dries. However, the artists in Akrotiri started with wet plaster and seemed indifferent if it dried before they finished; they kept painting. Unfortunately, some frescoes crumbled from the walls over time. The **Spring fresco** (3.2.2), painted with primary colors along with black, white, and brown, remains perfectly preserved along three walls. Instead of depicting a literal or natural landscape and flowers, the scene is abstract, an unusual choice. It is unknown what the room's purpose was or why the brightly colored fresco was placed there.

Figure \(\PageIndex{2}\): Spring fresco (Gleb Simonov, CC0 1.0)

Figure \(\PageIndex{3}\): Cycladic' frying pan (ca 2700 BCE, clay, 20 cm x 22 cm) (Zde,CC BY-SA 3.0)

Ancient Greek Town Suffered the Same Fate as Pompeii

The eruption of Santorini in 1615 BC covered the town of Akrotiri with meters of volcanic debris. Today, archaeologists are in the process of excavating it–and marveling at its remarkably preserved ruins.

The islands in the Aegean region produced pottery with distinctive decorations featuring geometric patterns and spirals. A dark color was painted over a **light clay vessel** and then covered with white paint. Some artisans created tall, large jugs and drinking vessels with long spouts. Over time, they improved their designs and added more sophisticated, multi-colored images. The overall shape of their clay vessels changed depending on their current needs. The Cycladic frying pan (3.2.3)–shaped vessel is decorated with spirals and incised patterns. This pan, along with most others, features lines of geometric and curvilinear designs that emphasize the star-like shape in the center.

All the islands have beautiful, natural deposits of **white marble** (3.2.4) suitable for quarrying for stone buildings and statues, and the Aegeans made extensive use of this natural resource. The Cycladic people are known for their small carvings of pure white **marble funerary statues**. No one knows the reason for these unique, small figurines, as the figures were found in multiple positions and poses. Not all tombs contained small figures, which may indicate the status of the individual. Many figures in the graves were broken, often at the knees, neck, or waist, adding to the mystery of their purpose.

Figure \(\PageIndex{4}\): Marble quarry (Gabriele85, CC BY-SA 4.0)

The **figurine of a woman** (3.2.5) has a modernist appearance with delicately carved features. This geometric sculpture shows her arms crossed over her chest, with broad shoulders compared to her body, and has no facial features except for a prominent nose. The paint has worn off the statue, which was carved and then painted—a common practice during that period. Historians are unsure of the figures' original purpose. Each female figure holds a different pose, though their arms often cover the stomach area.

This particular statue features a **seated marble harp player** (3.2.6), standing approximately 12 inches tall and meticulously carved from locally sourced marble. It holds the distinction of being the earliest known musician figurine discovered to date. The figure is depicted seated comfortably in a chair, with the harp resting gently on his lap, effectively portraying a person engaged in playing music. The depiction of a seated figure holding a musical instrument indicates that musical gatherings or performances were likely a common aspect of the society that created it, reflecting the cultural importance of **music** during that period.

Marble was easy to access and plentiful, so it was also a common material for practical objects. The marble bowl (3.2.7) is well carved in proportion, with a spout on one side for pouring. The bowl has exceptionally thin walls for its size. The maker did not

add any decoration except for a small handle opposite the spout.

Figure \(\PageIndex{5}\): Cycladic female figurine (ca. 2500-2300 BCE, marble, 13.6 cm x 53.7 cm) (Prof. Mortel, CC BY-NC-SA 2.0)

Figure \(\PageIndex{6}\): Marble seated harp player (2800-2700 BCE, marble, 7.4 cm x 15.1 cm) (Public Domain)

Figure \(\PageIndex{7}\): Marble spouted bowl (2700-2200 BCE, marble, 9.1 cm x 17.3 cm x 20.2 cm) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/perspectiv...cladic-figures

3.3: Early Egyptian Dynasty (3150 BCE – 2686 BCE)

Definition: Term

Nile River: A major river in Egypt that provided water, fertile soil, and transportation for ancient civilization.

Pharaohs: Kings of ancient Egypt who were considered both political rulers and divine figures.

Step Pyramid: An early pyramid with stacked levels, built as a royal tomb.

Great Sphinx: A massive stone sculpture with a lion's body and human head, symbolizing royal power.

Mastaba: A flat-roofed, rectangular tomb with sloping sides used in early Egypt.

Hieroglyphics: The ancient Egyptian system of writing using picture symbols.

The **Egyptian** culture originated along the banks of the **Nile River** and Lower Delta, where ample water supported life for thousands of people. The fertile soil provided productive farmland thanks to the harnessing of the Nile. Around 3500 BCE, the **Pre-dynastic** people were the first to unify Lower Egypt, including the delta, and Upper Egypt, the narrow upstream part of the valley where most early Egyptians lived. They developed into the E**arly Egyptian Dynasty**, a sophisticated civilization that utilized copper and other natural resources. They excelled at farming, irrigation, and flood management, which created a surplus of food. Without the constant need to hunt and gather for food, the Egyptians had time to focus on the arts, producing some of the most beautiful artifacts from early civilization.

The Early Egyptian Dynasty's belief in multiple gods fueled the creativity to build massive tombs for the **pharaohs,** ensuring their souls' survival in the afterlife. Ample stone supplies were available for constructing the enormous pyramid structures and carving the temples. Each pharaoh created a more elaborate tomb than the last. Artists depicted the pharaoh's life on the tomb walls with detailed low-relief painted carvings, where the heads of people were always carved in a sideways profile, even if their bodies faced forward, a prominent Egyptian art style.

In 2611 BCE, **Pharaoh Djoser** built a step pyramid for his tomb on the Giza plateau, a sandy desert with a dry climate on the Nile River's west bank. It started as a traditional mastaba—a rectangular monument of eternity made of mud bricks with a flat roof. However, after his 19-year reign, the design and architecture evolved into the first stepped pyramid tomb. This new tomb set the foundation for how future pharaohs constructed their pyramids. It was the first time stone was used in buildings, making it much more durable than mud bricks used in mastabas. The **step pyramid** of Djoser (3.3.1) features six steps, with multiple rooms and temples. Standing just over 200 feet, it is the largest, most massive structure of its time, with each step carefully balanced to support the next. The Egyptians were skilled engineers, placing Djoser's tomb chambers underground in a maze of hallways to deter tomb raiders. Artists created elaborate statues (3.3.2) as part of the tomb—some guarded it, while others accompanied the pharaoh on his journey after death.

Figure \(\PageIndex{1}\): Djoser pyramid (pyramidtextsonline, CC BY 2.0)

Figure \(\PageIndex{2}\): Djoser statues (CC BY-NC-SA 2.0)

The Inventor of the First Pyramid

The first pyramid ever built was constructed more than 4,500 years ago, and designed by Imhotep. Archaeologists are looking for answers as to how he came up with this design.

The world's oldest and largest surviving sculpture is the **Great Sphinx** (3.3.3, 3.3.4), a remarkable monument situated on the **Giza Plateau** in Egypt. It is widely believed that the face of the Sphinx depicts **Pharaoh Khafra,** whose tomb is the second-largest pyramid at Giza and is located directly behind the sculpture. The Sphinx is a mythical creature with the body of a lion and a human head, specifically representing **King Khafra**. The body was meticulously carved from seven distinct layers of geologically layered bedrock found at the site, shaped to resemble a lion lying down with its front paws extended forward. The head was carefully carved from natural limestone blocks and then seamlessly added onto the body, creating one of the most iconic and enduring symbols of ancient Egypt.

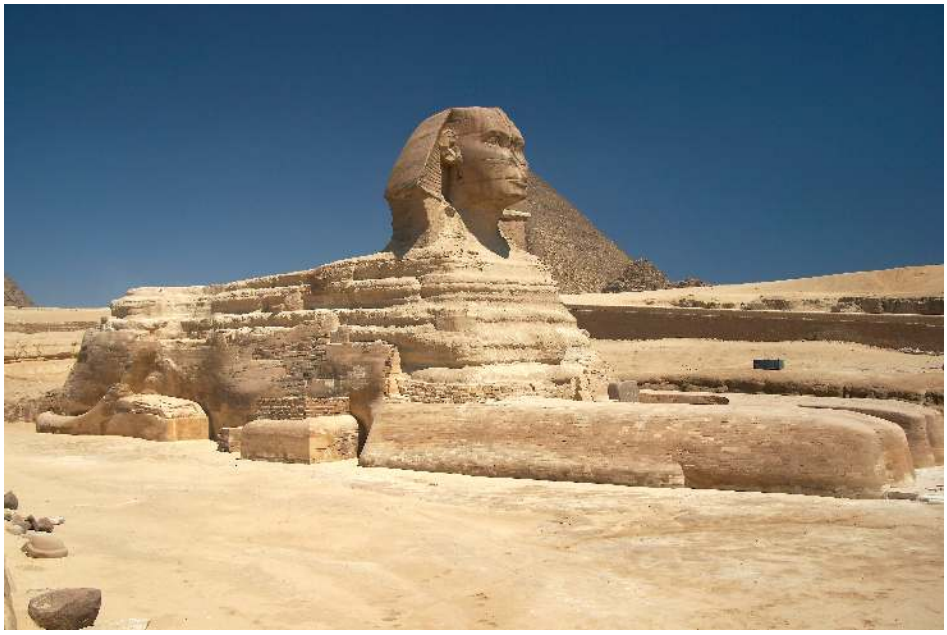


Figure \(\PageIndex{3}\): Great Sphinx (Barcex, CC BY-SA 3.0)

Figure \(\PageIndex{4}\): Sphinx head (George M. Groutas, CC BY 2.0)

There are three large pyramids on the Giza Plateau (3.3.5) built by the pharaohs of the Early Egyptian Dynasty. The largest is known as **King Khufu's Pyramid** (3.3.6), with two slightly smaller pyramids for **King Menkaure** and **King Khafre**. Several smaller pyramids for queens and the king's sisters are scattered around these three massive structures. All the pyramids are aligned to the north, and the largest uses over 2.3 million stone blocks. These massive stones, weighing between 2.5 and 9 tons each, were quarried and transported to Giza. Each pyramid contains burial chambers; typically, the king was buried in the center, protected by a sliding granite block system at the access point to deter thieves. The pyramids were built over 3000 years ago, and historians still lack a complete theory about how they were constructed or how the stones were moved and lifted.

Figure \(\PageIndex{5}\): Giza pyramids (Morhaf Kamal Aljanee, CC BY-SA 3.0)

Figure \(\PageIndex{6}\): King Khufu's pyramid (girolame, CC BY 2.0)

Giza, Egypt: The Pyramids and Great Sphinx

The Pyramids of Giza are one of the most recognizable scenes in all of tourism. The grandest is known as the Great Pyramid; one of the Seven Wonders of the Ancient World, it was designed to house the pharaoh Cheops' body — and help send his soul into the afterlife. Nearby, the Great Sphinx keeps watch over the rising sun.

One of the best examples of carvings from the Early Egyptian Dynasty is the **Menkaure** and **Khamerernebty** statue (3.3.7). The statue is dated to 2490 BCE and carved from slate, depicting the pharaoh Menkaure and his queen. It was discovered in the early 20th century in a hole left by tomb raiders. The Menkaure sculpture represents the entire body from the top of their heads to their feet but excludes the back half of the couple. Carved in the round from a solid piece of slate, it can be viewed from all sides. The two figures are three-quarters released from the stone in the front, and although there is no space between them, this is the first time lifelike statues are seen from a proper perspective. Each figure has a foot extended forward, giving a sense of movement. The king wears a traditional pleated kilt and a headdress, displaying his masculinity. The queen demonstrates her feminine beauty, wearing clingy clothing. The king is shown with one foot forward, a typical pose, and the queen adopts the same stance, although females were usually depicted with their feet together.

Figure \(\PageIndex{7}\): Menkaure and Khamerernebty (Steven Zucker, CC BY-NC-SA 2.0)

One of the most beautifully decorated and well-preserved tombs from ancient Egypt is the **Tomb of Ti**, an old **mastaba** that showcases exceptional artistry. The walls leading down to Ti's burial shaft feature outstanding carved relief scenes depicting various aspects of daily life during the Early Egyptian Dynasty. These images (3.3.8) illustrate people engaged in activities such as working, with detailed depictions of scribes and farmers. Additionally, the carvings include **hieroglyphic inscriptions** that provide context to the scenes. At the center of the hall, there is a vivid scene of a hippopotamus hunt, with Ti standing in a reed boat, overseeing the hunt amid water filled with fish, crocodiles, and hippopotamuses. A larger-than-life-size statue of Ti (3.3.9) was discovered outside one of the tomb's doors, adding to the tomb's grandeur and historical significance.

Figure \(\PageIndex{8}\): Tomb of Ti scenes (Prof. Mortel, CC BY 2.0)

Figure \(\PageIndex{9}\): Statue of Ti (Djehouty, Djehouty)

One of the oldest examples of Egyptian art, the ***Palette of Narmer*** (3.3.10), was discovered buried near the **Temple of Hierakonpolis**, a site of great importance in Egyptian history and the foundation of the subsequent Egyptian dynasties. This artifact features images that historians believe to depict the unification of Egypt's lower and upper regions into a single cohesive state. Crafted from black slate and adorned with low-relief carvings, the Palette showcases the names of various kings, along with insignias symbolizing both Lower and Upper Egypt, highlighting its significant cultural and political symbolism.

Figure \(\PageIndex{10}\): Palette of Narmar (profzucker, CC BY-NC-SA 2.0)

Egyptians used pottery for practical purposes, such as holding food, water, and oil, but they also made pottery for decoration. Most of the clay used for pottery was reddish-brown and came directly from the **Nile River silt.** This plentiful clay was often used to produce plates, bowls, serving platters, and vessels. The potter's wheel was introduced around 2700 BCE; however, it was operated by hand rather than by foot. The Egyptians still used pinch or coil techniques when working on the potter's wheel. The serving plate (3.3.11) is decorated with typical images of the period, including a hippopotamus and a crocodile, while the jar (3.3.12) features encircled gazelles. The abundance of animals provided inspiration for artists to create decorative images.

Figure \(\PageIndex{11}\): Egyptian plate (Public Domain)

Figure \(\PageIndex{12}\): Egyptian jar (Public Domain)

The Early Egyptian Dynasty created a very sophisticated culture built upon farming and trade, relying on the supportive environment of the vast Nile River basin. Their primary diet was wheat, which they made into bread and beer, along with other crops of onions, garlic, cabbage, lentils, plums, and grapes. They raised cattle, goats, pigs, ducks, and sheep for milk, meat, and hides. Processing wheat for bread and beer required fermentation, and breweries were discovered in ruins dating back to 3500 BCE, the oldest known breweries in the world. Over several centuries, the united Egyptians became a cultural and economic powerhouse using the Nile River to its fullest capacities. The ancient Egyptians were indebted to the Nile River, and their coexistence was necessary for survival.

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3.4: Early Mesopotamia (3100 BCE – 2000 BCE approx.)

Definition: Term

Cradle of Civilization: A region where some of the earliest complex societies developed.

Cuneiform: One of the earliest writing systems, made with wedge-shaped marks on clay tablets.

Mud Bricks: Bricks made from clay and straw, dried in the sun and used for building.

Reed Stylus: A pointed writing tool made from a reed, used to write on clay tablets.

Sumerians: People who created one of the world's first civilizations in Mesopotamia.

Akkadians: A group who later ruled Mesopotamia and adopted many Sumerian ideas.

Mesopotamia, often called the **Cradle of Civilization**, was located in the Fertile Crescent, an area that today includes modern-day Iraq and parts of western Iran. Early Mesopotamian societies developed between the Tigris and Euphrates Rivers, which flow from the mountains to the north and east. By harnessing these rivers, the Mesopotamians created complex farming communities. They invented the wheel, developed systems to control flooding, constructed irrigation canals to support agriculture and city life, and created one of the world's earliest writing systems, known as **cuneiform**.

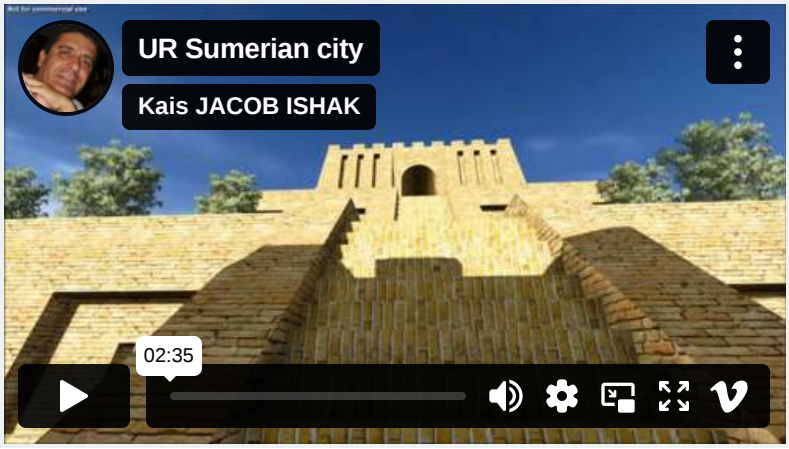
Unlike Egypt, Mesopotamia was never a unified empire. Instead, it was made up of independent city-states inhabited by different civilizations. One of the most influential of these groups was the **Sumerians**, who lived in the southern region near the Persian Gulf. Sumerian city-states were governed by rulers who acted on behalf of multiple gods, and religion played a central role in daily life. The land between the two rivers was Mesopotamia's most valuable natural resource, as the fertile soil and reliable water supply supported crops such as barley, sesame seeds, and dates.

Because Mesopotamia lacked natural resources such as timber, stone, and metals, builders relied heavily on **mud bricks** made from river clay. Many monumental structures, including ziggurats, were constructed using this material, and some still stand today. One of the best-preserved examples is the **Ziggurat of Ur**, (3.4.1) built around 2100 BCE by King Ur-Nammu. Rising nearly 30 meters tall, the ziggurat was a massive, stepped structure located at the center of the city. It served both administrative functions and as a religious shrine dedicated to the moon god **Nanna**. The structure was built with mass-produced mud bricks, each weighing nearly fifteen kilograms, forming a solid core. The exterior bricks were often fired and sometimes glazed, and inscriptions recorded the names of kings. While the lower portion of the ziggurat had a pyramid-like form, the top was flat, with multiple terraces that may have been decorated with plants and trees.

Figure \(\PageIndex{1}\): Ziggurat of Ur (CC BY 3.0)

UR Sumerian City

The first city in the world, " UR " (Sumerian city). In this city they knew Agriculture and invented writing & the wheel.



The city of **Uruk** was one of the most significant urban centers in southern Mesopotamia. A monumental religious structure dedicated to **Anu**, the sky god, once dominated the landscape and could be seen from miles away. Known as the **White Temple Ziggurat**, (3.4.2) the structure was completed around **3000 BCE** and constructed entirely of mud brick. At its height, Uruk had an estimated population of approximately **40,000 inhabitants**, and the White Temple and its ziggurat were positioned at the heart of the city, rising dramatically above the surrounding buildings.

The temple was accessed by steep stairways leading to a central hall, with smaller rooms arranged along the sides. Both the interior and exterior were coated in white plaster, which reflected the intense sunlight and gave the temple its distinctive name. Despite the fragile nature of its construction materials, the Sumerians were able to erect monumental temples that endured for centuries. Today, however, the **White Temple Ziggurat (3.4.3)** survives only as an eroded structure in the desert, offering a reminder of Uruk's former prominence and the architectural achievements of early Mesopotamian civilization.

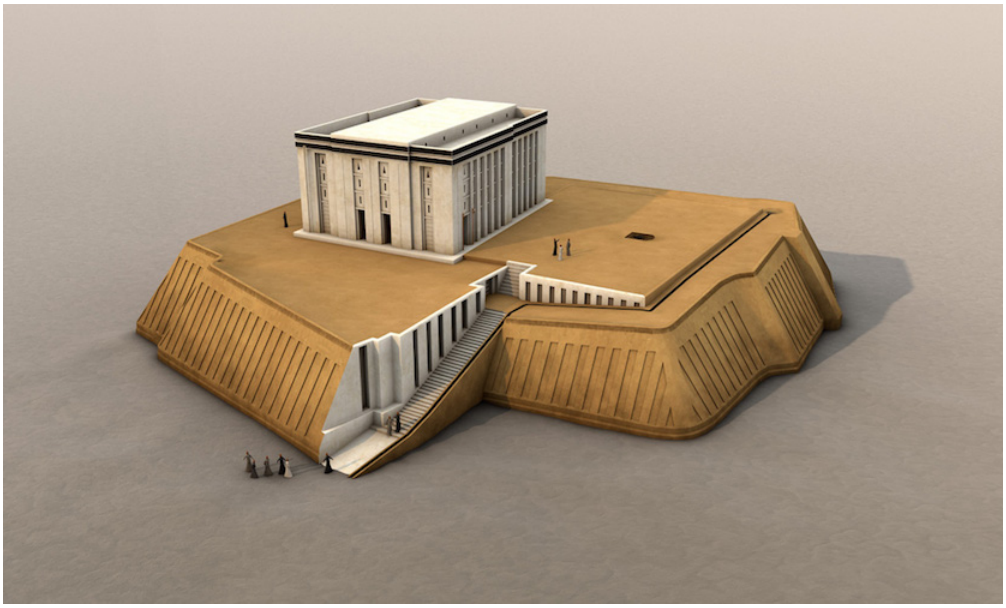


Figure \(\PageIndex{2}\): Digital reconstruction of the White Temple and ziggurat (SAC Andy Holmes (RAF)/MOD, Open Government Licence v1.0)

Figure \(\PageIndex{3}\): Remains of the ziggurat today (SAC Andy Holmes (RAF)/MOD, Open Government Licence v1.0)

Cuneiform developed as the standard written system of Mesopotamia and is one of the earliest known forms of writing in human history. Mesopotamian scribes used a specially shaped **reed stylus** to press wedge-shaped marks into soft, wet clay tablets to record information. The earliest cuneiform signs began as **pictographs**, or simple images representing objects and ideas, and gradually evolved into a more abstract and complex writing system.

Archaeologists have uncovered **over one million clay tablets**, many of which were used for everyday administrative purposes such as recording events, tracking goods, or serving as receipts for merchants—for example, documenting how much beer was allocated to various labor groups (**3.3.4**). By around **3000 BCE**, cuneiform became more standardized and was typically written **from left to right and top to bottom**. Because clay was soft and reusable, tablets intended for temporary records could be erased and recycled. In contrast, tablets meant to preserve permanent information—such as legal contracts or important commercial transactions—were often **fired**, making them durable records that have survived for thousands of years.

Figure \(\PageIndex{4}\): Beer allocation (Jim Kuhn, CC BY 2.0)

The **Standard of Ur** was discovered in one of the Royal Tombs at Ur. The object is a wooden box inlaid with **red limestone, lapis lazuli, and shell**, forming intricate mosaic scenes. The trapezoidal box features two primary narrative panels and is considered one of the **earliest surviving examples of pictorial storytelling**. Each side is divided into **three horizontal registers**, which are read **from bottom to top and left to right**, presenting a visual narrative centered on the power of the king.

All figures are arranged on a single ground plane; however, the king is depicted at a significantly larger scale than the other figures, a convention known as **hierarchical scale**, which emphasizes his authority and importance. One side of the object, commonly referred to as the **"War" side (3.4.5)**, illustrates a military victory over an unknown enemy, showing armed soldiers, defeated foes, and captives being presented to the ruler. The opposite **"Peace" side (3.4.6)** portrays a scene of stability and prosperity, including banquets, musicians, and celebratory figures. The clear organization of figures into registers and the use of narrative sequencing seen in the Standard of Ur established visual conventions that influenced Mesopotamian art and pictorial communication for centuries, paralleling the structured format later seen in cuneiform writing systems.

Figure \(\PageIndex{5}\): *Standard of Ur in War* (Public Domain)

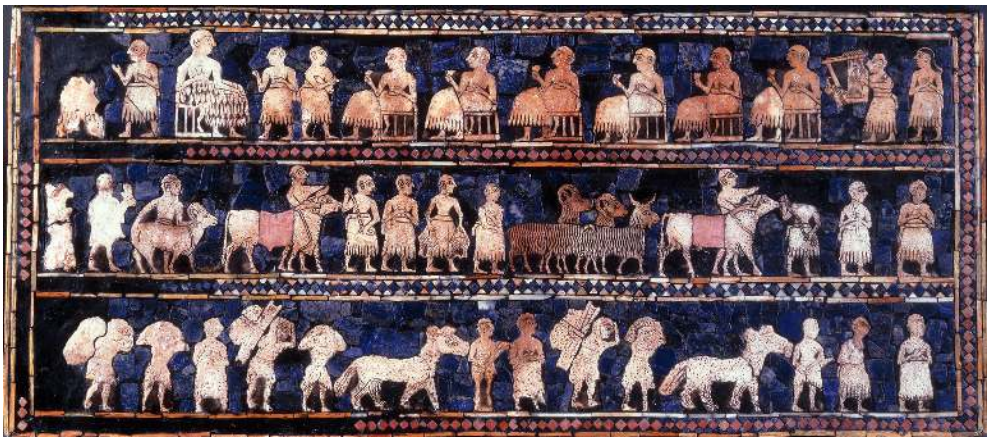


Figure \(\PageIndex{6}\): *Standard of Ur in Peace* (Public Domain)

Standard of UR

Standard of Ur, c. 2600-2400 B.C.E.

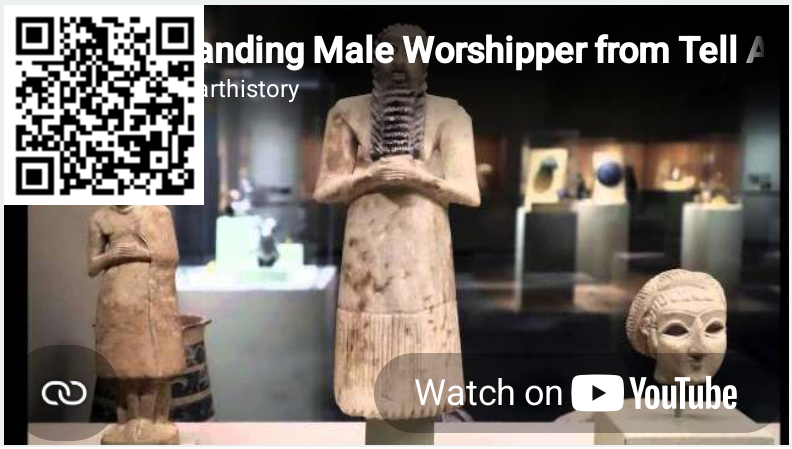
A group of **votive statues (3.4.7)** was discovered buried beneath the floor of the **Temple at Eshnunna**. These statues, many standing over **seventy-five centimeters high**, were carefully carved from **gypsum** and inlaid with **black limestone and shell**, particularly in the eyes, which appear wide and expressive. The figures represent worshippers rather than deities and provide valuable insight into Mesopotamian dress and devotional practices.

Male figures are shown wearing long, **fringed skirts** secured at the waist, likely with belts, while female figures wear long, flowing garments that leave the shoulders bare, with hair worn long. The statues stand erect on small platforms, their bodies symmetrically balanced and rigidly frontal. Their large, upward-gazing eyes and **clasped hands held at chest level** suggest an attitude of continuous prayer and devotion. Placed within the temple, these figures likely served as symbolic stand-ins for worshippers, eternally attentive to the gods.

Figure \(\PageIndex{7}\): Temple of Eshnunna statues (Osama Shukir Muhammed Amin FRCP(Glasg), CC BY-SA 4.0.)

Standing Male Worshipper from Tell Asmar

Standing Male Worshipper (votive figure), c. 2900-2600 B.C.E., from the Square Temple at Eshnunna (modern Tell Asmar, Iraq), Sumerian, Early Dynastic I-II, gypsum alabaster, shell, black limestone, bitumen, 11 5/8 x 5 1/8 x 3 7/8 inches / 29.5 x 10 cm



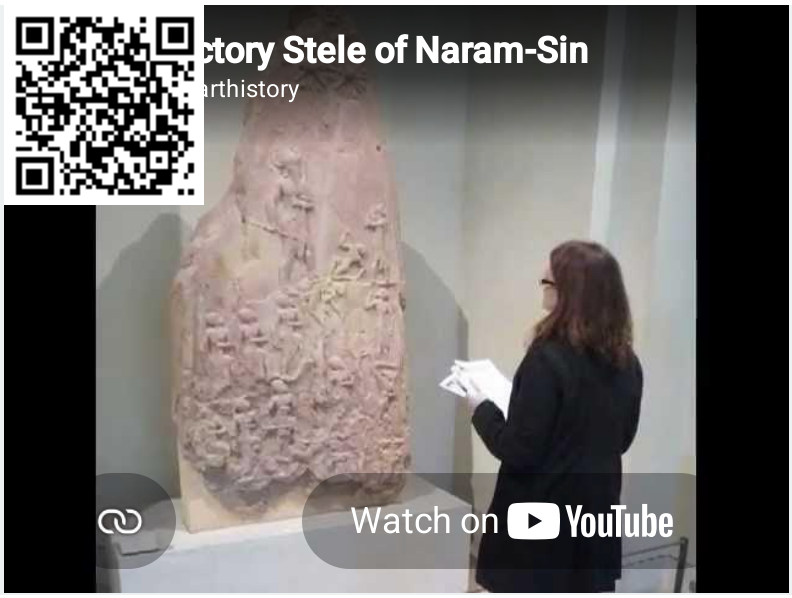
The **Akkadians**, a Semitic-speaking people who originated in the Arabian Desert, began to emerge in southern Mesopotamia around **2400 BCE**. Initially, they blended into Sumerian culture, adopting many Sumerian religious practices and deities. Over time, however, the Akkadians gradually replaced Sumerian political authority and language, ultimately gaining control of much of the Mesopotamian valley. Under their rule, political power became more centralized, leading to the rise of the **Akkadian Empire**, one of the first territorial empires in history.

One of the most significant surviving works of Akkadian art is the **Stele of Naram-Sin (3.4.8)**, which commemorates the Akkadian king's victory over a mountain people from the **Zagros Mountains**. The stele, carved in **low relief** and standing nearly **one meter high**, presents a dynamic narrative of military triumph. The king is depicted as nearly twice the size of the surrounding soldiers, an example of **hierarchical scale** that emphasizes his authority and divine status. Unlike earlier Mesopotamian reliefs arranged in horizontal registers, the composition rises diagonally up the stone surface, guiding the viewer's eye toward Naram-Sin as he ascends the mountain, reinforcing the idea of royal power and dominance.

Figure \(\PageIndex{8}\): *Stele of Naram-Sin* (Fred Romero from Paris, France, CC BY 2.0)

Victory Stele of Naram-Sin

Victory Stele of Naram-Sin, Akkadian, pink limestone, 2254-2218 B.C.E. (Louvre, Paris) This monument depicts the Akkadian victory over the Lullubi Mountain people. In the 12th century B.C.E., 1,000 years after it was originally made, the Elamite king, Shutruk-Nahhunte, attacked Babylon and, according to his later inscription, the stele was taken to Susa in what is now Iran. A stele is a vertical stone monument or marker often inscribed with text or relief carving.


ctory Stele of Naram-Sin
arthistory
Watch on YouTube

3.5: Indus Valley (3300 BCE – 1700 BCE)

Definition: Term

Harappan Civilization: An ancient urban culture of South Asia known for planned cities and advanced engineering.

Bronze Age: A time period when tools and weapons were commonly made from bronze.

Bitumen: A sticky, tar-like substance used as mortar and waterproofing material.

Pashupati: A seal figure often linked to early religious beliefs, possibly associated with fertility or a proto-Shiva figure.

Indus River: A major river that supported agriculture and settlement in ancient South Asia.

Himalayan Mountains: A large mountain range that forms a natural barrier in South Asia.

Mohenjo-Daro: A major planned city of the Harappan Civilization with streets, drains, and brick buildings.

Harappa: Another important city of the Harappan Civilization known for urban planning and architecture.

The **Indus River** flows from the expansive **Himalayan Mountains** into the **Indus Valley**, where the **Harappan civilization** flourished in what is now modern-day **Pakistan**. The fertile plains and abundant water of the Indus River were the civilization's most important natural resources. Early Harappans are believed to have migrated over the mountains from the desert regions of present-day **Iran**. They discovered a region rich in water and agricultural land, allowing them to develop one of the great civilizations of the **Bronze Age**.

At their height, major cities such as **Mohenjo-Daro** and **Harappa** each supported populations of over 40,000 people. The Harappans were masters of **urban planning** (3.5.1). With access to reliable water sources, they constructed sophisticated water-management systems that included reservoirs, bathhouses, sewer networks, and private restrooms. Their carefully planned cities demonstrate an advanced understanding of mathematics, evident in their standardized system of weights and measures used to build roads and structures. Cities were organized on a **grid plan**, with rectilinear buildings constructed from durable fired mud brick rather than traditional unfired brick. In **Mohenjo-Daro**, the grid plan was oriented from north to south. This highly complex society also domesticated animals and farmed the fertile **Indus River Delta**, cultivating crops such as cotton, peas, and barley. In addition, the Harappans were skilled traders who developed a strong merchant class. Using seafaring boats, they established **long-distance trade routes** that connected them with distant regions.

Indus Valley Civilization

The Indus River Valley (or Harappan) civilization lasted for 2,000 years, and extended from what is today northeast Afghanistan to Pakistan and northwest India. Sal explores the history of this civilization, its technological innovations, its art, its architectural practices, and its agriculture.

Figure \(\PageIndex{1}\): Moenjodaro ruins (Public Domain)

Unlike their contemporaries, the **Indus Valley civilizations** did not build massive monuments to the gods or bury leaders in golden tombs. Although they believed in an **afterlife**, they focused more on daily life and practical concerns. The **Great Bath of Mohenjo-Daro** (3.5.2) was a luxury structure and one of the earliest known **public baths**. It featured a courtyard with steps leading into a brick-lined pool that was waterproofed with **bitumen** (waterproof tar). Channels ran down the center of the city streets to drain water from rain and bathing areas. These channels were designed efficiently to remove water and sewage from the city, functioning much like the **underground sewer systems** used in modern cities today.

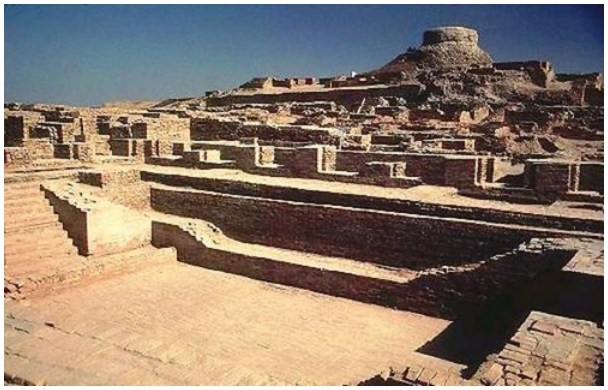


Figure \(\PageIndex{2}\): Great bath (Public Domain)

The cities were designed for efficiency and sanitation. **Water wells** were distributed throughout the city for bathing and cooking. Towns were built on **raised platforms** with drains beneath the buildings, allowing water to be removed efficiently. Streets were laid out much like modern cities, with straight roads intersecting at right angles. Homes were constructed of **fired brick**, all made to a standard size throughout the valley. Archaeological discoveries inside these homes include beads, utilitarian pottery in many shapes, and cotton textiles. These objects reflect a thriving economy and extensive trade with **Mesopotamia** and **Egypt**, carried out by both land and sea.

Mohenjo Daro

Mohenjo-Daro, built at the time of the pyramids and centuries before the Roman Baths, was the largest city of the Indus Civilization. Learn facts about this ancient city, including engineering feats like the Great Bath.

The **Harappan** people created seals featuring figures and symbols that depict hundreds of distinctive scenes from cities across the Indus Valley. These seals have been found in **Mesopotamia** and beyond the Indus region, indicating long-distance trade with other civilizations. The seals appear to include a recorded or pictorial language; however, historians have not yet been able to decipher this script. One seal discovered during excavations at **Mohenjo-Daro** depicts a figure believed to represent a religious or sacred individual. Known as the **Pashupati** (3.5.3), or "Lord of Animals," the figure is surrounded by animals including a buffalo, rhinoceros, and elephant. The figure is shown with three faces, a long nose, wide lips, and deeply set eyes. Multiple necklaces hang across the chest, with bracelets adorning the arms.

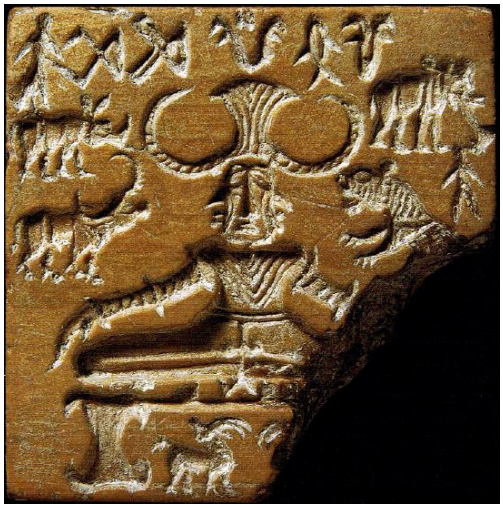
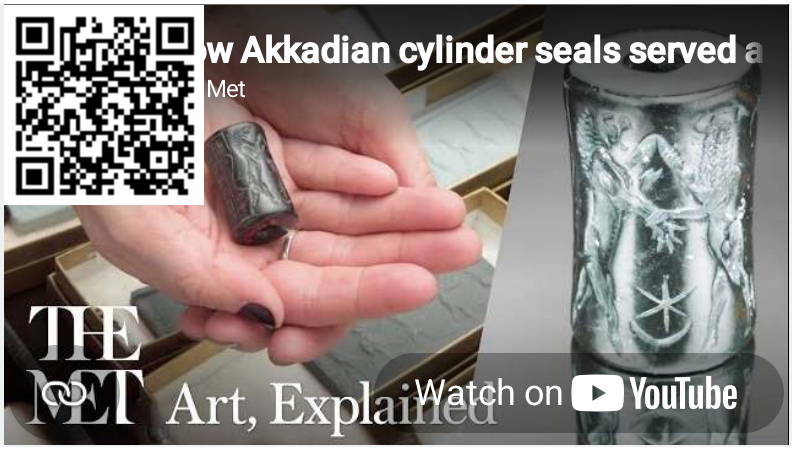


Figure \(\PageIndex{3}\): Cylinder seal (*Pashupati* seal (2500-2400 BCE, steatite, coated with alkali, 3.56 cm) (Public Domain)

How Akkadian cylindar seals served as ancient signatures.

Curator Yelena Rakic on Akkadian cylinder seals.



The statue known as the **Priest-King** (3.5.4) was carved from **steatite**, a soft soapstone material. While there is no clear archaeological evidence confirming the existence of priests or kings in Harappan society, scholars have traditionally used the term "priest-king" to describe this figure. The band around the head and the carefully combed hair suggest an elaborate hairstyle. The figure wears a cloak decorated with circular motifs, with traces of **red pigment** still visible, indicating that the sculpture may originally have been painted. The recessed areas of the eyes suggest they were once **inlaid**. The lower portion of the sculpture is missing, and researchers believe the figure was originally depicted in a seated or kneeling position.

Figure \(\PageIndex{4}\): Indus Priest/King statue (17.5 cm high, steatite (soapstone) (Public Domain)

Unlike their neighbors, the **Egyptians**, the Indus people did not carve elaborate statues of kings or gods. Instead, they created small figures of people and animals made from clay, stone, or **bronze**, as well as figurines depicting girls in dancing poses. The **Dancing Girl** (3.5.) was cast in bronze using the **lost-wax method**. This small sculpture, measuring only ten centimeters in height, shows a girl standing in a natural, animated pose. One arm rests on her waist, while the other hangs loosely at her side. Multiple bracelets adorn her left arm, suggesting that jewelry may have been a symbol of **wealth** or status.

A second female figure (3.5.6) appears more reserved, possibly waiting for her turn. Together, these sculptures demonstrate the Harappans' skill in working with bronze. Although dance likely played a role in their culture, the exact purpose and function of these small sculptures remain unknown.

Figure \(\PageIndex{5}\): Dancing Girl (2700-2100 BCE, bronze, 10.5 x 5 x 2.5 cm) (Public Domain)

Figure \(\PageIndex{\6}\): Dancing Girl 2 (Public Domain)

As seen throughout history, even the most advanced civilizations eventually declined, and the Harappan people of the Indus Valley were no exception. Over time, they became increasingly vulnerable to environmental changes that affected their ability to sustain large urban populations. Scholars believe that shifts in climate, changes in river patterns, and possible flooding or drought disrupted agricultural production and weakened the economic foundations of Harappan society.

Around **1700 BCE**, the once-thriving Harappan civilization collapsed. As populations gradually dispersed, the great cities of **Mohenjo-Daro** and **Harappa** were abandoned. Over centuries, layers of silt and soil covered the remains of these carefully planned urban centers, preserving them beneath the landscape. The cities lay hidden for thousands of years until their rediscovery by archaeologists in the **1920s**, revealing a civilization whose sophisticated urban planning, trade networks, and artistic traditions continue to shape our understanding of early human societies.

3.6: Longshan (3000 BCE – 1700 BCE)

Definition: Term

Yellow River: A major river in China that supported early farming communities and civilizations.

Rammed Earth: A building technique using tightly packed layers of soil to create strong walls.

Silk Road: A network of trade routes connecting Asia, the Middle East, and Europe.

Eggshell Pottery: Extremely thin, delicate pottery made from fine clay.

Updraft Kilns: Kilns where heat rises upward to evenly fire pottery at high temperatures.

High-Speed Potter's Wheel: A rotating wheel that allows potters to shape clay quickly and precisely.

The **Longshan culture** consisted of multiple Neolithic communities that inhabited the river valleys along the **Yellow River** in northern China. The river carried powerful seasonal waters from the Himalayan mountain system, frequently flooding the valleys and depositing nutrient-rich silt that created fertile farmland. In addition to the Longshan culture, other cultural groups existed throughout different regions of what is now China, each developing distinct traditions and characteristics.

The Longshan people were productive farmers. Archaeologists have uncovered large numbers of agricultural tools used to harvest and process millet and rice, which supported growing populations. Communities produced a wide variety of stone tools and used clay from the riverbanks to create different types of pottery. As society became more complex, people began to specialize in labor. **Jade** emerged as a highly valued material, used to create both practical objects and items of social or ritual significance. Jade continues to hold cultural importance in China today.

Between approximately **2600 and 2000 BCE**, small towns became increasingly populated, causing communities to expand outward and establish additional settlements. Villages were surrounded by walls constructed of **rammed earth**, suggesting the possibility of conflict between neighboring groups and a growing need for protection. Rammed earth construction was commonly used for houses, defensive walls, and civic buildings. Wooden frames were filled with layers of dirt and small stones that were tightly packed to create thick, durable walls. Roofs were made from woven wattle coated with mud. At the **Jiangzhai** site (3.6.1), one of the early Longshan settlements, archaeologists uncovered the remains of roughly 100 homes.

Burial practices from the Longshan period further reveal social differences within these communities. Some graves contained numerous artifacts, while others included very few objects, indicating the presence of social hierarchy and unequal wealth.

Fragments of silk fabric discovered in tombs suggest that silk production may have begun during this period on a small scale. Archaeologists have also uncovered specialized tools used to produce silk thread, marking the early development of a practice that would later become central to China's economy. Over time, silk production expanded dramatically, eventually supporting the vast trade network known as the **Silk Road**.

Figure \(\PageIndex{1}\): Jiangzhai settlement (Public Domain)

Scholars believe that the abundance of jade material, especially **nephrite**, allowed people to produce large numbers of jade household objects. Jade artifacts have been discovered in **tombs**, **pits**, and within the remains of buildings, suggesting both daily and ritual use.

Two distinct types of jade objects appear most frequently: the **bi** and the **cong**. The cong (3.6.2) resembles a tube with squared sides and is carved with patterns depicting an unknown beast combined with a human-like figure. The exact function and meaning of the cong remain unknown. Jade is an exceptionally hard material and cannot be easily split like ordinary stone. Scholars believe artisans used abrasive materials, such as **sand**, to gradually shape the jade and carve its surface decorations.

The bi (3.6.3) were crafted as flat circular discs. Many elaborately made bi have been found placed on the stomach or chest of the deceased, while others were discovered stacked in small piles. Historians still do not know how the bi were used or why they were commonly included in burials. However, their frequent presence in tombs suggests they held significant symbolic or ritual importance, especially given the difficulty of shaping jade into precise circular forms.

Figure \(\PageIndex{2}\): Jade *cong* (Public Domain)

Figure \(\PageIndex{3}\): Jade *bi* (2400-1900 BCE, jade, 64 cm) (Public Domain)

Working Jade

An exploration of the significance and working of jade in China.

The quality of the surviving pottery from the **Longshan period** is exceptional and unusual for **Neolithic cultures**. Scholars believe that Longshan **black pottery** was produced in a wide range of sizes and forms using a **high-speed potter's wheel**. Archaeologists have also uncovered multiple **updraft kilns**, an advanced technology for the Neolithic period. These kilns likely supported the mass production of Longshan pottery; however, no individual vessel has been definitively linked to a specific workshop or potter.

Another remarkable achievement is the production of extremely thin goblets known as **eggshell pottery** (3.6.4, 3.6.5). These vessels feature flared rims, delicate cups, and stems of varying shapes. Highly polished in appearance, eggshell pottery demonstrates the potters' technical mastery of the fast wheel. Artisans carefully collected fine river silt and washed it thoroughly to remove impurities before shaping the clay.

During the firing process, water was introduced into the kiln, creating smoke. Carbon from the smoke penetrated the clay, turning the vessels black. The surface was then polished, helping to preserve the deep black color. Both goblets have thin, flared rims; one example features multiple cutouts in its delicate stem, while the other has a longer stem with a broader central section for support.

Figure \(\PageIndex{4}\): Stemmed cup (Gary Todd from Xinzheng, China, CC0 1.0)

Figure \(\PageIndex{5}\): Eggshell goblet (clay, 22.6 cm high) (Public Domain)

If Treasures Could Talk

The fourth episode of CGTN's special series "If Treasures Could Talk" features the Longshan Eggshell Black Pottery Cup, which is accurate to two-tenths of a millimeter. How would you define "thin?" As thin as a cicada's wing? As the edge of a coin? Can one centimeter be considered thin, or one millimeter? Or a fifth of a millimeter?

Figure \(\PageIndex{6}\): Plate with Dragon Design (2300 – 1200 BCE) (CC BY-SA 4.0)

Figure \(\PageIndex{7}\): Jar (2300 – 1200BCE) (CC BY-SA 4.0)

During the **Neolithic Age** in China, dragon imagery began to emerge as an important symbolic motif. The plate (3.6.6) featuring a **dragon** design is considered the earliest known depiction of a dragon on pottery. The dragon is shown with a snake-like body, a relatively small, rounded head, three-clawed feet, and a tongue resembling a stalk of rice. Although the **Longshan** culture is best known for its refined black pottery, artisans also produced other ceramic styles. The jar (3.6.7) is decorated with repetitive, geometric patterns around its surface. Compared to the delicate black pottery, both the plate and jar appear more primitive and may have served as familiar, everyday household objects.

The Longshan and other early settlements in China introduced many important innovations during the Neolithic period. These communities developed early forms of mass production, created new materials for textiles and clothing, constructed fortified walls and durable buildings, and established increasingly stratified societies with emerging military organization.

[1] Retrieved from https://www.sciencedirect.com/scienc...cid=rss_sd_all

3.7: Early Jomon Period (5000 BCE – 2500 BCE)

Key Terms:

Jōmon Pottery – Early Japanese pottery known for surface designs created by pressing cords into wet clay.

Coil Pot – A pottery-building technique in which rolled coils of clay are stacked and smoothed to form a vessel.

Cord Marking – Decorative impressions made by pressing rope or cord into damp clay before firing.

Low-Temperature Firing – An early firing method using open bonfires rather than kilns, producing earthenware pottery.

Shell midden, a debris pile similar to our modern dumps.

The Neolithic people of early Japan were known as the **Jōmon (cord-marking) culture,** based on the characteristic **cord-marked pottery**. In modern Japan, researchers have studied approximately seventeen archaeological sites. The result is the identification of a very mature yet **hunter-fisher-gatherer culture**, which developed from approximately **13,000 BCE to 300 BCE**. The people created long-lasting settlements where archaeologists found burial areas, ritual sites, pit dwellings, pottery, and other artifacts of a stable society that still maintained the ancient lifestyle. Historians have divided the long Jōmon period into six sub-periods: **incipient, initial, early, middle, late, and final**. During this extensive time, the Jōmon lived off the land with only limited crop cultivation of millet or beans.

“This area of northern Japan had rich arborous and aquatic resources, with deciduous broad-leaved forests that featured abundant nut-bearing trees, as well as ideal fishing conditions created by the intersection of warm and cold currents off the coast. Over a period of more than 10,000 years, the Jomon people continued hunter-fisher-gatherer lifeways without changing to an agrarian culture, adapting to environmental changes such as climate warming and cooling and the corresponding marine transgression and regression. The Jomon people initiated a sedentary way of life about 15,000 years ago, as indicated tentatively at first by the use of pottery and later by the construction of more permanent dwellings and ritual sites and the year-round exploitation of nearby resources. Already in the very early stage of sedentary life, the Jomon people developed a complex spiritual culture. They made graves and also created ritual deposits, artificial earthen mounds, and stone circles that were probably used for rituals and ceremonies and confirmed a social bond across the generations and between the settlements.”[1]

One of the oldest **Jōmon sites** is in **Kasori**, near Tokyo. The site included a large **shell midden**, a debris pile similar to our modern dumps. The debris gave researchers a window into food sources and daily living materials seen in the uniquely decorated pottery for practical use for cooking and storing. Much of the information from the Jōmon period is interpreted based on artifacts because the Jōmon did not have a written language. Yet, it is considered to be Japan’s first primary culture.

The Jōmon established small permanent settlements. Their early houses were shallow pit houses in groups of 10–12 homes per site. Although agriculture was not evident in the early Jōmon civilization, they had plentiful hunting (deer, boar), gathering (nuts, berries, fruits), and fishing and mollusks. The separation of Japan from the Asian mainland probably kept the civilization a hunter-gatherer society instead of evolving into a farming society like China. The Jōmon did not begin transitioning to farming until around **1000 BCE**.

Pit houses (3.7.1) were the primary style of house and were made by removing dirt from the floor of the dwelling. The subterranean earth level helped retain warmth. Early floor plans were circular and later evolved into square shapes. The pillars were inserted into the ground to create a frame for the structure, with one central support pillar. Researchers found three types of roofs: thatched, bark, and mud. Fire pits were generally placed inside the house and used for cooking, smoking meat for storage, and warmth.

Figure \(\PageIndex{1}\): Recreated pit houses (Public Domain)

The **Irie site** at **Toyako** has remnants demonstrating the construction of the house (3.7.2). The wide circle for the floor shows how the floor was dug out and leveled as a platform. Stones were used to delineate the fire circle and form the outside wall. The other structure defines how the wooden posts were installed around the outer edge of the circle for the floor and leaned into the center where the posts were held together. The posts supported the walls and roof. The houses were usually formed around a central space, creating small villages.

Figure \(\PageIndex{2}\): Floor of a pit house (Indiana jo, CC-BY SA 4.0)

The Jōmon were some of the earliest people to make clay vessels, some dating to **10,000 BCE**. Around **5000 BCE**, the Jōmon people began making clay vessels in different shapes. They created unique patterns in the wet clay by imprinting it with coiled rope

and sticks. Most of the pots have flat bottoms and round sides to provide the utilitarian necessities of the people.

The pots were initially **coil pots** (3.7.3), made with clay coils starting at the bottom and molded together to form a pot. Once the pot was smooth, they pressed a cord into the damp clay, creating **cord markings**. There are hundreds of different designs on the pots (3.7.4), a reflection of people's desire to create beyond the practical use of a pot. Pottery was dried and then fired in a low-temperature bonfire. In the later years of the Jōmon Period, the corded imprints on the vessels started to disappear, replaced by the form and function of a pot.

Figure \(\PageIndex{3}\): Incipient Jomon pottery from Hinamiyama site, Yokohama (Public Domain)

Figure \(\PageIndex{4}\): Pottery used for infant burial (Public Domain)

Jomon Pottery

How to make Jōmon Pottery. It was made in Japan 4,500 years ago. This video explains how to make. ・粘土帯の重ね合わせに注意。上へ、まっすぐや内側に延ばすときは粘土帯を内側へ重ね積み、外へ開くときには外側へ重ね積む。土器制作・撮影・編集　清瀬市郷土博物館学芸員　内田祐治

“During this period, handmade utilitarian wares were treated with inventive, often extravagant artistry, and regional separations between groups resulted in a wide range of types and styles. This earthenware food vessel (3.7.5), which came from the Aomori Prefecture in northeastern Japan, is remarkable for the fine quality of its clay and its sophisticated decoration. The cord-marked herringbone pattern was reproduced by cords knotted together and twisted in opposite directions.”[2]

Figure \(\PageIndex{5}\): Deep vessel (3500-2500, clay 69.8 cm high, 41.9 cm wide) (Public Domain)

[1] Retrieved from https://jomon-japan.jp/en/learn/jomo...northern-japan

[2] Retrieved from https://www.metmuseum.org/art/collection/search/39660

3.8: Neolithic England (3100 BCE – 1600 BCE approx.)

Key Terms:

Henge – A prehistoric circular or oval earthwork consisting of a bank and ditch, often containing stones or wooden posts.

Woodhenge – A prehistoric monument near Stonehenge built with large wooden posts rather than stone.

Stonehenge – A famous prehistoric stone circle in England aligned with solar events such as sunrise and sunset.

Avebury Henge – One of the largest stone circle complexes in Europe, featuring a massive circular bank and ditch and multiple stone circles.

Sarsen Stones – Large sandstone blocks forming the outer circle of Stonehenge.

Bluestones – Smaller stones forming the inner circle of Stonehenge, transported from Wales.

Heel Stone – A massive standing stone near the entrance to Stonehenge aligned with the summer solstice sunrise.

Hammer Stones – Hard stones used as tools to shape and chip larger stones.

Post-and-Lintel – A construction system using vertical supports (posts) topped by horizontal beams (lintels).

Mortise-and-Tenon Joint – A woodworking joint in which a projecting tenon fits into a carved socket (mortise) to lock pieces together.

Capstone – A horizontal stone placed across upright stones.

When most people think about Neolithic England, they focus on **Stonehenge**, which is only one of many henges in England and Ireland. Henges were dated from **3000 BCE to 2000 BCE** and defined as a circular or oval earthen enclosure. "Fewer than 100 henges still survive across Britain and Ireland, although it's very likely that there were originally more. The key feature of every henge is a ring-shaped bank on the *outside* and a ring-shaped ditch on the *inside* that marks out a central, circular area. Some henges have multiple rings of bank-and-ditch, and some have additional structures (like standing stones or timber posts) inside the henge earthwork. They all have openings, or 'causeways' that pass through the earthwork circuits into the central circle. If there are two causeways, they often face one another across the circle. Most henges are somewhat between 20m and 100m in diameter."[1]

The word 'henge' comes from the shapes at Stonehenge, England's most famous henge. The lintel stones are balanced across the vertical stones, "forming what is known as trilithons (*tri-* three, *lith-* stone). 'Henge' is possibly an Old English word for 'hanging' or 'suspended,' and the common interpretation is that the name means 'the Hanging Stones,' referring to the huge lintels suspended in space."[2] The reasons for and uses of the henges are unknown. The structures were not defensive; however, the difficulty of construction caused historians to believe the henges were very important and an integral part of life, perhaps only for ceremonial purposes.

Many of the henges appear to be interrelated with each other. **Woodhenge** (3.8.1) is only two miles from **Stonehenge** and is made of large timbers instead of stone. Today, the places where the timbers stood are replaced with concrete posts. The structure was oval-shaped instead of the usual circle and aligned with sunrise and sunset. The **Avon River** runs from Woodhenge to Stonehenge, and some scientists believe the people might have celebrated at one site and traveled on the river to further rites at the other site.

Maelmin Henge (3.8.2) and **Avebury Henge** (3.8.3) are other examples of henges. Maelmin Henge is reconstructed from the excavation of the original structure. The henge had a bank and ditch with timber posts. Burial pits were found in the central area of the henge. Avebury Henge is one of the most significant circular bank and ditch structures, and the henge was initially made with about 100 stones encircling two smaller stone circles.

Figure \(\PageIndex{1}\): Woodhenge (CC BY-SA 2.0)

Figure \(\PageIndex{2}\): Maelmin Henge (CC BY-SA 2.0)

Figure \(\PageIndex{3}\): Avebury Henge (CC BY-SA 2.0)

On the **Salisbury Plains** in England stands **Stonehenge** (3.8.4), one of the most famous **megalithic monuments** from ancient times. The Neolithic people were nomadic but transitioned to farming after discovering wild cereal wheat could be harvested and the seeds used to plant the following year again. Hunting was a supplementary food source and provided the necessary elements for clothing, bones for tools, and fat for cooking. The area also had abundant water, timber, and stone for construction and housing, provisions needed by the Neolithic people who inhabited the area. They probably lived in small groups or tribes organized into clusters of houses with roofs, doors, and flooring. There is evidence of shelving for storing food and skins on the floor for sleeping.

Figure \(\PageIndex{4}\): Stonehenge (Copyright; author via source)

Stonehenge is an art form of giant stones carved into individual posts and supporting lintels. The construction of Stonehenge started in **3100 BCE** as an earthwork enclosure with a circular ditch surrounding the henge; along the ditch, scientists discovered multiple graves. The henge complexes were built using traditional **bank-and-ditch** methods, a circular ditch excavated with simple tools and dirt banked up around the outside of the ditch. This ditch is common to all henges and a tell-tale sign of henge construction for archeologists. Early builders of henges may have used wood instead of stones. Archeologists estimate the complete construction of Stonehenge lasted hundreds of years after the initial henge formed; however, it was a very complex effort by people with few tools. The **megalith stones** had to be quarried and transported by land, river, and sea.

There are two distinct circles of stone; the outermost is the enormous **sarsen stones** and the smaller **bluestones** from the inner circle. Archeologists believe the sarsen stones, weighing approximately 25 tons each and four meters high, are sandstone from an area called **Marlborough Downs**, twenty-nine kilometers away from the construction site. The eighty smaller bluestones were added to the site around **2300 BCE**, each stone weighing two to four tons, and archeologists estimate the stone was from **Wales**, over 250 kilometers away. The most massive stone, known as the **Heel Stone** (3.8.5), is over 30 tons and stands on the main avenue to the site. The use of the stone is unknown. However, the sun rises behind the stone during the **summer solstice** and shines into the circle.

Figure \(\PageIndex{5}\): Heel Stone (CC BY 3.0)

Figure \(\PageIndex{6}\): Mortise and tenon joints (greens n cornbread, CC BY-NC-SA 2.0)

As evidenced by all the stone debris in the fields surrounding **Stonehenge**, the massive stones were shaped by hand using **hammer stones**. Great rock tools helped chip away at the stone for shaping, and smaller stones were fashioned into tools to smooth the surfaces before they lifted them into place. The Neolithic people set **30 stones** in a circle using a **post-and-lintel** construction technique. Stonecutters carved a **mortise-and-tenon joint** (3.8.6) on the top of the stones to secure the capstones in place. How the stones were raised is still unknown; however, archeologists believe a large hole was dug next to the stone, and the stone raised into the hole, becoming upright. The hole may have been lined with wood so the stone could easily slide into the hole and then be packed with rock and dirt, or some archaeologists think they may have used an **A-frame** structure and ropes to help set the stones into place.

Stonehenge Education Film

The story of Stonehenge

Stonehenge is not the only henge structure in England. The Neolithic people used wood and stone to build henges scattered throughout **England, Scotland, and Ireland**. The impact on Neolithic society is not well known. There is no written word to decipher the stone henges, but scientifically, we know that the stones aligned to the sun's **solstices**. Because none of the Neolithic inhabitants of Britain had any known or surviving recorded language, there is very little known about its history or culture.

People in the region were farmers who lived in small groupings. They raised sheep, pigs, and barley while still foraging for natural plants. The houses (3.8.7) were constructed with a base of large timbers for the frames, a foundation, and some walls made from stone or mud bricks. The roofs frequently formed the walls also and were made with reed, hay, wheat straw, or other natural vegetation. The **fire** was central to the space in the one large room and used for cooking and heating.

Figure \(\PageIndex{7}\): Prehistoric house (CC BY-SA 4.0)

Grooved pottery (3.8.8) was the typical ceramic style during the **Neolithic Period** in England and Ireland. This type of pottery is often associated with ceremonial and domestic contexts and has been found in tombs, pits, and within henge complexes. The pottery was made from locally sourced clay mixed with water and shaped entirely by hand, as pottery wheels had not yet been developed or adopted in these regions. To decorate the vessels, artisans used tools made from animal bones or antlers to carve, incise, or press patterns into the soft clay, creating the distinctive grooved surfaces for which the pottery is named. Once shaped and decorated, the pots were left to dry and then fired in open bonfires, a low-temperature process that hardened the clay and made the vessels suitable for everyday use.

Figure \(\PageIndex{8}\): Grooved pottery (Wessex Archaeology, CC BY-NC-SA 2.0)

How to make Prehistoric Pottery

In celebration of the history of human ingenuity we traveled back into the mists of prehistory.

[1] Retrieved from https://www.english-heritage.org.uk/...'proto%2Dhenge

[2] Retrieved from https://www.english-heritage.org.uk/...'proto%2Dhenge

3.9: Conclusion and Contrasts

Many of these ancient societies settled and thrived along major river valleys like the **Nile** in Egypt, the **Yellow River** in China, or the **Tigris** in Mesopotamia, using the rich, fertile valleys to develop agrarian societies. Art developed along with access to materials in settled communities through practical, decorated pottery or elaborate structures and buildings. A ruler class of kings or priests began to dominate early cultures, concentrating control of wealth and power in the hands of a few. Specialized artisans emerged; not only did society need practical pottery or housing, but the wealthy also wanted visual expressions of their power. Stone, marble, and clay became materials for ornate and decorative examples of creative work reflective of these civilizations.

The table demonstrates how different civilizations used their natural and abundant resource—**clay**. Some cultures, like the **Longshan**, had sophisticated potter's wheels and kilns to support extensive manufacturing of pottery, while others, like the **Early Jōmon**, still made coil pots fired in open pits.

Civilization	Raw Material	Product	Process	Finish
Aegean	Pottery making centered in Crete. The clay had a high iron content giving it an orange-red color.	Early jugs had round bottoms and yellow surfaces. Spouted, oval shape bowls, nicknamed sauce boats, usually had a reddish or dark overall wash.	Clay prepared by putting it in settling tanks to refine it. Potters wheels, fired in ovens	Incised ornamentation with spirals or simple geometric patterns. Dark paint on light-colored clay with a white coat, or mottled red and black appearance.
Early Egyptian Dynasty	Made of reddish-brown clay called Nile silt.	For everyday purposes, they were left undecorated. The red color of the fired pot was from oxidized iron compounds. A whitish color of clay was from lime.	Hollowed out a lump of clay and pinched it to get final form. A flat tool used to press against the clay to make very thin-walled pottery.	Decorations incised or painted. Slip made of a pigmented mixture of water and clay applied to the surface to add color. Wash was red ochre. Images of geometric forms, people, ibexes, flamingos.
Mesopotamia	Mixed clay and water then let clay age a few weeks for easier use.	Made pots, bowls, urns. Brushes made of animal hair to apply the glaze. Created a matte finish by rubbing with stones. Pinch potting, slab, coil building.	Potters' wheel was hand-turned for uniform thickness.	An important part of the culture. Fired in open hearths with somewhat controlled heat.
Indus Valley	Clay made of river silt.	Metal dishes made from copper, silver, bronze. Bowls, dishes, cups, vases. Favored using goats as decoration as well as humped bulls, pumas, birds.	Clay pots made on the wheel turned. The finished pot put in a hot oven to harden.	Most pots plain but some pots decorated in red and black. Patterns of leaves, flowers, other lines. More exceptional pots were colored blue, red, green and yellow.
Longshan	Clay made of river silt.		Fast running pottery wheels, updraft kilns, significant manufacturing	

Early Jomon	Clay made of river silt.		Fast running pottery wheels, updraft kilns, significant manufacturing	
Neolithic England	Made clay mixed with adhesive materials of mica, lead, fiber, crushed shells.	Bowls, jars, vessels with narrow mouths and long necks, vessels with spouts. The primary purpose of storing items, boiling food, burying the dead.	Open-pit fired. Built from the bottom with coil on coil then smoothed to form the pot.	Surface patterns made with twisted rope or cord.

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CHAPTER OVERVIEW

4: Learning to Build and the Evolution of Tools and Symbolic Statues (1900 BCE - 400 BCE)

From the time of the first civilizations, people continued to adapt and explore their environments, Innovations lead to inventions making life easier and aiding in the emergence of new cultures. Simultaneously, throughout the world, ancient civilizations were constructing large structures without the aid of modern building equipment.

4.1: Overview
4.2: Middle, New, and Late Kingdom Egyptian Dynasties (1366 BCE – 332 BCE)
4.3: Aegean (1700 BCE – 1450 BCE)
4.4: Mesopotamia (2500 BCE – 330 BCE)
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4.6: Etruscan (900 BCE – 600 BCE)
4.7: Shang and Zhou Dynasties (1766 BCE – 256 BCE)
4.8: Late Jomon (1500 BCE – 300 BCE)
4.9: Chavin (900 BCE – 200 BCE)
4.10: Olmec (1500 BCE – 400 BCE)
4.11: Conclusion

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4.1: Overview

From the time of the first civilizations, people continued to adapt and explore their environments. Innovations lead to inventions making life more comfortable and aiding in the emergence of new cultures. Simultaneously, throughout the world, ancient civilizations were constructing large structures without the aid of modern building equipment. As the ruling class grew in power and wealth, their requirements for magnificent temples, palaces, and monumental structures increased. Food production sustained more than the local populations, and new specialized occupations were formed. Farmers, soldiers, and merchants supported the communities. At the same time, increasingly new artistic skills were required to create the magnificent buildings demanded by the leaders — requirements for specialty raw materials for artistic projects generated trade routes and military incursions into neighboring territories.

The civilizations in this period constructed colossal structures. With the sophisticated technology of the modern world, we cannot understand how the ancient civilizations moved, lifted, and raised the large structures still existing 3,000 years later. How did they manage to quarry and cut stone without explosives or mostly powered saws designed to cut granite or marble? To move a 2-ton rock today, a worker uses a tractor with a forklift, powerful enough to elevate and move stone; however, lacking mechanical equipment for the heavy lifting, how did they excavate and move 2-ton stone a mile or more and then lift it to soaring heights? Ancient civilizations have always been innovative with structural designs, whether refining the rock outcrop where they would live, gathering wood and reeds to erect a home or constructing massive stone buildings, all based on the stability of the engineering from natural materials. Even with over three thousand years of weathering, earthquakes, vandalism, war, and rampage, many structures or their basic outlines are still there for us to enjoy today.

The types of construction varied based on the natural materials, and during this period, the significant configurations of any building comprised of wall systems and open roofing — the walls in any building needed to be strong enough to support themselves and the roof. If the roof span were too large, the roof would push the walls out, causing them to collapse. Therefore, the load-bearing walls could only support small windows or doorways, or they would collapse.

Wood, brick, stone, or mud bricks were stacked and piled, reaching the desired height and adding a lightweight roof made from wood. This type of construction was common, and many of the buildings made of stone or brick are still standing today, minus the roof structure. Wood did not last as long as a stone, and the wood rotted away under the weather conditions or fires over thousands of years. Another type of construction used for large structures was the post and lintel system comprised of two pillars of stone and a third stone laid across the first two. At the Palace of Karnak, they carved columns out of stone and laid a large piece of stone across the top. This system was robust, but only for short distances and would collapse if the span were too high.

This chapter, *Learning to Build and the Evolutions of Tools and Symbolic Statues (1900 BCE – 400 BCE)*, describes the materials and methods for the buildings the civilizations constructed and the art principles the architects might have employed.

Civilization	Approximate Time Frame	Starting Location
New/ Middle/Late Kingdom Egyptian Dynasties	1366 BCE – 332 BCE	Nile River, Egypt
Aegean	1700 BCE – 1450 BCE	Crete
Mesopotamian: Assyrian	2500 BCE – 1400 BCE	Tigris River, Iraq
Mesopotamian: Babylonian	1654 BCE - 911 BCE	Iraq
Mesopotamian: Persians	518 BCE – 330 BCE	Kur River, Persia
Phoenicians	1200 BCE – 539 BCE	Syria
Etruscans	900 BCE – 600 BCE	Italy
Shang and Zhou Dynasties	1766 BCE – 256 BCE	China
Late Jomon	1500 BCE – 300 BCE	Japan
Chavin	900 BCE – 200 BCE	Peru
Olmec	1500 BCE – 400 BCE	Mexico

Early/Middle Pre-Classic Mayan	2000 BCE – 400 BCE	Belize

- **4.1: Overview** by Deborah Gustlin & Zoe Gustlin is licensed CC BY 4.0.

4.2: Middle, New, and Late Kingdom Egyptian Dynasties (1366 BCE – 332 BCE)

Definition: Term

Middle Kingdom – The period of Egyptian history from about 2050–1710 BCE known for political stability, expanded trade, and important developments in literature, architecture, and tomb construction.

New Kingdom – The era from about 1550–1070 BCE considered the height of Egyptian power, when pharaohs expanded Egypt's territory and built monumental temples and tombs.

Karnak – A vast temple complex in Thebes dedicated primarily to the god Amun; the name means "the most select of places."

Great Hypostyle Hall – A massive hall within the Karnak Temple complex filled with rows of giant stone columns supporting the roof, designed to create an impressive sacred space.

Valley of the Kings – A burial site in Egypt where many pharaohs of the New Kingdom were entombed in elaborate rock-cut tombs hidden in the desert cliffs.

King Tutankhamun – A young pharaoh of the 18th Dynasty who ruled during the New Kingdom and became famous after his nearly intact tomb was discovered in 1922.

Aten – The sun disk worshipped as a god during the reign of Pharaoh Akhenaten, who attempted to establish a form of monotheistic worship centered on Aten.

Mummification – The Egyptian process of preserving the dead through embalming and wrapping the body to prepare it for the afterlife.

Canopic jar – A container used during mummification to store and protect internal organs removed from the body before burial.

The Egyptians remained the dominant power along the Nile River and continued their long tradition of building monumental tombs for their kings. Their standardized written language was used for administrative and literary texts, and many technological innovations emerged in Egypt. The introduction of the horse and chariot, advancements in musical instruments, bronze working, pottery production, and textile looms laid foundations for later mechanical developments. This era marked the height of the Egyptian Empire under powerful pharaohs such as Hatshepsut, Thutmose III, Akhenaten (4.2.1) (r. c. 1353–1336 BCE), and Tutankhamun.

The **Middle Kingdom** is characterized as a period of artistic flourishing, large-scale construction projects, and strong economic growth. By the beginning of the **New Kingdom**, however, crop failures, political struggles, and foreign invasions weakened this prosperity. Although artistic production experienced moments of renewal, it increasingly suffered under government corruption and instability. Ramses II was the most prominent ruler of the New Kingdom and reigned for approximately 67 years. After his era, Egypt gradually declined. By around 600 BCE, the Persians controlled Egypt, and the once-great Egyptian Empire slowly eroded.

Figure \(\PageIndex{1}\): Statue of Akhenaten (CC BY 2.0)

Karnak

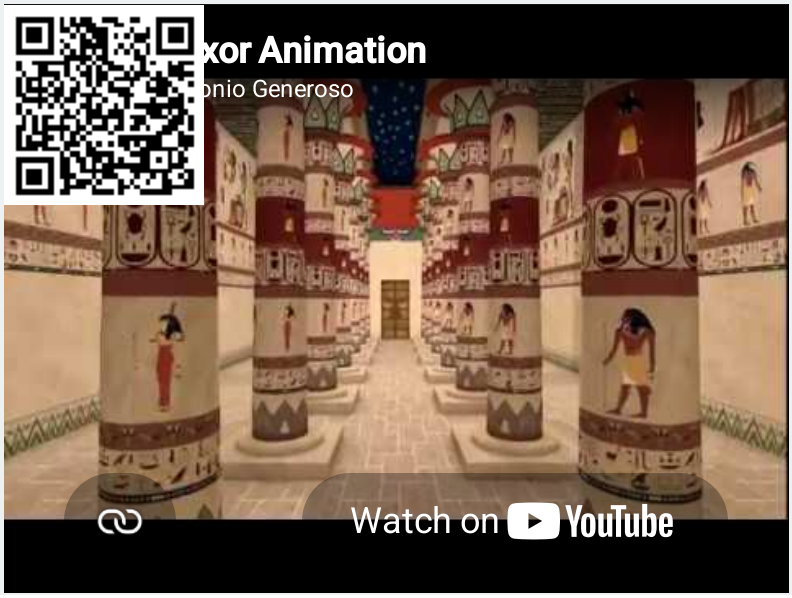
The **Temple of Karnak** (4.2.2) is located along the **Nile River** in Upper Egypt and served as the central religious complex dedicated primarily to the god **Amun-Re**. One of the most important spiritual centers ever constructed, Karnak eventually covered more than 200 acres and remained in continuous use for over 2,000 years. The scale of the complex is extraordinary—entire cathedrals such as **Notre-Dame Cathedral**, **St. Peter's Basilica**, and **St. Mark's Basilica** could fit within its walls. Additional structures were constantly added by successive rulers, including pylons, courtyards, shrines, and a large sacred lake, reflecting the wealth and political power of ancient Egypt.

The grandest space at Karnak is the **Great Hypostyle Hall**, (4.2.3), containing 134 massive sandstone columns, many rising about 24 meters (80 feet) high. The stone blocks were quarried at **Gebel Silsila**, more than 100 miles away, and likely transported by boat along the Nile. The hall's walls, columns, and roof are richly covered with carved reliefs and hieroglyphic inscriptions. Today, the Hypostyle Hall remains one of the largest religious spaces ever built and stands as a testament to the richness and power of the ancient Egyptian kingdoms.

Figure \(\PageIndex{2}\): Temple of Karnak (CC BY-SA 4.0)

Luxor Animation

A reconstruction of the Ancient Egyptian temple, Luxor.



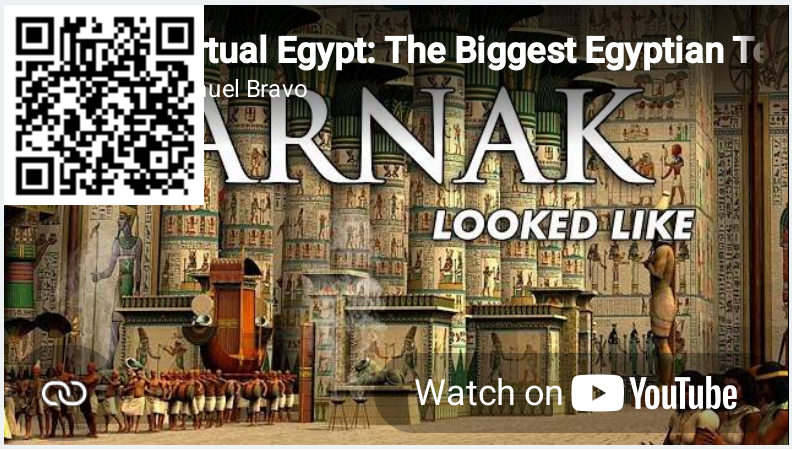
The **Temple of Karnak** was an enormous open-air religious complex constructed over more than 1,500 years by successive pharaohs and dedicated primarily to the supreme deity **Amun-Re**. Rather than being built all at once, Karnak grew gradually as each ruler added new temples, pylons, courtyards, and monumental halls to demonstrate devotion to the gods and to proclaim political power. The entire complex was once vividly painted with scenes of lotus and papyrus plants, palm trees, birds, stars, and religious rituals in brilliant blues, reds, yellows, and greens. Against the pale tones of the surrounding desert, this explosion of color would have created a striking and awe-inspiring visual experience for ancient visitors.

Many theories surround how Karnak was constructed, particularly regarding the movement and lifting of enormous stone blocks. Scholars generally propose the use of large earthen ramps, sledges, and pulley-like systems, along with thousands of skilled laborers and craftsmen. Because no written construction manuals survive, these ideas remain speculative, highlighting both the ingenuity of ancient Egyptian engineers and the enduring mystery of their building methods.

Figure \(\PageIndex{3}\): Hypostyle Hall (CC BY-SA 4.0)

The Biggest Egyptian Temple

What did the enormous Temple of Karnak look like 3000 years ago? In this video we take a tour of the Temple of Amun-Ra in Karnak, the biggest Egyptian Temple that was ever constructed in Ancient Egypt.



The giant obelisk of **Hatshepsut** (4.2.4) still stands at the **Temple of Karnak** today, weighing approximately 325 metric tons and rising over 29 meters (95 feet) tall. Carved from a single block of pink granite, the obelisk was quarried, transported for many miles, and erected as a monumental symbol of royal authority, divine favor, and architectural ambition. Obelisks in ancient Egypt were closely associated with the sun and were believed to represent a petrified ray of sunlight, linking the pharaoh directly to the gods. Once positioned at Karnak, Hatshepsut's obelisk was carved on all four sides with hieroglyphic inscriptions that recount her achievements as pharaoh. The reliefs show the queen kneeling before the god **Amun-Re**, presenting offerings and affirming her divine right to rule. Other inscriptions praise her lineage, celebrate the prosperity of her reign, and record the dedication of the monument.

In total, four obelisks commissioned by Hatshepsut were installed at Karnak using granite quarried and transported from distant sites. Scholars suggest that large teams of laborers, wooden sledges, water-lubricated tracks, and massive earthen ramps may have been used, yet no definitive construction records survive. The precise methods for raising and positioning these towering monoliths

remain unknown, highlighting both the ingenuity of ancient Egyptian engineers and the enduring mystery surrounding their building techniques.

Figure \(\PageIndex{4}\): Obelisk of Queen Hatshepsut (CC BY 2.0)

Valley of the Kings

The **Valley of the Kings** (4.2.5) is situated along the Nile River in Upper Egypt and served as the primary burial ground for Egypt's pharaohs and elite nobles during the New Kingdom. As the construction of pyramids gradually declined, rulers chose hidden rock-cut tombs instead, seeking greater security for their burials and treasures. These extraordinary tombs were carved directly into the sandstone cliffs and richly decorated with painted murals and reliefs. The imagery illustrates religious texts, funerary rituals, and scenes from the afterlife, all intended to guide and protect the pharaoh's soul on its journey beyond death. Deep within each tomb lay the burial chamber, where the ruler was placed in an elaborately decorated sarcophagus surrounded by offerings for eternity. The Valley of the Kings stands today as one of the most important archaeological sites in the world and provides invaluable insight into ancient Egyptian beliefs about death, the afterlife, and divine kingship.

Figure \(\PageIndex{5}\): Valley of the Kings (Copyright; author via source)

Valley of the Kings

Come explore the Valley of the Kings in Egypt. We'll descend into King Tut's Tomb and explore the tombs of other pharaohs as well. Now, if you're not quite sure what the Valley of the Kings is, this is where a man named Howard Carter, in 1922, discovered the tomb of Tutankhamen, better known as King Tut.

Queen Hatshepsut

One of the most famous royal burial monuments in ancient Egypt is associated with **Hatshepsut** (4.2.6) (r. c. 1508–1458 BCE). Hatshepsut was the fifth pharaoh of the **18th Dynasty** and ruled for approximately 22 years. She is widely regarded as one of the greatest female leaders in world history, known for political stability, ambitious building programs, and extensive trade networks. Her mortuary temple, located at Deir el-Bahri near the Valley of the Kings, is considered one of the most beautiful and innovative architectural achievements in Egypt. The complex (4.2.7) originally featured gardens filled with frankincense trees and other rare plants brought back from foreign expeditions, emphasizing the wealth and reach of her reign. Completed within about 15 years, the temple is organized around a dramatic **three-terraced design** connected by ramps and framed by long colonnades, courtyards, and porticos. Carved reliefs on the walls recount Hatshepsut's divine birth, her expedition to Punt, and her relationship with the god Amun, reinforcing her legitimacy as pharaoh.

Figure \(\PageIndex{6}\): Queen Hatshepsut (Public Domain)

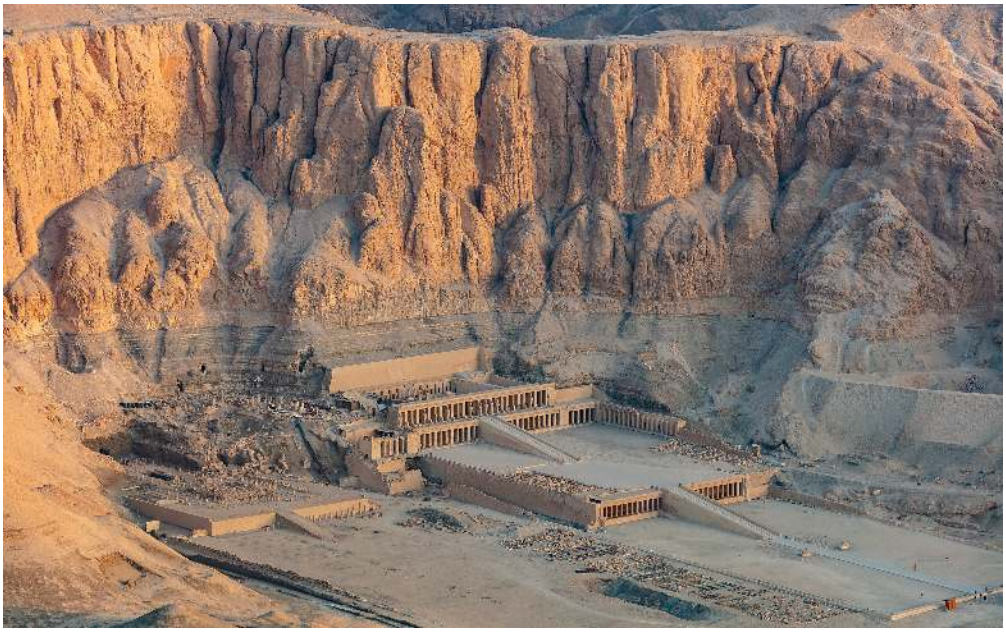


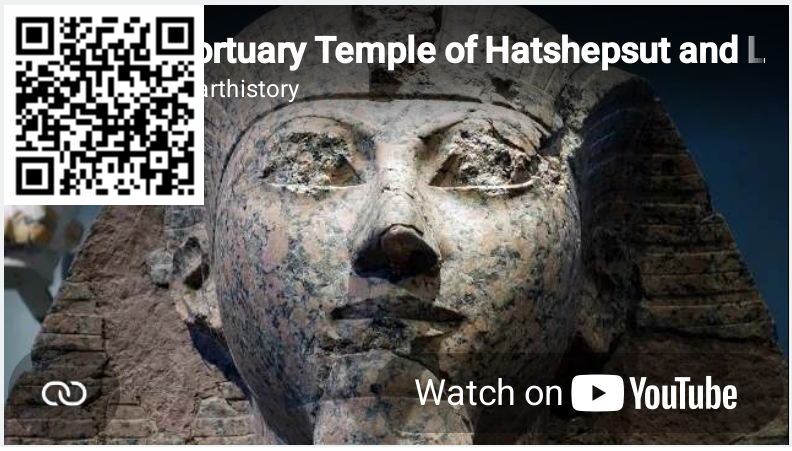
Figure \(\PageIndex{7}\): Queen Hatshepsut's tomb (CC BY-SA 4.0)

Inside the tomb were elaborate **low-relief carvings** (4.2.8) painted with exquisite colors depicting the life of Hatshepsut. Figures are generally shown in **profile view**, especially the head. Even when the body is depicted from the front, the head is typically turned to the side. The carvings were carefully executed and then precisely painted. Although painted reliefs can deteriorate when exposed to the elements, these images were preserved because they were hidden deep underground. Artists created their **pigments** from locally available rocks and minerals, producing a rich palette of durable colors.

Figure \(\PageIndex{8}\): Low relief carving (CC BY-SA 3.0)

Mortuary Temple of Hatshepsut

Mortuary Temple and Large Kneeling Statue of Hatshepsut, c. 1479-58 B.C.E., New Kingdom, Egypt.



King Tutankhamun

King Tutankhamun was only nine years old when he was anointed as pharaoh and king in ancient Egypt, commonly known as **King Tut**. At the time, numerous wars were occurring, a problematic environment for a nine-year-old ruler. The king died when he was eighteen. Little was known about the king until the archaeologist Howard Carter discovered Tut's tomb in 1922. Most of the tombs in the Valley of the Kings were raided throughout time, and few important artifacts were found in earlier tomb excavations. When Carter discovered the tomb, all the objects buried with the king remained untouched. When Carter opened the final door to the tomb, he exclaimed, "As one's eyes became accustomed to the glimmer of light, the interior of the chamber gradually loomed before one, with its strange and wonderful medley of extraordinary and beautiful objects heaped upon one another."[1]

Carter discovered a highly decorated coffin inside a deeply buried room (4.2.9). When the coffin was opened, Carter found three more nested coffins, the last one made of gold. In the gold box was the sarcophagus holding the mummified body of the king. A study of King Tut's remains indicates he was only 1.67 meters tall. He "had a variety of medical conditions and illnesses, including

malaria and Kohler disease, a rare bone disorder of the foot."[2] Several canes were found in the tomb, indicating the king's potential to have problems walking.

"The **death mask** (4.2.10 is considered one of the masterpieces of Egyptian art. It originally rested directly on the shoulders of the mummy inside the innermost gold coffin. It is constructed of two sheets of gold hammered together and weighs 22.5 pounds (10.23 kg). Tutankhamun is depicted wearing the striped nemes headdress (the striped head-cloth typically worn by pharaohs in ancient Egypt) with the goddesses **Nekhbet** and **Wadjet** depicted again protecting his brow. He also wears a false beard that further connects him to the image of a god as with the inner coffin. He wears a broad collar, which ends in terminals shaped as falcon heads. The back of the mask is covered with Spell 151b from the Book of the Dead, which the Egyptians used as a road map for the afterlife. This particular spell protects the various limbs of Tutankhamun as he moves into the underworld."[3]

Figure \(\PageIndex{9}\): King Tut's shrines and sarcophagus (CC BY-SA 3.0)

Figure \(\PageIndex{10}\): Funerary mask of Tutankhamun (Public Domain)

Figure \(\PageIndex{11}\): King Tut's throne (ca 1327 BCE, wood, gold leaf, silver, semi-precious stones, glass paste, 102 cm high, 54 cm long, 60 cm wide)

(CC BY-SA 4.0)

Sitting on the **golden throne** (4.2.11), Tutankhamun and Ankhsenamun are portrayed below in the rays of **Aten**, the sun god. Aten was part of a religious system and one of the primary deities. The sun and extending rays demonstrate Aten's influence to give life and light. The queen is anointing the king's shoulder with ointment as Aten's rays reflect on the pair. The ceremonial throne was located in the antechamber of the tomb. Embossed gold sheets about 3 mm thick covered the chair and then inlaid with semi-precious stones. When Howard Carter entered the tomb, he stated that the throne was "the most beautiful thing found to date in Egypt."[4]

The Excavation of Tutankamun's Mummy

After 3 years Howard Carter and his team finally get to excavate the lost tomb of King Tutankhamun. Using colorization technology, we are able to see this discovery as Carter and his team would have.

Mummification

The Egyptians believed in **mummification**, a process involving embalming and wrapping the body in preparation for burial in a sarcophagus. During the embalming process, the internal organs were removed from the body. The **heart** was considered the embodiment of the soul and was the only organ left inside the body for the journey to the afterlife. Each removed organ was placed in a **canopic jar** (4.2.12), often made from clay or alabaster, and buried with the body. The jars had different lids and were ornately decorated with animal or human faces (4.2.13), representing protective deities who watched over the organs.

The **canopic jars** (4.2.14) created for King Tutankhamun were made from alabaster with gold leaf decorating the base of the containers. When discovered in the tomb, the set was wrapped in a linen sheet. Each of the four jars contained one of the king's organs: the lungs, stomach, intestines, and liver. These organs were removed during the interment process so they could accompany the king and be reunited with him in the afterlife.

Figure \(\PageIndex{12}\): Canopic jar falcon head (Public Domain)

Figure \(\PageIndex{13}\): Canopic jar human head (Public Domain)

Figure \(\PageIndex{14}\): Canopic jars for King Tutankhamun (ca 1318 BCE, alabaster, gold leaf, 85.5 cm high, 54 cm long, 54 cm wide) (Public Domain)

[1] Retrieved from https://www.livescience.com/54090-tu...-king-tut.html

[2] Retrieved from https://www.livescience.com/54090-tu...-king-tut.html

[3] Retrieved from https://smarthistory.org/tutankhamun...nd-death-mask/

[4] Retrieved from https://egyptianmuseumcairo.eg/artef...f-tutankhamun/

4.3: Aegean (1700 BCE – 1450 BCE)

Definition: Term

Crete – The largest island in the Aegean Sea and the center of the Minoan civilization during the Bronze Age.

Minoans – An advanced Bronze Age culture that developed on Crete, known for trade, elaborate palaces, vibrant frescoes, and maritime power.

Linear A – An early writing system used by the Minoans that has not yet been fully deciphered.

Palace of Knossos – The largest and most famous Minoan palace complex on Crete, serving as a political, economic, and ceremonial center.

Frescoes – Wall paintings created by applying pigments to wet plaster so the color becomes part of the wall surface.

Clerestory windows – Windows placed high on a wall to allow light to enter a building while maintaining privacy and structural stability.

Pithoi jars – Large clay storage containers used to hold grain, oil, wine, and other goods in Minoan palaces.

Alabaster throne – A carved stone seat located in the throne room at Knossos, believed to have been used for ceremonial or political purposes.

Palace of Phaistos – A major Minoan palace complex on Crete, known for its large central court, theatre area, and storage rooms.

Palace of Zakros – A smaller Minoan palace near a harbor on the eastern coast of Crete, associated with trade and the discovery of valuable imported goods.

The largest concentration of people in the Aegean Sea region was on the island of **Crete**, home to the **Minoans**. They were major exporters of wine, crafted goods, jewelry, and oil, and they imported raw materials to support the growing population on the island. The Minoans developed one of the finest fleets of merchant vessels for trade with other civilizations, including the Egyptians, Mesopotamians, and peoples of the Indus Valley.

The Minoans established important political and economic centers, often referred to as **palaces**. These complexes also became centers of artistic activity. The Minoans formed a highly sophisticated civilization known for significant architectural construction and complex artworks. Although these settlements are called palaces, there is no clear evidence that the Minoans had a traditional royal government structure. The palaces are "better understood as multipurpose centers where all commercial, political, religious, industrial, and social activities may have taken place."[1] The culture also demonstrated a defined religious structure mainly focused on goddesses.

The significant palaces were constructed at **Knossos**, **Mallia**, **Phaistos**, and **Zakros**. Each palace had a central court with buildings arranged around it. The Minoans did not erect defensive walls, suggesting the region experienced a relatively peaceful period. The palaces were decorated with frescoes, painted walls and floors, and impressive masonry. These complexes functioned as centers for economic activity and the control of trade. Archaeologists also discovered artifacts with writing that used a hieroglyphic script and a linear script known as **Linear A**.

Palace of Knossos

The **Palace of Knossos** (4.3.1), located on the north side of Crete, was situated along an important trade route on the Mediterranean Sea. At the height of Aegean culture, from about 1900 to 1450 BCE, Crete functioned as a city-state with approximately 100,000 people living around the palace complex. The Palace of Knossos is one of the best-preserved palatial buildings of the Aegean world, a well-designed complex covering more than 80 hectares with several smaller communities surrounding it. The site was used for nearly 700 years, although two major earthquakes severely damaged the area. Each time, the inhabitants rebuilt and restored the palace. At the center of the complex, architects designed a large central courtyard with four wings extending outward. The palace served as the political center of **Minoan culture** and may also have functioned as an important ceremonial center.

Figure \(\PageIndex{1}\): Palace of Knossos (CC BY-SA 2.0)

The palace was constructed with **stone floors** and **timber-frame construction** for the walls, a technique that provided flexibility during earthquakes. Stone was stacked between the timber frames to form the walls of the first floor, while wood was used for the upper walls, ceilings, roofs, and doors. Most palace walls were covered with simple plaster and painted; however, selected walls received a second layer of **lime plaster**, allowing artists to paint **frescoes** directly into the surface. These frescoes depicted elaborate scenes of daily life, including animals, sea creatures, and human figures. One of the most famous examples is the **Dolphin Fresco** (4.3.2), which shows lively fish and dolphins swimming through the water, reflecting the strong connection between the Minoans and the surrounding sea.

Figure \(\PageIndex{2}\): Dolphin fresco (CC BY-SA 2.0)

The **Palace of Knossos** was grand; however, unlike other civilizations that often used monumental buildings primarily for religious purposes, the palace was built on a more subtle scale and designed for multiple uses. Some of the columns were made from the trunks of **cypress trees**, painted red (4.3.3) and set on stone bases with capitals. The red color created a strong visual contrast against the surrounding stone and mountain landscape. Interior lighting was achieved through **clerestory windows** placed high on the walls, as well as light wells and vertical shafts that allowed sunlight to enter spaces without exterior windows. The Minoans also created large storage rooms with compartments built directly into the floors to hold **pithoi jars** (4.3.4). These massive jars stored dry goods such as grain and liquids like oil or wine. Because the wide-mouthed vessels were extremely large and difficult to move, they were partially sunk into the floor to make access easier.

Knossos Palace Reconstruction

Digital Reconstruction of Knossos Palace Reconstruction Crete

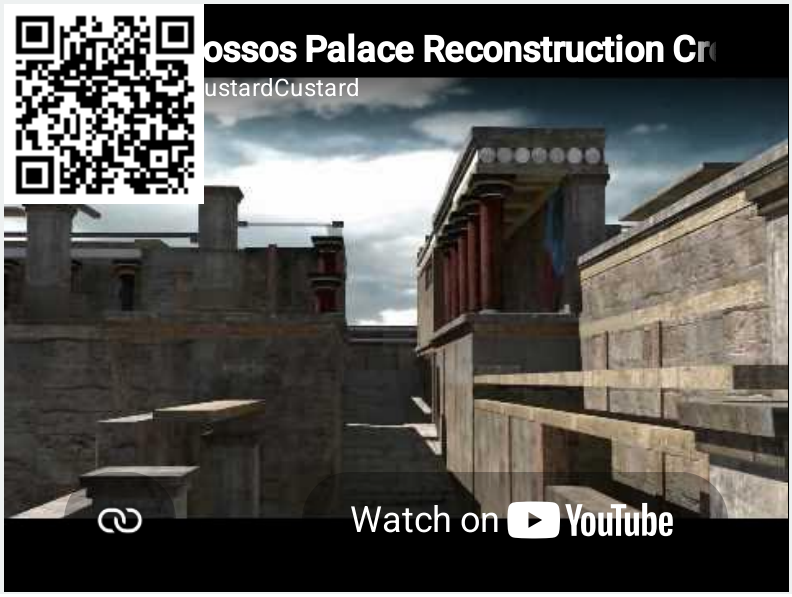


Figure \(\PageIndex{3}\): Knossos columns (CC BY-SA 4.0)

Figure \(\PageIndex{4}\): Storage rooms (CC BY-SA 3.0)

An engineering feat at the palace was an advanced **water management system** consisting of three separate systems: drainage, wastewater removal, and water supply. The Minoans constructed **aqueducts** to bring water from a spring about 12 miles away, supplying the city through a gravity-fed system of **terracotta pipes**. These clay pipes functioned much like modern sewer pipes used to connect homes to city systems. The queen's bedroom even had a **water-flushing toilet** in the adjoining bathroom. The **throne room** (4.3.5) was a chamber containing an **alabaster throne** built into the north wall. In front of the throne was a small round tub or **lustral basin** used for ritual cleansing. The room connected to the central court through an **anteroom**, which served as a waiting area with benches. On the walls were the famous **griffin frescoes** (4.3.6), showing reclining griffins positioned on either side of the throne.

Figure \(\PageIndex{5}\): Throne room (CC BY-SA 3.0)

Figure \(\PageIndex{6}\): Griffin fresco (CC BY-SA 3.0)

Storing food and liquids for the general population and trade required many different types of storage vessels. **Pithoi** (4.3.7) were enormous jars used to hold large quantities of liquids. These vessels were decorated with knobs, bands, and ridges created by adding extra pieces of clay to the surface of the pot. Archaeologists discovered nearly 400 pithoi at the **Palace of Knossos**, with each jar capable of holding more than 1,000 pounds of fluid. Because of their great weight, the jars were stored on the lower floors of the palace. The Minoans favored elaborate decoration and often created pottery with intricate designs. A well-known example is the clay **flask** (4.3.8) decorated with a large octopus, part of the distinctive **marine style** of ornamentation. This pottery was typically used to store oils and ointments. Most vessels were produced in small workshops located near sources of good clay. Artists used **slips**—liquid clay mixtures—for decoration, but the pottery was fired at relatively low temperatures, and true ceramic glazes were not used.

Figure \(\PageIndex{7}\): Pithoi storage jars (CC BY-SA 3.0)

Figure \(\PageIndex{8}\): Marine-themed bottle (1500 BCE, clay) (CC BY-NC-SA 4.0)

The Palace of Knossos

Minoan civilization, Bronze Age civilization of Crete that flourished from about 3000 bc to about 1100 bc. Its name derives from Minos, either a dynastic title or the name of a particular ruler of Crete who has a place in Greek legend. Snake goddess, faience statuette from the temple depository of Knossos, c. 1600 BCE.

Palace of Phaistos

The **Palace of Phaistos** (4.3.9), the second-largest Minoan palace after Knossos, had an intricate design with rooms for storage, work, and living spaces. Like other Minoan complexes, it was built around a central courtyard. The palace was constructed on low hills and had no defensive walls. West of the central court was a **theatre court** with rows of seats that could hold about 400 people, where spectators likely gathered to watch performances or participate in special rituals. Today, the palace remains in ruins due to earthquakes. Although it was rebuilt three times after major earthquakes, the final destruction left the site unusable.

Archaeologists also uncovered more than 1,000 **ceramic vases** at the site. Large storage rooms contained clay **pithoi** used for storing food, wine, and oil. These large jars were covered and sometimes locked to protect their contents. The vessels were used both for storage and transportation and had wide openings for easy access. Various decorative patterns appear on the jars, including one example (4.3.10) showing a **fish in a net**. The colors on these later vessels were more muted, marking a shift from the brighter colors seen in earlier Minoan pottery.

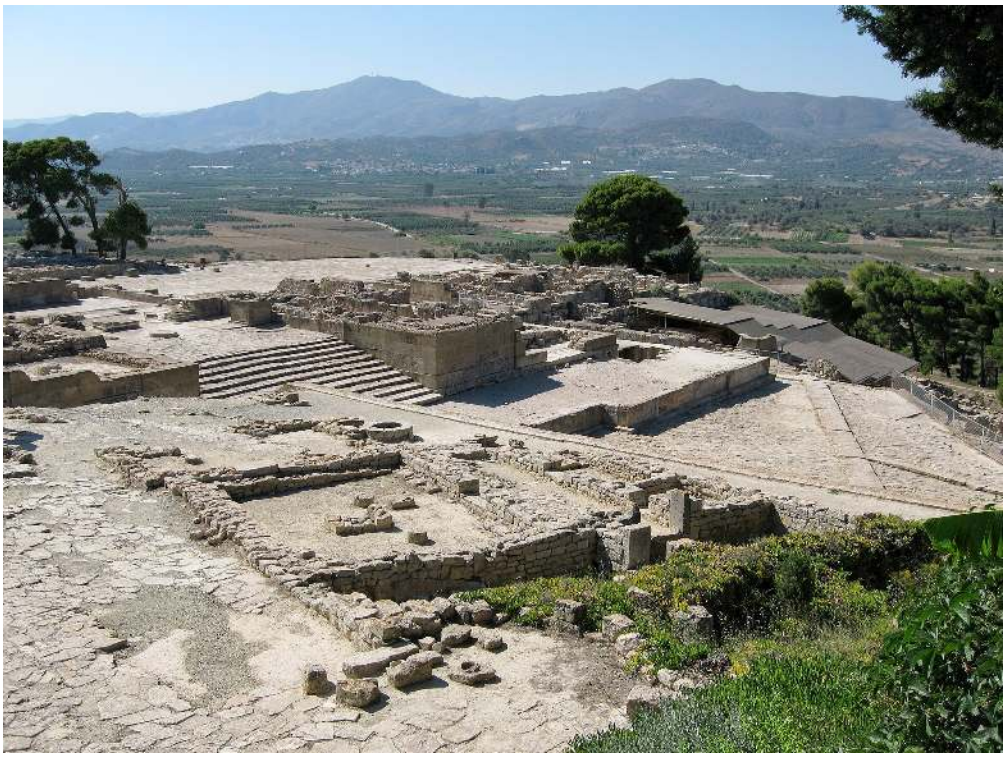


Figure \(\PageIndex{9}\): Palace of Phaistos (CC BY-SA 3.0)

Figure \(\PageIndex{10}\): Clay pot from Phaistos (CC BY-SA 4.0)

Palace of Malia

The **Palace at Malia** (4.3.11) was the third-largest Minoan palace, built with two floors and the typical **central court** at its center. The complex included a theatre area, workshops, storage rooms, and living spaces, likely used by elite families. An unusual **round table** was discovered near the central court. The table had small circular indentations around the edge and a larger opening in the center. Historians believe it may have been used to place seeds as offerings to the gods in hopes of ensuring plentiful crops. Today, the palace site also lies in ruins.

Some of the rooms along the central court were used for storage and contained large **pithoi** set into bases built into the floor. These tall, top-heavy jars were kept upright in the bases, and some were as tall as a person. The wide mouths of the jars were sealed with lids to protect the contents during storage or transportation. The jars (4.3.12) were often decorated and typically had loops on either side that functioned as handles. One example shows a common **rope pattern**, created by adding extra clay to form wave-like designs. Other decorations were painted onto the surface, sometimes indicating the type of material stored inside the vessel.

Figure \(\PageIndex{11}\): Palace of Malia (CC BY-SA 4.0)

Figure \(\PageIndex{12}\): Pithoi (CC BY-NC-SA 2.0)

Palace of Zakros

The **Palace of Zakros** (4.3.13) was the smallest of the major Minoan palaces and had two levels arranged around a central court. The complex included areas for elite residents as well as important public spaces used by the general population. Because the palace was located near a protected port surrounded by rough seas, the harbor became an active trading location with regions along **North Africa** and the **Eastern Mediterranean**. The palace was built in an area with wetlands, so the Minoans constructed a system of **drains** to manage excess water.

Archaeologists discovered a hidden room containing valuable imported objects made from **ivory**, **metals**, and **semi-precious stones**, suggesting the palace played an important role in commercial trade. The palace was eventually destroyed by a catastrophic event followed by a fire. At Zakros, archaeologists also uncovered a large ceremonial vessel (4.3.14) known as the **Sanctuary Rhyton**, named for the religious scenes decorating its surface. The vessel was originally covered in **gold leaf**, though only small fragments remain today. The relief scene shows **wild goats** moving through a rocky landscape. In the center, spiral designs decorate a building wall with what appears to be an altar, possibly representing an actual ritual space at the site. Historians believe the vessel was used in **ritual ceremonies**.

Figure \(\PageIndex{13}\): Palace of Zakros (CC BY-NC-ND 2.0)

Figure \(\PageIndex{14}\): Sanctuary Rhyton (CC BY-SA 4.0)

[1] Retrieved from https://archaeology.org/issues/july-...zakros-greece/

4.4: Mesopotamia (2500 BCE – 330 BCE)

Definition: Term

Mesopotamia – An ancient region between the Tigris and Euphrates Rivers in the eastern Mediterranean area, considered one of the earliest centers of civilization.

Iraq – The modern country that contains most of the land once known as Mesopotamia.

Iran – The modern nation east of Mesopotamia where the Achaemenid Persian Empire later developed.

Syria – A modern country to the west of Mesopotamia that was historically connected to ancient Near Eastern cultures.

Turkey – A modern country north of Mesopotamia that includes areas once influenced by Mesopotamian civilizations.

Assyrians – A powerful ancient civilization that developed in northern Mesopotamia and became known for its military strength and organized empire.

Babylonians – An ancient civilization centered in southern Mesopotamia, famous for its cities, law codes, and monumental architecture.

Achaemenid Persians – The ruling dynasty that founded the Persian Empire, beginning in the 6th century BCE in the region of modern Iran.

7th century BCE – The time period when the Achaemenid Persians began rising to prominence in the ancient Near East.

Ashur – The ancient capital city of the Assyrian Empire and an important center for religion, trade, and government.

Ziggurats – Large stepped temple structures built in Mesopotamian cities as places of worship dedicated to the gods.

Marduk – The chief god of Babylon and one of the most important deities in Mesopotamian religion.

Persepolis – A ceremonial capital of the Achaemenid Persian Empire, known for its monumental architecture and elaborate relief sculptures.

Persian Empire – One of the largest empires of the ancient world, ruled by the Achaemenid dynasty and stretching across much of the Near East.

Temple of Ashur – A major religious temple in the city of Ashur dedicated to the chief Assyrian god, built around 2000 BCE and used for several centuries.

Ashur (god) – The chief deity of the Assyrian Empire and the divine protector of the Assyrian people and their kings.

Ziggurat – A large stepped temple tower common in Mesopotamian cities, built as a sacred structure dedicated to a god.

Basalt – A dense volcanic stone often used in ancient sculpture and architecture because of its durability.

Water basin – A carved stone container used in temples to hold water for ritual purification ceremonies.

Ritual cleansing – A religious practice in which water is used symbolically to purify people, objects, or sacred spaces.

Water gods – Divine figures associated with water, fertility, and purification, often depicted holding vessels or flowing water.

Throne room – The central ceremonial hall in a palace where the king held court and received visitors.

Lamassu – A protective Assyrian guardian figure combining a human head, wings of a bird, and the body of a bull or lion, placed at palace entrances.

Horned cap – A crown-like headpiece used in Mesopotamian art to symbolize divine power.

Five-leg illusion – A sculptural technique used on lamassu statues so the figure appears stationary from the front but walking when viewed from the side.

Babylon – An ancient city in Mesopotamia located along the Euphrates River that became one of the most important political, cultural, and economic centers of the ancient Near East.

Euphrates River – One of the two major rivers of Mesopotamia, along with the Tigris, that supported agriculture, trade, and the growth of early civilizations.

King Hammurabi – The Babylonian ruler (reigned c. 1792–1750 BCE) best known for establishing a unified Babylonian kingdom and creating the famous law code known as the Code of Hammurabi.

Assyrians – A powerful civilization located in northern Mesopotamia known for its strong military, large empire, and monumental architecture.

Fortified walls – Thick defensive walls built around ancient cities to protect them from enemy attacks.

King Nebuchadnezzar II – A powerful Babylonian king who ruled from 605–562 BCE and is remembered for major building projects and military campaigns.

Kingdom of Judah – An ancient Hebrew kingdom in the southern Levant that was conquered by Nebuchadnezzar II, leading to the destruction of Jerusalem and the Babylonian exile.

Jerusalem – An ancient city in the region of Judah that was destroyed by the Babylonians in 586 BCE.

Etemenanki – A massive ziggurat temple in Babylon dedicated to the god Marduk, believed by some scholars to be associated with the biblical Tower of Babel.

Ishtar Gate – A monumental ceremonial gate of Babylon decorated with blue glazed bricks and relief images of animals associated with the goddess Ishtar.

Hanging Gardens of Babylon – A legendary garden complex said to have been built by Nebuchadnezzar II, considered one of the Seven Wonders of the Ancient World, though its existence is debated.

Cuneiform – A wedge-shaped writing system developed in Mesopotamia and used for recording language on clay tablets.

Mesopotamia was the ancient region located in the eastern Mediterranean area, encompassing most of modern-day Iraq and parts of Iran, Syria, and Turkey. Over time, several powerful cultures developed in this region, including the **Assyrians**, **Babylonians**, and later the **Achaemenid Persians**. The Assyrians settled in the northern part of Mesopotamia, while the Babylonians controlled the southern region. Meanwhile, the Achaemenids began establishing communities in what is now Iran, eventually rising to power around the **7th century BCE**.

The Assyrian capital city of **Ashur** became a major center of trade, government, and religion. It served as the ceremonial location where kings were crowned and buried, reinforcing its importance as both a political and sacred city. The Babylonians were known for constructing monumental **ziggurats**—massive stepped temple structures dedicated to their gods. One of the most important temples was dedicated to **Marduk**, the chief deity of Babylon. The **Achaemenid Persians** later built the grand ceremonial city of **Persepolis**, whose name means “city of the Persians.” Persepolis served as a symbol of imperial power and wealth, with monumental architecture and elaborate relief carvings celebrating the diversity of the Persian Empire.

Assyrian (2000 BCE – 1075 BCE)

The ancient city of **Ashur** (4.4.1) was located about 400 kilometers from what is now Baghdad, along the banks of the northern **Tigris River**. Ashur served as the capital of the **Assyrian Empire**, functioning as an important center of trade, government, and religion. The city was protected by two large double walls nearly four kilometers long, with a moat between them and several gates leading into the city. Most of the buildings were constructed from mud brick stacked on stone foundations, a common architectural method in Mesopotamia. Some structures still remain today, including **ziggurats**, palaces, temples, and a few houses. The **Assyrians** were also known as skilled engineers and builders, particularly recognized for their mastery of **arches**, an architectural innovation that helped support large stone and brick structures.

Figure \(\PageIndex{1}\): Ashur (CC-BY-SA IGO 3.0)

The **Temple of Ashur** was built around **2000 BCE** and remained in use until about **1400 BCE** during the height of the **Assyrian Empire**. Ashur functioned as the religious center of the empire, and the massive **ziggurat** was dedicated to the god **Ashur**, the chief deity of the Assyrians. Inside the temple complex was a **water basin** (4.4.2) carved from a single large block of **basalt**. The basin stood in the courtyard, and the water was used for **ritual cleansing**. At the corners of the basin are figures of **water gods** holding jugs. The imagery suggests that water flows from the skies into the jugs and then into the earth, symbolizing the cycle of divine purification. Religious attendants are shown carrying buckets filled with water to help purify the central divine figure.

At the entrance to the **throne room** of the palace stood two massive **forty-ton statues** (4.4.3) that guarded the doorway. These figures are known as **Lamassu**, protective spirits believed to safeguard the palace and the king. The creature combines a **human head**, **wings of a bird**, and the **body of a bull**. When viewed from the front, the lamassu appears to stand still, but from the side it seems to walk forward. This illusion occurs because the sculpture was carved with **five legs** so the figure appears stable from multiple viewpoints. The lamassu also wears a **horned cap** symbolizing divinity and a belt representing authority and power.

Figure \(\PageIndex{2}\): Water basin (704-681 BCE, basalt, 312 x 117 cm) (CC BY 2.0)

Figure \(\PageIndex{3}\): Lamassu (883-859 BCE, gypsum alabaster, 311.2 x 62.2 x 276.9 cm) (Public Domain)

Ashur

The ancient city of Ashur is located on the Tigris River in northern Mesopotamia in a specific geo-ecological zone, at the borderline between rain-fed and irrigation agriculture. The city dates back to the 3rd millennium BC. From the 14th to the 9th centuries BC it was the first capital of the Assyrian Empire, a city-state and trading platform of international importance.

The historical site of **Nimrud** (4.4.4), located in what is now Iraq, was developed during the 800s BCE by the **Assyrian Empire**. The city became the new capital under King **Ashurnasirpal II** (883–859 BCE), who moved the royal seat from Ashur. At Nimrud, the Assyrians constructed massive temples and palaces that demonstrated the power and authority of the king. The palace walls were covered with enormous relief carvings that illustrated the king's achievements and his dominance in Mesopotamia. Artisans quarried local gypsum, transported the stone to the site, and carefully cut and installed the slabs before carving detailed scenes of warfare, royal hunts, and protective divine figures. These reliefs were originally painted in bright colors, though most of the pigment has faded over time. Archaeologists also discovered finely crafted objects in the palace, including bronze Nimrud bowls, carved ivory furniture inlays, and elaborate jewelry.

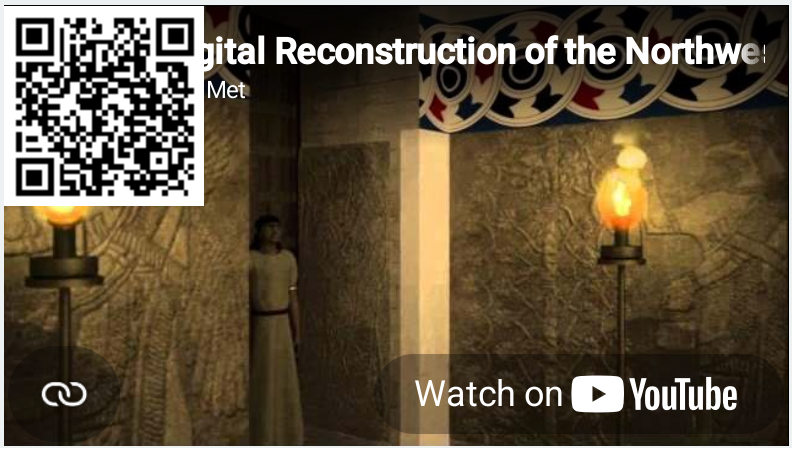
One relief panel (4.4.5) depicts the king and his attendant. The king is easily identified by his crown, elaborate clothing, and luxuriant beard, symbols of royal authority. The panel was originally painted, and the rich colors of the king's garments helped distinguish his status. He is also shown wearing ornate jewelry, emphasizing his power and wealth. The second figure is **beardless**, suggesting he is a **eunuch**, a common court official in Assyrian palaces. The quality of his clothing indicates his role within the royal court as an attendant serving the king. Across the center of the panel runs **cuneiform writing**, which records the king's accomplishments and activities.

Figure \(\PageIndex{4}\): Historical site of Nimrud (Public Domain)

Figure \(\PageIndex{5}\): Relief panel (883-859 BCE, gypsum alabaster, 234.3 x 233.7 x 11.4 cm) (Public Domain)

Nimerud, Assyria Palace

This video reconstructs the Northwest Palace of Ashurnasirpal II at Nimrud (near modern Mosul in northern Iraq) as it would have appeared during his reign in the ninth century B.C. The video moves from the outer courtyards of the palace into the throne room and beyond into more private spaces, perhaps used for rituals. The video also shows the original location and painted colors of the relief depicting the winged, eagle-headed figure included in the exhibition Assyria to Iberia at the Dawn of the Classical Age.



Designed to Impress and Overwhelm

International Head of Antiquities G. Max Bernheimer marvels at this powerful stone relief retrieved from Nimrud in modern-day Iraq in the mid-19th century. Standing more than 7 ft. high, this proud figure was once part of an elaborate decorative scheme that covered the walls of the Northwest Palace at Nimrud, which was constructed some 3,000 years ago.

Babylonia (1654 BCE - 911 BCE)

The city of **Babylon** (4.4.6) was established along the **Euphrates River** in the late third millennium BCE and rose to prominence under the leadership of **King Hammurabi**. Babylonian cities became important centers of learning, administration, and writing. The Babylonians maintained communication and trade with the Egyptians, while often experiencing conflict with the **Assyrians** to the north. After periods of warfare, Babylonian rulers eventually defeated the Assyrians and rebuilt Babylon into a magnificent city. Massive fortified **walls** were constructed to protect the city's palaces and religious buildings.

One of Babylon's most powerful rulers was **King Nebuchadnezzar II**, who governed for more than forty years. He is remembered for both his extensive military campaigns and his ambitious building projects throughout Babylon. One of his most significant campaigns was the destruction of the **Kingdom of Judah** and the city of **Jerusalem**, which resulted in the displacement of many inhabitants and a major shift in the region's political landscape.

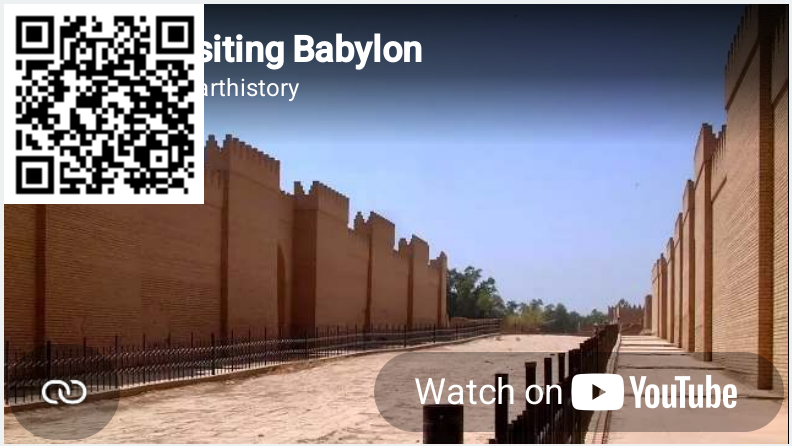
Among the most famous structures associated with Nebuchadnezzar's reign were the **Etemenanki**, the **Ishtar Gate**, and the legendary **Hanging Gardens of Babylon**. According to tradition, the king built the Hanging Gardens for his wife, who longed for

the lush landscapes of her homeland. However, historical evidence for the gardens remains uncertain. Very little **cuneiform** documentation directly describing the gardens has been discovered, leaving historians to debate whether they were a real architectural achievement or a later legend.

Figure \(\PageIndex{6}\): Reconstructed view of Babylon (CC BY-SA 4.0)

Visit Babylon

A conversation with Lisa Ackerman, World Monuments Fund, and Beth Harris, Smarthistory.



King Hammurabi was one of the most well-known leaders in **Mesopotamian** history. He described himself as “the king who made the four quarters of the earth obedient.” His most important contribution was his concept of **justice**, expressed through his famous **law code**, which was recorded on a stone **stele** (4.4.7) and on other clay tablets. At the top of the stele is a carved scene showing **Hammurabi** receiving the laws from the god **Shamash**, who is seated on a throne. This imagery symbolized the belief that the laws were given by the gods and therefore carried divine authority. Hammurabi believed that his laws were granted by **Shamash**, the god of justice, reinforcing the idea that the king ruled with divine approval.

Figure \(\PageIndex{7}\): *Law Code Stele of King Hammurabi* (1792-1750 BCE, basalt) (CC BY 3.0)

The Law Code Stele of King Hammurabi

The Law Code Stele of King Hammurabi, 1792-1750 B.C.E., basalt, 225 x 65 cm

Ancient **Babylonia** built large brick temple towers called ziggurats, which served as the religious and ceremonial centers of their cities. One of the most famous was **Etemenanki** (4.4.8), considered the largest of the roughly twenty known ziggurats. Cuneiform tablets describe the tower as having seven terraces, rising about 91 meters high, with a base measuring 91 meters by 91 meters. The highest terrace of the ziggurat was dedicated to the Babylonian god **Marduk**, while other rooms were associated with important gods such as **Ea**, the god of water; **Nusku**, the god of light; and **Anu**, the god of heaven. The structure was designed with stairways

that wrapped around the building, giving the ziggurat a spiral-like appearance as people ascended toward the sacred space at the top. The **Persian king Xerxes** destroyed the structure in 484 BCE after two Babylonian revolts against Persian rule. After this period, Babylonian political and cultural power gradually declined, and today no visible remains of the tower survive.

> *The word ziggurat translates from Akkadian zaqaru, which means to rise high.*

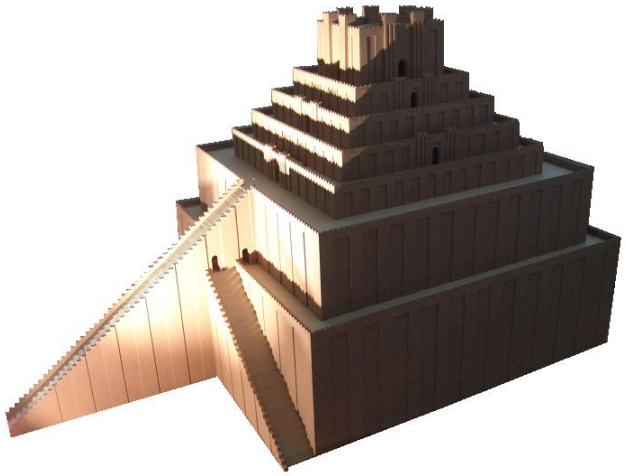


Figure \(\PageIndex{8}\): Ziggurat Etemenanki (CC0 1.0.)

"The Ishtar Gate (4.4.9) (today in the Pergamon Museum in Berlin) was the most elaborate inner-city gate constructed in ancient Babylon. The whole gate was covered in glazed bricks, which the inscription tells us are made of lapis lazuli, which would have rendered the façade with a jewel-like shine (4.4.10). Alternating rows of lion and cattle march in a relief procession across the gleaming blue surface of the gate."[1]

> **I, Nebuchadnezzar . . . magnificently adorned them with luxurious splendor for all mankind to behold in awe.**
>
> (Nebuchadnezzar II, Inscription plaque of the Ishtar Gate)[2]

Figure \(\PageIndex{9}\): Ishtar Gate and Processional Way (Reconstruction, c. 575 BCE, glazed mud brick) (CC BY 2.0)

Figure \(\PageIndex{10}\): Ishtar Gate and Processional Way detail (Reconstruction, c. 575 BCE, glazed mud brick) (CC BY-NC-SA 2.0)

Ishtar Gate and Pressional Way

Reconstruction of the Ishtar Gate and Processional Way, Babylon, c. 575 B.C.E., glazed mud brick (Pergamon Museum, Berlin)

Achaemenid (518 BCE – 330 BCE)

"The Achaemenid Persian empire was the largest that the ancient world had seen, extending from Anatolia and Egypt across western Asia to northern India and Central Asia."[3] The Babylonian Empire controlled much of Mesopotamia until the Persian forces defeated them. After a ten-day siege, the Persians took even Egypt's ancient capital of Memphis. When Darius I (called the "Great") took power, he stabilized the empire and constructed the Royal Road, the postal system, and a process for commercial shipping to enhance trade with other countries. Darius also brought northwestern India and the Greek islands under his control.

Darius I introduced a new transnational currency called the **Daric** to help regulate trade and commerce across the **Persian Empire** and its trading partners. These coins were made of **gold or silver**, though only the king had the authority to mint the gold darics (4.4.11). The standardized currency helped unify the vast empire's economy and facilitated long-distance trade.On the coin, the figure is shown wearing a **quiver** and either kneeling or running while holding a **spear** in the right hand and a **bow** in the left. The image represents the Persian king as a powerful warrior and ruler. The back side of the coin contains an **incuse punch**, a mark created when the design on the coin was s truck during the minting process.

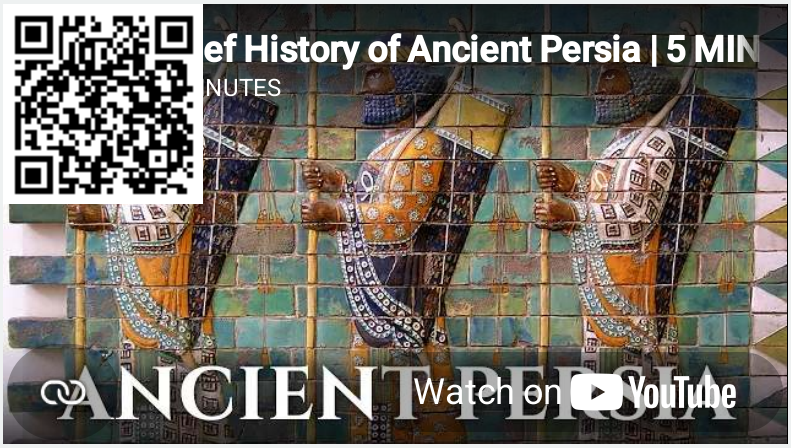
Figure \(\PageIndex{11}\): Daric coin (ca 485-420 BCEm gikdm 15 mm (CC BY-SA 2.5)

Darius I introduced a new transnational currency called the **Daric** to help regulate trade and commerce across the **Persian Empire** and its trading partners. These coins were made of **gold or silver**, though only the king had the authority to mint the gold darics (4.4.12). The standardized currency helped unify the vast empire's economy and facilitated long-distance trade. On the coin, the figure is shown wearing a **quiver** and either kneeling or running while holding a **spear** in the right hand and a **bow** in the left. The image represents the Persian king as a powerful warrior and ruler. The back side of the coin contains an **incuse punch**, a mark created when the design on the coin was struck during the minting process.

Figure \(\PageIndex{12}\): Tomb of Darius I (486 BCE) (C BY-SA 3.0)

Brief History of Ancient Persia

The Achaemenid Empire, otherwise known as the Persian Empire, took place between 550 BCE and 330 BCE. The empire existed in what is now modern-day Iran and encompassed parts of Central Asia as well. It was the largest empire on earth at the time of its existence, which spanned three centuries of power. In fact, the Achaemenid Empire was considered one of the most powerful empires to ever exist and even today it's considered one of the longest-lasting empires that existed in human history.



Founded in **518 BCE** by **Darius the Great**, **Persepolis** (4.4.13) became the ceremonial capital of the **Achaemenid Empire** and the residence of the Persian kings. The city was located near the **Kur River** and built against the eastern side of **Kuh-e Rahmet**, known as the "Mountain of Mercy." Three sides of the complex were supported by massive retaining walls that created a large, level terrace for the city center. The use of both natural terrain and engineered walls produced an impressive flat platform that could be seen for miles and was relatively easy to defend.

Unlike the massive stone column structures seen in places such as the **Temple of Karnak**, Achaemenid architects developed a lighter architectural style. They used **wooden lintels** to support the roof, which reduced the number of columns needed for the large halls. This design created a more open structure that allowed natural light to flow through the building. The grand halls served as

spaces for government functions, royal ceremonies, and elaborate receptions during imperial festivals. The **Achaemenid Empire** remained powerful until **Alexander the Great** captured and burned Persepolis in 330 BCE. After looting the city, the destruction marked the symbolic end of Achaemenid rule.

> *Persepolis literally means "city of Persians."*

Figure \(\PageIndex{13}\): Persepolis (CC BY-SA 4.0)

The temple complex at **Persepolis** included massive staircases, large gathering halls, throne rooms, and additional buildings that supported the royal and ceremonial activities of the empire. The city was protected by three defensive walls: the first was about seven feet tall, the second rose to fourteen feet, and the outer wall reached nearly thirty feet in height, enclosing the entire city. Persepolis was constructed primarily from gray limestone quarried in the surrounding region, along with mud brick, a common building material throughout Mesopotamia. Engineers also designed systems to manage water resources. Water was collected in an elevated cistern carved into the hillside, allowing rainwater to be stored and distributed to the city. Like many advanced cities of the ancient world, Persepolis also had an extensive underground system of tunnels used to control sewage and move water. These engineering systems helped maintain sanitation and supported the large population that gathered there for government functions and imperial ceremonies.

Figure \(\PageIndex{14}\): Gate of all Nations (CC BY-SA 4.0)

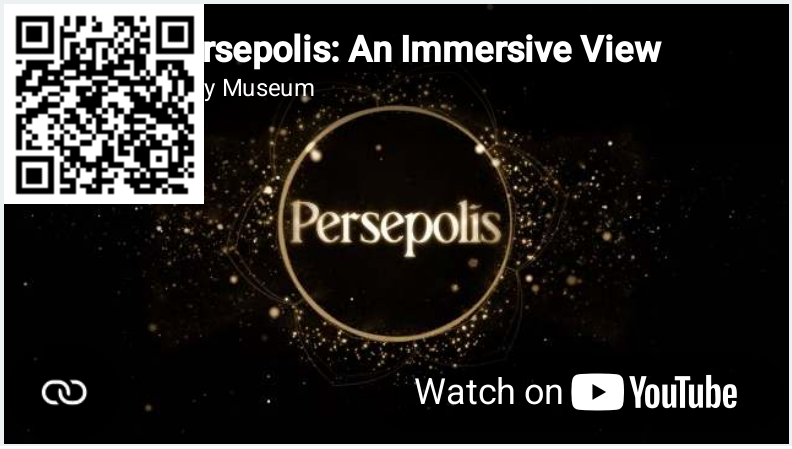
The remains of **Persepolis** (4.4.13) reveal the layout of numerous monumental buildings built on the foundations that still survive today. Although much of the city was destroyed, several architectural elements remain. Fifteen of the massive pillars are still standing near the main entrance to the city, known as the **Gate of All Nations** (4.4.14). Two large stairways flank the grand entrance to the complex. These staircases were considered masterpieces of design and proportion and were carefully constructed to be perfectly symmetrical (4.4.5). The steps were wide and shallow, allowing visitors, officials, and processions to move easily toward the ceremonial halls.

The **Persians** were highly skilled in **low relief carving**, a technique visible on the decorative stair rails and banisters that are covered with detailed reliefs and sculpted figures. Monumental **winged bulls** appear throughout the complex, often positioned on columns and at gateways as protective symbols. In **330 BCE**, **Alexander the Great** attacked Persepolis, sacking, looting, and ultimately burning the city. After the destruction, only portions of the monumental architecture—such as columns, stairways, and doorways—remained standing.

Figure \(\PageIndex{15}\): Entrance to Persepolis (CC BY 2.0)

Persepolis: An Immersive View

This video takes you on a journey through a virtual reconstruction of the ancient Persian city of Persepolis in southern Iran, inviting you to follow in the footsteps of its ancient visitors. Built by powerful Achaemenid kings, Persepolis served as the ceremonial capital of what was then the world's largest empire.



[1] Retrieved from https://smarthistory.org/neo-babylonian/

[2] Retrieved from https://smarthistory.org/neo-babylonian/

[3] Retrieved from https://www.metmuseum.org/essays/the...re-550-330-b-c

4.5: Phoenicians (1200 BCE – 539 BCE)

Definition: Term

Phoenicians – An ancient seafaring civilization that lived along the eastern Mediterranean coast in what is now Lebanon and became known for trade, shipbuilding, and navigation.

Mediterranean Sea – A large sea connecting Europe, Africa, and the Middle East that served as a major trade route for ancient civilizations.

Purple dye – A rare and expensive dye produced from the Murex sea snail and used by the Phoenicians to create highly valued purple textiles.

Murex snail – A sea snail whose glands produced the famous purple dye used in Phoenician fabrics.

Bireme – An ancient warship or trading vessel powered by two rows of oars, developed and used by Mediterranean civilizations including the Phoenicians.

City-states – Independent cities that function as separate political units with their own governments, economies, and leadership.

Phoenician alphabet – A writing system developed by the Phoenicians that used symbols to represent sounds and later influenced Greek and modern European alphabets.

Amrit – An ancient Phoenician city located on the Mediterranean coast of modern Syria, known for its temple complex and stadium.

Temple of Amrit – A Phoenician religious structure built within a large carved stone courtyard with a sacred spring at its center.

Sacred spring – A natural water source considered holy or spiritually significant and often incorporated into religious structures.

Burial towers (spindles) – Tall stone funerary monuments used by the Phoenicians to mark burial sites.

The **Phoenicians** were an ancient civilization that lived along the coast of the **Mediterranean Sea** in what is now **Lebanon**. Over time, their settlements expanded along parts of the **North African** coast. They became famous throughout the Mediterranean as the "**Purple People**," a name referring to the purple dye used in their clothing. The valuable dye was produced from the **Murex snail**, and Phoenician merchants traded the highly prized purple fabrics along major sea trade routes.

The Phoenicians were also skilled shipbuilders and sailors. They developed the **bireme**, a ship powered by two rows of oars that allowed them to travel efficiently across the Mediterranean. Their settlements functioned as independent **city-states**, similar to those of ancient Greece. One of their most lasting contributions was the **Phoenician alphabet**, which later influenced many modern **European alphabets**. Rather than forming a single unified nation, Phoenicia likely consisted of loosely connected trading cities and alliances that dominated maritime commerce in the region.

One important Phoenician site is the ancient city of **Amrit**, located along the Mediterranean coast in modern **Syria**. Two rivers pass through the area, providing direct access to the sea for Phoenician traders. Archaeologists have identified two major architectural remains at Amrit: the **Temple of Amrit** (4.5.1) and a **stadium**. The temple complex includes a large court carved directly into the bedrock, measuring approximately **47 by 49 meters** and more than **3 meters deep**. At the center of the court was a **sacred spring** fed by natural underground water sources and surrounded by a portico. Another distinctive feature of the site is a series of stone **burial towers**, sometimes called **spindles**, which rise about **7.5 meters** high. These tall, tapering monuments served as funerary structures and stand as important examples of Phoenician architectural traditions.

Figure \(\PageIndex{1}\): Temple of Amrit (CC BY-SA 3.0)

The Phoenician **stadium** (4.5.2) at Amrit was built around **1500 BCE** and was located about 200 meters northeast of the temple complex. The stadium was carved directly from rock and measured about 230 meters long and 40 meters wide, dimensions similar to those of later Greek Olympic stadiums. The structure was cut into a natural **U-shaped hillside**, allowing the stadium to hold as many as 11,000 spectators. Although much of the structure has deteriorated over time, seven rows of seating remain preserved today. The stadium had two entrances, including a tunnel that led from the outside directly into the arena, which was likely used by the athletes. Nearby buildings may have served as a gymnasium and an outdoor training area. Historians believe the stadium was used for athletic competitions and funeral games, suggesting that these types of sporting events existed in the region before the development of the **Greek Olympic Games**.

Figure \(\PageIndex{2}\): Amrit Stadium (CC BY-SA 3.0)

The **Phoenicians** were master sailors whose ships (4.5.3) traveled across the Mediterranean Sea and beyond. Archaeological discoveries of sunken ships reveal the wide range of goods they carried, including materials from Spain, raw amber from the Baltic Sea region, and elephant tusks from Africa. Despite their extensive maritime activity, little is known about the daily lives of Phoenician sailors. Unlike many other seafaring cultures that kept logs, journals, or maps, no written sailing records from the Phoenicians have been discovered. Historians instead rely on images of Phoenician ships depicted in the artwork of other cultures to understand what their vessels looked like.

Phoenician shipbuilders were highly skilled and used the abundant **cedar trees** of their region to construct their vessels. Ship hulls (4.5.4) were built using pegged **mortise-and-tenon joints** that secured the planks to the ship's ribs, creating strong and durable structures. Some ships featured decorative figures, such as horses carved on the prow. These vessels were powered by both sails and oars, and a crew of about eight sailors was needed to manage the sail. Even the ship's anchor was massive, sometimes weighing nearly 275 kilograms. Historians believe the Phoenicians also developed the **bireme**, a larger and faster ship designed for long voyages or warfare. The bireme had two tiers of oars, with one row of rowers positioned above the other. Measuring about twenty-four meters long and three meters wide, these ships were often used to escort and protect merchant ships transporting valuable goods.

Figure \(\PageIndex{3}\): Basic Phoenician merchant ship (CC BY 4.0)

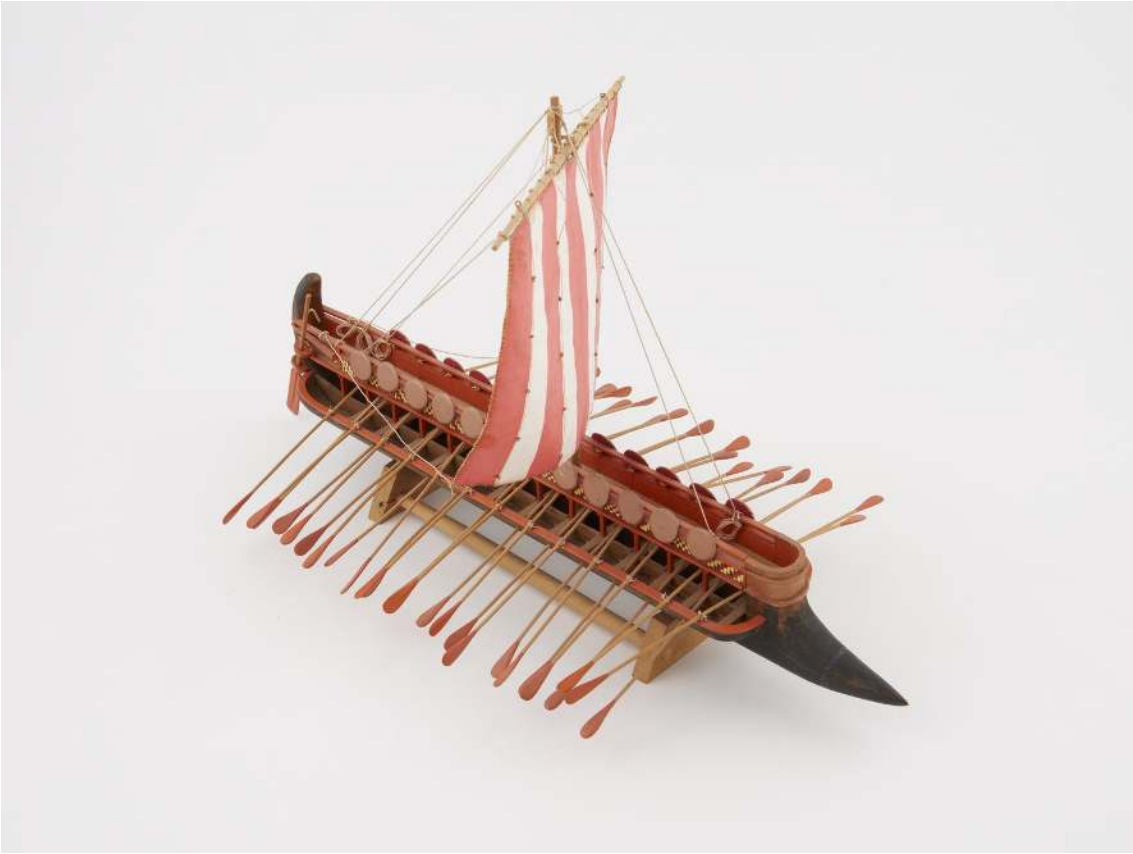


Figure \(\PageIndex{4}\): Model of Bireme ship (CC BY-NC-SA 4.0)

Tyrian purple was one of the ancient's costliest and most mysterious dyes and was later reserved for royalty, priests, and nobles. “Used first by the Phoenicians, the dye was taken from the secretions of several species of mollusks, *Murex brandaris*, and *Purpura haemostoma*.”[1] "Dyeing with *Murex* and *Purpura* is a complex process that involves extracting the liquid while the mollusk is still alive and exposing it to sunlight for a specified period of time, during which the dye changes color. It can take up to 12,000 mollusks to produce 1 gram of dye. With the fall of the Roman and after it, the Byzantine Empire, the European understanding of purple dyeing fell away, and by the 14th century, the secrets of Tyrian purple were lost. It has only been through recent experimentation that the technique was rediscovered in 2001."[2]

Tens of thousands of dried glands from **murex sea snails** (4.5.5) were boiled to produce a very small amount of dye, often only enough to color a small fabric swatch. The resulting **Tyrian purple** dye did not fade and actually intensified as it was worn and washed. Because the process required so many snails and so much labor, even a small amount of the dye was more expensive than most **precious metals**. As a result, **purple** became strongly associated with luxury, royalty, leadership, and spiritual power, a symbolism that still continues today.

Figure \(\PageIndex{5}\): Bolinus brandaris (CC BY-SA 3.0)

History of the Royal Tyrian Purple

The most expensive purple dye reserved for the royals and worth its weight in silver: The history of Tyrian Purple!

Because of their extensive trade and the need for record-keeping, the standard cuneiform writing system used in earlier civilizations was very complex and cumbersome for merchants. The **Phoenician alphabet** (4.5.6) was much simpler and based only on consonants, making it easier to use in everyday business. The Phoenicians also established a fixed writing direction, moving horizontally from right to left. The alphabet contained **twenty-two consonant letters** and did not include vowels. The characters were angular and straight rather than pictorial like earlier writing systems. Because the letters were simple and adaptable, many

other cultures adopted and modified the system. It became easier for people to learn and provided a more efficient way for merchants to record trade and financial information.

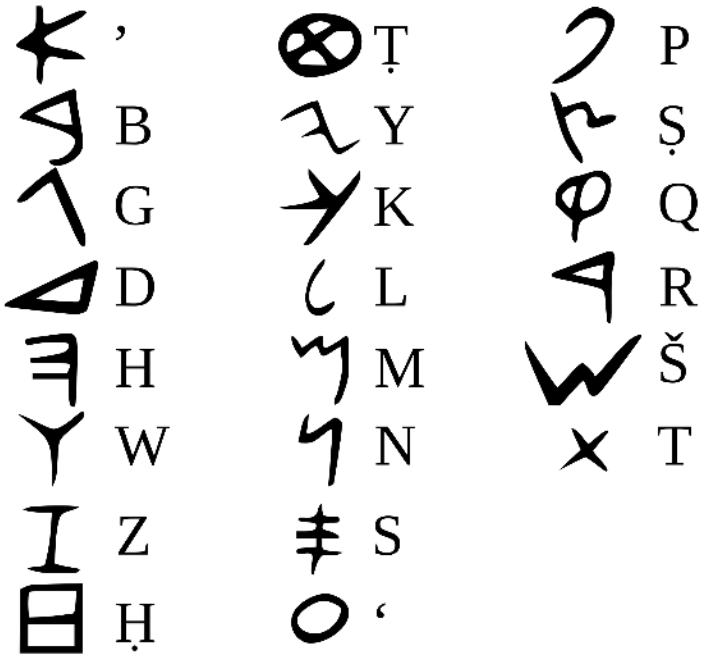


Figure \(\PageIndex{6}\): Phoenician alphabet (Public Domain)

Phoenicians

History of the Phoenicians

[1] Retrieved from https://www.lib.uchicago.edu/collex/...tyrian-purple/

[2] Retrieved from https://www.lib.uchicago.edu/collex/...tyrian-purple/

4.6: Etruscan (900 BCE – 600 BCE)

Definition: Term

Etruscans — An advanced Iron Age civilization that lived in central Italy before the rise of Rome, known for their city-states, trade networks, and influence on early Roman culture.

Aegean — The region surrounding the Aegean Sea between Greece and Asia Minor, home to several important ancient civilizations and trade routes.

Phoenicians — A seafaring civilization from the eastern Mediterranean known for trade, shipbuilding, and developing an early alphabet.

Mediterranean Sea — A large sea connecting Europe, Africa, and Asia that served as a major center of travel, trade, and cultural exchange in the ancient world.

Fortress walls — Thick defensive walls built around cities or settlements to protect inhabitants from invasion.

City-state — An independent city that functions as its own political and cultural center, often controlling the surrounding land.

Iron Age — A historical period when societies widely used iron tools and weapons, allowing for advances in technology, agriculture, and warfare.

Trade networks — Systems of exchange that connect different regions and cultures through the movement of goods, resources, and ideas.

Metal and mineral ores — Natural materials mined from the earth that can be refined and used to create tools, weapons, and decorative objects.

Tarquinia — An important **Etruscan city-state** in central Italy known for its large necropolis containing thousands of tombs.

The **Etruscans** lived west of the Tuscany region of Italy, and their culture was influenced through trade with the **Aegean** and **Phoenician** civilizations. They built settlements along the coast of the **Mediterranean Sea**, often positioned high on cliffs and surrounded by tall, thick **fortress walls (4.6.1)** for protection. The Etruscans developed an advanced society and were the only true urban **city-state culture** in pre-Roman Italy, even creating their own written language. Their civilization began around 900–800 BCE and lasted about 400 years before the expanding **Romans** conquered and destroyed many of their towns. Many Etruscans fled north or were gradually absorbed into Roman culture. The Etruscans reached their peak stability and development around **500 BCE**.

The Etruscans, along with the **Greeks**, were among the first cultures to establish true cities in Europe. Modern cities such as **Florence**, **Pisa**, and **Siena** developed in areas originally settled by the Etruscans. They were considered an advanced **Iron Age** culture and created strong **trade networks**, exporting valuable **metal and mineral ores**. The Etruscans also had a lasting influence on Roman society, as the **Romans adopted many Etruscan rituals, symbols, and architectural ideas**. "We even derive our very common word "person" from the Etruscan mythological figure Phersu—the frightful, masked figure you see in this Early Etruscan tomb painting who would engage his victims in a dreadful "game" of bloodletting in order to appease the soul of the deceased (the original gladiatorial games, according to the Romans!)."[1]

Figure \(\PageIndex{1}\): Etruscan village (CC BY-SA 4.0)

The Etruscans constructed elaborate tombs carved into rock or hillsides and decorated them with murals and everyday objects intended for use in the afterlife. Builders incorporated stacked stone into the tomb walls and roofs, creating durable structures. The size and shape of the tombs often reflected the status and wealth of the people buried inside. Large tombs could hold multiple generations of a family, while smaller tombs were created for one or two individuals.

At **Tarquinia**, archaeologists have discovered more than 6,000 tombs (4.6.2) within the necropolises, and over 200 of these contain painted frescoes and household objects left for the journey into the afterlife. The layout of the tombs suggests careful planning, with streets arranged in a grid and small open spaces resembling parks or squares. Many tombs were designed to look like houses, complete with carved crossbeams, gabled roofs, stone pillars, and benches (4.6.3). Niches were also carved into the stone walls to hold objects and offerings for the afterlife.

Figure \(\PageIndex{2}\): Etruscan tomb (CC-BY-SA IGO 3.0)

Figure \(\PageIndex{3}\): Inner tomb (Public Domain)

The Etruscans painted **frescoes** on the walls and ceilings of more than 200 tombs in **Tarquinia**, depicting scenes from everyday life. These paintings provide valuable insight into Etruscan culture, including the foods they ate, the clothing they wore, and the activities they enjoyed. Plants and trees often appear in the background, offering clues about the natural environment and vegetation growing in the region about 2,500 years ago. Many of the scenes are lively and celebratory, showing people enjoying food, drink, music, and social gatherings. Much of what historians know about Etruscan life and artistic traditions comes from objects and artworks discovered in these burial sites, including paintings, pottery, and sculpture.

In the **Tomb of the Triclinium (**4.6.4**)**, a well-known fresco shows people enjoying a banquet. Some of the guests recline on couches while attendants stand nearby ready to serve the diners. The figures wear colorful garments, and their elaborate robes suggest wealth and social status. On other sections of the walls, **dancers and musicians (**4.6.5**)** perform, adding movement and celebration to the scene. In keeping with Etruscan painting conventions, women are shown with lighter skin tones while men are painted with a darker orange-brown color. These images suggest that funerals were not only solemn events but also social gatherings where people shared ritual meals and celebrated the life of the deceased.

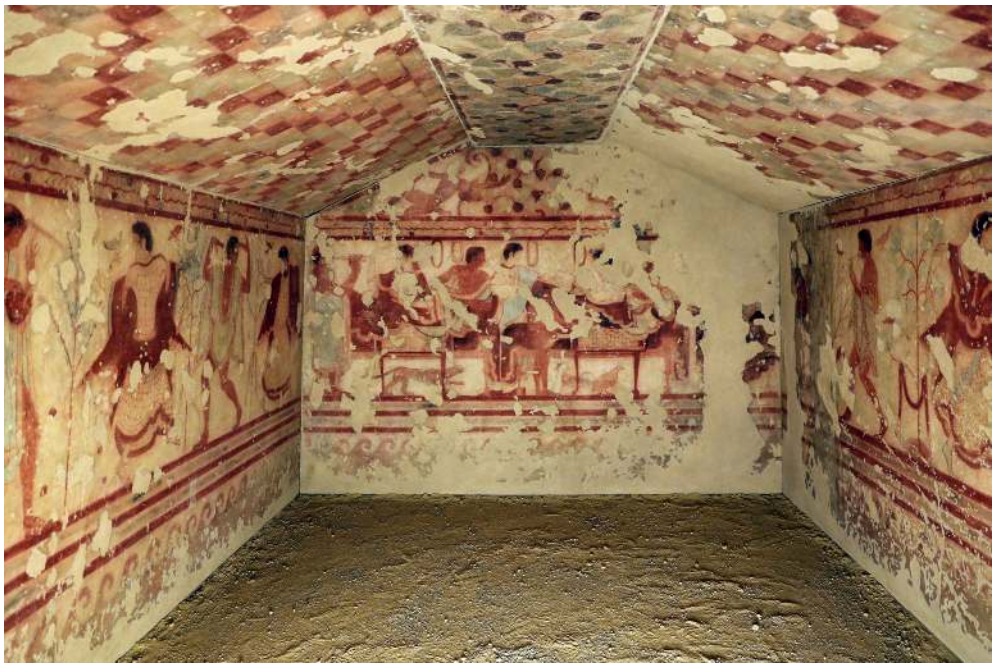


Figure \(\PageIndex{4}\): *Tomb of the Triclinium* (470 BCE, Etruscan chamber tomb, Tarquinia, Italy) (CC BY-SA 3.0)

Figure \(\PageIndex{5}\): Two dancers on a wall (470 BCE, Etruscan chamber tomb, Tarquinia, Italy) (CC BY-SA 3.0)

Etruscan Necropolises of Cerveteri and Tarquinia

These two large Etruscan cemeteries reflect different types of burial practices from the 9th to the 1st century BC, and bear witness to the achievements of Etruscan culture. Which over nine centuries developed the earliest urban civilization in the northern Mediterranean. Some of the tombs are monumental, cut in rock and topped by impressive tumuli (burial mounds).

The **Sarcophagus of the Spouses (**4.6.6**)** was discovered in the modern city of **Cerveteri, Italy**. Made of **terracotta**, the sarcophagus was designed to hold cremated human remains. The sculpture shows a man and woman reclining together on cushions, similar to the way people would lie on couches during banquets. The figures are not realistic portraits of the deceased but instead display stylized faces and bodies typical of the artistic style of the time.

Both figures have braided hair, and the male figure has a sculpted beard. Their clothing appears simple, with little emphasis on displaying wealth or status. The elongated proportions of their bodies reflect the artistic style associated with the **Archaic period** in the region. Scenes of people reclining at banquets were common in Etruscan art and symbolized social gatherings centered around food, wine, and conversation. Similar banquet scenes appear in many tomb frescoes, suggesting that funerals were often commemorated with ritual feasts meant to honor the deceased and symbolically accompany them into the enjoyment and celebration of the **afterlife**.

Figure \(\PageIndex{6}\): *Sarcophagus of the Spouses*, c. 520 B.C.E., Etruscan, painted terracotta, 140 x 202 cm (CC BY-NC-SA 2.0)

Sarcophagus of the Spouses

Sarcophagus of the Spouses (or Sarcophagus with Reclining Couple), from the Banditaccia necropolis, Cerveteri, Italy, c. 520 B.C.E., painted terracotta, 3 feet 9 1/2 inches x 6 feet 7 inches (Museo Nazionale di Villa Giulia, Rome).

The primary type of pottery produced by the Etruscans was a distinctive black, burnished ceramic called **bucchero**. This pottery appeared in several forms that varied in thickness and quality, ranging from thin-walled pieces to heavier vessels. Bucchero pottery was produced mainly between the seventh and fifth centuries BCE and was often used by members of the elite. This example of heavy bucchero is a large **column-krater (**4.6.7**)** with decorative straps connecting the rim to the body of the vessel. Unlike the typical krater, which usually has two straps or handles, this vessel has six. The straps are decorated with images of lions and the upper bodies of warriors. A column-krater was commonly used during banquets to mix wine with water. Wine was poured into the wide mouth of the vessel, water was added, stirred, and then ladled into individual drinking cups for consumption.

Figure \(\PageIndex{7}\): Terracotta column-krater (560-500 BCE, terracotta, 41 cm x 34.5 cm) (Public Domain)

[1] Retrieved from https://www.khanacademy.org/humaniti...n-introduction

4.7: Shang and Zhou Dynasties (1766 BCE – 256 BCE)

Definition: Term

Xia dynasty — The earliest Chinese dynasty described in historical records, believed to have ruled along the Yellow River from about 2100 to 1600 BCE.

Shang dynasty — A powerful early Chinese dynasty that ruled from about 1600 to 1046 BCE, known for bronze casting, early writing, and organized cities.

Zhou dynasty — The longest-lasting Chinese dynasty, ruling from about 1046 to 256 BCE and introducing important political and philosophical ideas.

Yellow (Huang) River — A major river in northern China where many early Chinese civilizations developed.

Yangtze River — The longest river in China, providing water, transportation, and fertile land for agriculture.

Himalayan Mountains — A massive mountain range in Asia whose snowpack feeds many of China's major rivers.

Silt — Fine soil and mineral particles deposited by rivers during flooding, often creating fertile farmland.

Tibetan Plateau — A high plateau in Central Asia where many major rivers of China originate.

Taotie masks — Stylized animal-face designs commonly found on ancient Chinese bronze vessels.

Western Zhou dynasty — The early Zhou period in China (1046–771 BCE) that followed the fall of the Shang dynasty and introduced the Mandate of Heaven.

Bianzhong of Marquis Yi of Zeng — A set of sixty-five bronze bells from a 433 BCE tomb in China used as a musical instrument.

The **Xia dynasty** is described in early Chinese historical records as one of the first ancient civilizations in China. Archaeological evidence suggests the Xia dynasty existed from about **2100 to 1600 BCE** and developed along the **Yellow (Huang) River**. The Xia dynasty was followed by the **Shang dynasty (1600–1046 BCE)** and later the **Zhou dynasty (1046–256 BCE)**. Together, these early dynasties controlled large regions and are often considered the foundation of Chinese civilization and culture.

Like many ancient civilizations, early Chinese societies developed along major rivers, particularly the **Yellow River** and the **Yangtze River**. These river valleys received water from heavy snowpack in the **Himalayan Mountains**. When the snow melted and seasonal rains arrived, the rivers often flooded the surrounding valleys, depositing fertile **silt** but also causing destructive floods. One major difference between China and ancient Egypt was the landscape and river conditions. The **Nile River** in Egypt flowed across a gentler slope, allowing Egyptians to manage flooding with levees and irrigation systems. In contrast, rivers flowing from the Himalayas carried enormous volumes of water, leading to powerful and difficult-to-control flooding (4.7.1). Both the Yangtze and Yellow Rivers flow from the **Tibetan Plateau** across thousands of miles before reaching the **China Sea**.

Figure \(\PageIndex{1}\): Yellow River (CC BY-NC-ND 2.0)

The **Yellow River** is the second-longest river in Asia, and early Chinese dynasties learned to use its seasonal flooding to support agriculture. During the **Shang** and **Zhou dynasties**, engineers developed methods to control the powerful waters for irrigation. In 591 BCE, they constructed a **10-meter-high earthen dam**, creating the **Shaopi Reservoir**, which is still in use today and is considered one of the longest continuously used dams in the world. The dam allowed the Zhou to design a large irrigation system that supported the cultivation of **rice paddies**. By diverting sections of the river, they were able to distribute water across farmland and significantly improve agricultural production. This large-scale irrigation project demonstrates the early development of hydraulic engineering in ancient China and helped increase crop yields to support growing populations.

Shang Dynasty

The Shang dynasty is the earliest Chinese culture clearly supported by archaeological evidence. It ruled in the **Yellow River Valley** from about 1766 BCE to 1046 BCE and is considered one of the oldest historically documented Chinese dynasties. The Shang developed an early writing system that appears on thousands of bronze vessels and artifacts. These inscriptions represent early proto-Chinese characters. Writing found on bone fragments and bronze objects has allowed historians to study many aspects of Shang life, including agriculture, medical practices, the legal system, and artistic production. During this time, the Shang also built large cities and established a government run by official administrators.

Archaeologists have discovered many artifacts known as **oracle bones**, which were used for divination. Important questions or sacred statements were inscribed on bones, often on the scapula (shoulder bone) of an ox (4.7.2) or turtle shells. The bone was heated until it cracked, and the pattern of the cracks was interpreted as a message about the future. Questions commonly concerned warfare, harvests, or the birth of children. Early in the dynasty, many people practiced this type of divination, but later the right to perform these rituals was limited to the king. Scholars have studied these inscriptions and identified them as oracle script, revealing that the Shang had advanced knowledge in areas such as mathematics, astronomy, and other scientific fields. Although the writing differs from modern Chinese characters, researchers can still interpret many of the symbols because of their similarities to the Chinese writing system used today.

Figure \(\PageIndex{2}\): Inscribed scapula (CC BY-SA 3.0)

The Shang were highly skilled in **bronze technology**, which played an important role in their military and daily life. Strong bronze weapons such as swords and spears gave the Shang army a clear advantage in warfare. The Shang also developed advanced **horse-drawn chariots**, allowing soldiers to move quickly during battle. Bronze fittings made the chariots more durable and helped the Shang maintain military strength. Bronze was also used to create agricultural tools, improving farming efficiency and supporting increased food production. Bronze vessels were equally important in religious practices, especially in the tradition of **ancestor worship**. These vessels were used to present offerings of wine and food to honored ancestors and are commonly found in tombs. Many vessels were inscribed with the name of a clan or ancestor. They were often decorated with images of animals and symbolic designs such as birds, dragons, **taotie masks**, and geometric patterns.

“One of the most distinctive and characteristic images decorating Shang-dynasty bronze vessels is the so-called *taotie*. The primary attribute of this frontal animal-like mask is a prominent pair of eyes, often protruding in high relief. Between the eyes is a nose, often with nostrils at the base. *Taotie* can also include jaws, fangs, horns, ears, and eyebrows. Many versions include a split animal-like body with legs and tail, each flank shown in profile on either side of the mask.”[1]

“The earliest Chinese bronzes were made by the method known as piece-mold casting—as opposed to the lost-wax method, which was used in all other Bronze Age cultures. In piece-mold casting, a model is made of the object to be cast, and a clay mold taken of the model. The mold is then cut in sections to release the model, and the sections are reassembled after firing to form the mold for casting. If the object to be cast is a vessel, a core has to be placed inside the mold to provide the vessel’s cavity.”[2] The *ding* (cooking vessel) (4.7.3) was made from several pieces: the legs, handles, and vessel. Different geometric designs were used around the outside of the vessel.

Figure \(\PageIndex{3}\): *Ding* (cooking vessel) 1300-1046 BCE bronze (CC0 1.0)

Tigers, dragons, and monsters on a Shang Dynasty Ewer

Lidded ritual ewer (guang) with taotie, dragons, birds, tigers, elephants, fish, snakes, and humans, Shang Dynasty, Middle Yangzi Valley, China, c. 1100–1050 B.C.E., bronze, 31.4 x 31.5 x 14.4 cm (Freer Gallery of Art, Smithsonian Institution, Washington DC; Gift of Eugene and Agnes E. Meyer.

Like many ancient cultures, the Shang built elaborate tombs for members of the elite. One of the most famous is the tomb of **Lady Fu Hao**. Fu Hao was a powerful military commander, landowner, and the mother of the heir to the throne. She was married to the Shang king and led thousands of soldiers in successful military campaigns. Inscriptions found on oracle bones associated with her

burial describe her role as both a military leader and royal consort. Unlike the tombs of many Shang kings that were looted in antiquity, Fu Hao's tomb (4.7.4) remained undisturbed and was not discovered until 1976.

Although the wooden chamber walls and lacquered coffin deteriorated after excavation, many of the grave goods survived. Objects made of bronze, jade, bone, and pottery were preserved in the tomb. Archaeologists uncovered more than 1,600 ceremonial objects, including about 200 bronze ritual vessels that demonstrated her high status. Some vessels (4.7.5) are decorated with **taotie masks**, stylized animal-like designs common in Shang art. Elaborate **zun vessels** used to hold wine were also placed in the tomb and likely filled before the burial chamber was sealed. Alongside the remains of Lady Fu Hao, archaeologists found the remains of six dogs and sixteen human skeletons. Historians believe these individuals were servants or slaves who were sacrificed and buried in niches around the tomb.

Figure \(\PageIndex{4}\): Tomb of Lady Fu Hao (CC BY-SA 3.0)

Figure \(\PageIndex{5}\): *Zun* (wine containers) (1200 BCE, bronze) (CC0 1.0)

Ancient China

At the end of the Mythic Period of China's history, the Xia dynasty gave way to the Shang Dynasty… if the Xia really existed at all! Sal gives an overview of the Xia, Shang, and Zhou Dynasties—societies that lived between the Yellow and Yangtze Rivers—and discusses their cultural practices, their bronzeworking, and the origins of a Chinese identity.

Western Zhou Dynasty

The early **Western Zhou dynasty** coexisted with the Shang dynasty toward the end of Shang rule and shared a similar language and cultural traditions. In 1046 BCE, the Zhou defeated and overthrew the Shang. Zhou leaders introduced the idea of the **Mandate of Heaven**, the belief that a ruler could govern only if he had the approval of heaven and ruled with virtue. In this context, heaven was a political concept rather than a religious or theological belief. The Zhou government operated as a decentralized **feudal system**, where regional leaders governed territories and authority depended on maintaining the Mandate of Heaven.

The Zhou dynasty continued to expand settlements across the plains, and the arts flourished with more elaborate designs and craftsmanship. Agricultural improvements supported population growth, and the discovery of **iron** in nearby mountains gradually shifted technology from the Bronze Age to the **Iron Age**. The Zhou developed methods for extracting and working iron nearly a thousand years before similar developments occurred in Europe.

The use of **chariots** (4.7.6) in warfare began during the later Shang dynasty and expanded during the Zhou period. These chariots typically had two wheels and were pulled by two or four horses. The body of the chariot was attached to a three-meter-long axle with bronze hubcaps on each end. Zhou chariot wheels usually had eighteen to twenty-six spokes. The carriage was about one meter long with wooden walls, and an opening in the rear allowed soldiers to jump on and off easily. The chariots were lightweight and built for speed, creating a highly mobile military force equipped with bronze weapons.

Figure \(\PageIndex{6}\): Buried chariot (late Shang) (CC0 1.0)

During the Zhou period, bronze was no longer used only for governmental or religious rituals. Local rulers also commissioned decorative and artistic objects. Musical instruments became especially popular, including large sets of bronze bells. New casting techniques, such as the lost-wax method, allowed artists to create larger and more elaborate bronze works. One of the most remarkable discoveries is the **Bianzhong of Marquis Yi of Zeng** (4.7.7), a set of bronze percussion bells found in his tomb in Hubei and dated to 433 BCE. Archaeologists did not discover the bells until the 1970s. Zeng was a smaller state, and the Marquis was not considered one of the most powerful leaders, so his tomb had attracted little attention. The bianzhong bells were suspended on wooden racks arranged at three levels. The bells are organized by size and pitch, with the largest bells placed on the lowest rack.

The set contains sixty-five bells with a total weight of about 2.5 tonnes. The largest bell weighs about 203.6 kilograms, while the smallest weighs about 2.4 kilograms. Each bell can produce two different tones depending on where it is struck. Together, the bells create a tonal range comparable to that of a piano, allowing musicians to perform complex musical pieces. The bells were struck with wooden mallets or poles and likely required several musicians to perform. Displays of bronze bells or vessels were also symbols of elite wealth and political status during the Zhou dynasty.

Figure \(\PageIndex{7}\): *Biazhong of Marquis Yi of Zeng* (433 BCE, bronze, lacquer) (CC BY-SA 3.0)

Bianzhong of Marquis Yi of Zeng

Bianzhong, or chimes, is an ancient percussion instrument of China with a history of over 3,000 years.

Bronze vessels in the Zhou were significantly more ornate than during the Shang dynasty. Vessels used to serve wine or food were covered with intricate designs. “During the early Western Zhou dynasty, coherent animal mask images morphed into increasingly abstract patterns defined by curving, ribbon-like lines. A composite character is cast both on the interior of the vessel (4.7.8) and the inside of the lid: “Fu” (name, in the center) and “mian” (designation of rank, on either side).”[3] “This vessel (4.7.9) is notable

in that all of the ornamental decoration—except for the animal head handles—has been stripped away in favor of a bold design of horizontal fluting. The same twelve-character inscription is cast on the interiors of the vessel and its lid: “The Earl of San made this precious gui for Ji of Zhe. May it be perpetually used for tens and thousands of years.”[4]

Figure \(\PageIndex{8}\): *fangyi* (wine container) (Mid-10th century, bronze, 27.9 x 15.2 x 17.8 cm) (CC0 1.0)

Figure \(\PageIndex{9}\): *gui* (grain serving vessel) (early 9th century BCE, bronze, 22.9 x 33 cm) (CC0 1.0)

“The majority of the ceramics produced during the Shang and Zhou dynasties were unpainted earthenware and stoneware vessels with simple banded, combed, stamped, or incised decoration. Some of the higher-fired vessels have glassy ash-glazed surfaces. The range of colors from reddish to gray to brown or black result from oxygen levels in the kiln, as well as variations in the quantity of iron in the clay.”[5] The tripod cooking vessel li (4.7.10) had an open mouth, bulbous body, and small rounded feet. The gray earthenware was stippled with minimal decoration.

Figure \(\PageIndex{10}\): li (ca 15th-14th century BCE, gray earthenware, 13.8 cm x 12.7 cm) (CC0 1.0)

[1] Retrieved from https://www.metmuseum.org/essays/sha...e-age-of-china

[2] Retrieved from https://www.metmuseum.org/essays/sha...e-age-of-china

[3] Retrieved from https://www.metmuseum.org/art/collection/search/49398

[4] Retrieved from https://www.metmuseum.org/art/collection/search/44514

[5] Retrieved from https://harvardartmuseums.org/tour/497/slide/11107

4.8: Late Jomon (1500 BCE – 300 BCE)

Definition: Term

Jomon Period — A prehistoric culture in Japan (c. 14,000–300 BCE) known for early pottery, pit houses, hunting, fishing, and gathering.

Mortise-and-Tenon Joint — A woodworking technique in which a projecting piece of wood (tenon) fits into a carved slot (mortise) to securely join two pieces without nails.

Sannai-Maruyama Site — A large Jomon archaeological settlement in northern Japan that reveals evidence of permanent homes, storage buildings, and community life.

Pit House — A dwelling partially dug into the ground with a roof supported by wooden posts and often containing a central fire pit.

Fire Pit — A built area inside a house used for cooking, heating, and light.

Midden — A pile of discarded materials such as shells, bones, pottery, and other debris that helps archaeologists understand daily life.

Clay Figurines — Small sculpted figures made from clay, often believed to have spiritual, ritual, or symbolic purposes.

Elevated Storage Building — A structure raised above the ground on posts to store food and protect it from animals and moisture.

Thatching — A roofing method using dried plant materials such as grass or reeds layered to create a waterproof roof.

Chestnut Trees — Trees that were an important resource for the Jomon people, providing food and durable wood for construction.

Dogū — Small clay figurines created during the Jomon period in Japan. These stylized human figures were shaped by hand and fired in clay, and they are believed to have been used for ritual, spiritual, or symbolic purposes.

Japan's **Middle and Late Jomon periods** brought about significant expansion of settlements and increasingly complex community life. Trees were plentiful in the surrounding areas, and the Jomon people became skilled woodworkers, building permanent settlements using wood from the abundant and durable chestnut trees. The wooden-frame houses they constructed used **mortise-and-tenon joint construction**, a method similar to techniques still used in woodworking today. The Jomon were also skilled carvers and used wood to build canoes, tools, and storage structures. Excavations at the **Sannai-Maruyama archaeological site** in northern Japan revealed a large prehistoric settlement. Archaeologists discovered fishing hooks, spears, net sinkers, and dugout canoes, indicating a society that relied heavily on fishing and hunting. There was even a paw print preserved in clay, suggesting the Jomon may have kept dogs as companions.

The chestnut tree was an important resource for the Jomon people. Archaeologists discovered evidence of large chestnut groves near the **Sannai-Maruyama settlement**. The wood from these trees was used for construction because it was strong and resistant to decay. One surviving structure was supported by six large chestnut logs that rose several stories high. Jomon houses are often referred to as **pit houses** because they were partially dug into the ground. Early houses were generally circular and built around a central support pole. Over time, houses evolved into square or rectangular forms with multiple support posts and thatched grass roofs. The floors were made of packed earth and stones, and indoor **fire pits**provided warmth and a place for cooking.

As architectural techniques developed, Jomon houses became more sophisticated. Many dwellings were square or rectangular with roof systems supported by wooden posts. The earthen floors were tamped into hard surfaces and sometimes covered with woven mats. Indoor fire pits were common features. Archaeologists have identified approximately 700 dwellings at **Sannai-Maruyama**. Each dwelling had different floor shapes, post arrangements, and fireplace locations, suggesting a long and continuously occupied settlement. Two **midden piles** (debris piles) were also discovered at the site, revealing everyday objects from Jomon life. Artifacts including clay figurines, tools, pottery fragments, and objects made from wood and bone were unearthed.

The **Sannai-Maruyama site** appears to have functioned as a major settlement center for an extended period. One large reconstructed structure (**4.8.1**) was built from massive chestnut logs and may have served as a communal building or ceremonial space. The structure measured approximately 32 meters long and 9.8 meters wide and demonstrates impressive engineering skill.

Archaeologists also found **elevated storage buildings** (**4.8.2**) designed to protect food supplies from animals and moisture. The roofs of these structures were made from kaya grass, a common plant used for thatching.

Figure \(\PageIndex{1}\): Sannai-Murayama building (CC BY 2.5)

Figure \(\PageIndex{2}\): Elevated storehouse (CC BY-SA 3.0)

Archaeologists found holes for upright pillars made from massive tree trunks measuring more than 6 meters across and 2 meters deep. The remains of the **chestnut posts** had a diameter of about one meter, and remnants were still visible at the site. The building was later reconstructed and had floors approximately 4.2 meters wide. The roof and walls were not reconstructed because archaeologists are uncertain how the building was originally enclosed or what materials may have covered the structure. At the site,

archaeologists also discovered approximately **500 burial pits** where adults were buried. In addition, they found multiple **jar burials**, a practice in which the bodies of small children were placed inside large ceramic vessels for burial.

"Skill in pottery has been an important defining aspect of Japanese culture from the earliest time. There are pottery fragments from Aomori in northern Japan which date from about 14,500 BCE and are believed to be among the oldest yet discovered anywhere in the world."[1] Because the Jomon were hunters, fishers, and gatherers, pottery was typically used to boil food for consumption.

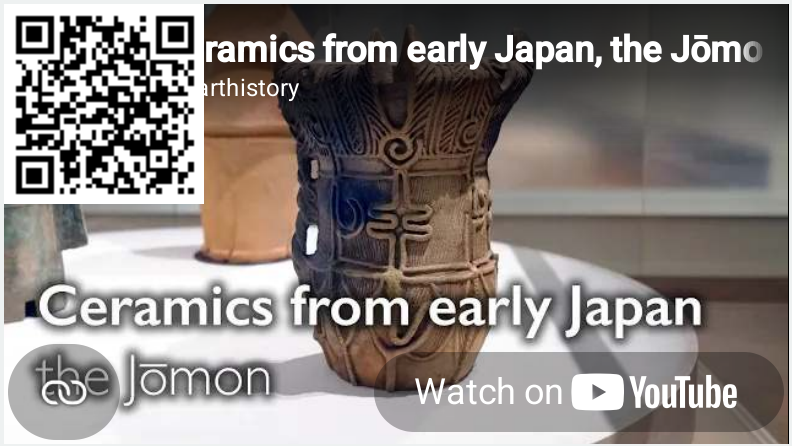
Ento-style pottery recovered from Sannai-Maruyama. The word "Ento" means "cylindrical". This vessel (4.8.3) was tall with a wide opening and ornamental details. Ento vessels were commonly decorated with cord marks. The vessel is decorated with small pieces of clay rolled into cord and affixed to the exterior. The second vessel (4.8.4) is decorated with cord indentations around the body and a highly ornamental sculpture around the top. The meaning of the ornate top on the pot is unknown. Both pots were dried and low-fired in an open fire pit.

Figure \(\PageIndex{3}\): Pottery (CC BY-SA 3.0)

Figure \(\PageIndex{4}\): Flame-rimmed deep bowl (3500-2500 BCE, clay, 33.02 cm high) (Public Domain)

Ceramics from Early Japan

Deep Bowl, c. 3000–2000 B.C.E, Middle Jōmon Period, low-fired clay, excavated from Miyanomae, Ina-Ishi, Nagano, Japan; and a Dogū, c. 1000–400 B.C.E., Late Jōmon Period, low-fired clay, excavated from Rokugoishinadate, Misato-cho, Akita, Japan.



Dogū were small figures made from clay and fired in a kiln or open fire. The earliest examples from about 10,000 BCE appear as simple abstractions of the human form. By around 4000 BCE, dogū figures began to resemble stick figures with visible arms, legs, and heads. By 3000 BCE, the figures developed more detailed and stylized faces and bodies. The **dogū** (4.8.5) shown here does not include arms, and the head is flattened rather than shaped to resemble a natural human head. Most of the facial features are incised

into the clay, while the nose is formed from a small piece of added clay that projects outward to suggest a more realistic facial feature.

Figure \(\PageIndex{5}\): Dogu figurine (1000-300 BCE, clay, 15.6 cm high, 18.4 cm wide) (Public Domain)

"Towards the end of the Jomon period, the most distinctive form of dogu were hollow 'goggle-eyed' figurines, named after their large bulging eyes. There are several interpretations for these eyes: could they be modeled on newborn infants, snow goggles (northern Honshu was then, as it is now, prone to very heavy snowfalls in winter), or something altogether more 'other-worldly'? The bodies of these dogu are burnished (where the clay is smoothed prior to firing) and also have fine cord-marked decorations."[2] Although the dogu figurine (4.8.6) is missing a leg, the figure is an example of the later decorative dogu. The bisected coffee-bean-shaped eyes are an example of a seemingly essential part of the design with no documented information about the meaning

Figure \(\PageIndex{6}\): Dogu figurine (1000-400 BCE, clay, 34.2 cm high) (CC BY-SA 3.0)

The **dogū** (4.8.7) represents a style commonly found during the **Late Jomon period**. The figure has traditional coffee-bean-shaped eyes and small holes indicating the nose and mouth. Deeply incised lines cover the surface, created by pressing cords into the clay, a decorative technique typical of Jomon pottery and sculpture. The figure appears to wear a crown or headdress and has pointed breasts, suggesting it may represent a female figure. Like many dogū figures discovered at archaeological sites, this example is broken at the waist. Thousands of these small clay figures have been found by researchers, and many are intentionally broken. Historians and archaeologists are still uncertain about the exact function of these figures or whether they were meant to represent men, women, or symbolic spiritual forms.

Figure \(\PageIndex{7}\): Dogu figurine (1000-300 BCE, clay, 16.5 cm high) (Public Domain)

Japan's Jomon Period in 3 Minutes

Breaking down the main points of Japan's first named historical era: the Jōmon Period!

[1] Retrieved from https://www.khanacademy.org/humaniti.../jomon-pottery

[2] Retrieved from https://dig.sainsbury-institute.org/...ogu-figurines/

4.9: Chavin (900 BCE – 200 BCE)

Definition: Term

Chavín Culture: An early civilization in the Andes Mountains of Peru (c. 900–200 BCE) known for its religious center at Chavín de Huántar and distinctive stone carvings combining human and animal imagery.

Andes Mountains: A long mountain range along the western edge of South America that influenced the development of many ancient civilizations, including the Chavín.

Mosna Valley: The highland valley in northern Peru where the Chavín culture developed and where the important ceremonial site of Chavín de Huántar is located.

Pre-Columbian: A term referring to the time period in the Americas before the arrival of Christopher Columbus in 1492.

Irrigation Canals: Man-made channels used to bring water to agricultural fields and manage water flow for farming.

Chavín de Huántar: A major religious and political center of the Chavín culture in Peru, known for its temple complex, plazas, and carved stone sculptures.

Terraces; Stepped levels built into hillsides to create flat areas for farming or construction.

Zoomorphic Imagery: Art that combines or represents animal forms, often used symbolically or spiritually in ancient cultures.

Raimondi Stele: A carved stone monument from the Chavín culture in Peru that depicts the Staff God surrounded by complex imagery of animals and symbolic patterns. The design includes visual transformations and hidden images, reflecting Chavín religious beliefs and artistic style.

Staff God: A supernatural figure commonly shown in Andean art holding staffs in both hands. The figure often combines human and animal features and represents spiritual power and authority.

Stele: An upright stone slab carved with images or inscriptions, often used for religious, ceremonial, or commemorative purposes.

The **Chavín culture** developed high in the northern Andes Mountains of Peru in the Mosna Valley. Settled by the Chavín people, the highland plateau lies about 3,150 meters above sea level, where the **Mosna and Huachecsa Rivers** merge, forming a productive agricultural location. Historians believe the site was one of the earliest and most influential pre-Columbian cultural centers in the region. The natural resources of the valley allowed the Chavín to flourish. Farmers grew maize, potatoes, and quinoa as important staple crops. They also developed irrigation canals along the steep hillsides to water their crops and control drainage during the heavy rainy season. The Chavín built **Chavín de Huántar** (4.9.1) as a major religious and political center. The complex was constructed on terraces and around central plazas. Many of the stone structures were decorated with incised carvings featuring zoomorphic imagery, combining human and animal characteristics that reflected the spiritual beliefs of the Chavín culture.

Figure \(\PageIndex{1}\): Chavin de Huantar (CC BY 2.0)

Constructed from stone, the temple featured several terraces, central plazas, and landscaped areas. The temple was located between the heat of the jungle below and the snow-covered peaks of the surrounding mountains. The structure was shaped like a large pyramid with a flat top and surrounded by lower terraces, serving as a center for gathering and worship. Several figures and animals in low relief were carved into the stone surfaces. The interior of the temple contained many tunnels and maze-like passages connecting galleries that were kept in near-complete darkness because there were no windows. Small channels within the structure allowed water and air to move through the tunnels, creating resonating sounds that may have enhanced ritual experiences. These sounds could echo through the temple and into nearby gathering spaces, possibly giving the impression that the voices of the gods were speaking to the people assembled in the amphitheater. The temple was an important ceremonial site, and visitors traveled from many regions to bring offerings and participate in religious activities.

The temple was dedicated to a powerful deity represented by the **Lanzón Stela** (4.9.2), and its line drawing (4.9.3) illustrates the detailed carvings on the stone. The monolith is over **4.5 meters high** and is carved with a complex god-like image. The stela stands deep within the temple's tunnel system, positioned between interior galleries. The imposing figure has large eyes and a wide mouth with prominent fangs, and the hands end in talon-like fingernails. Parts of the figure's hair are depicted as snakes, blending human and animal characteristics. The image reflects the Chavín tradition of combining multiple forms to represent powerful supernatural beings.

Figure \(\PageIndex{2}\): Lanzón Stela (CC BY-SA 3.0)

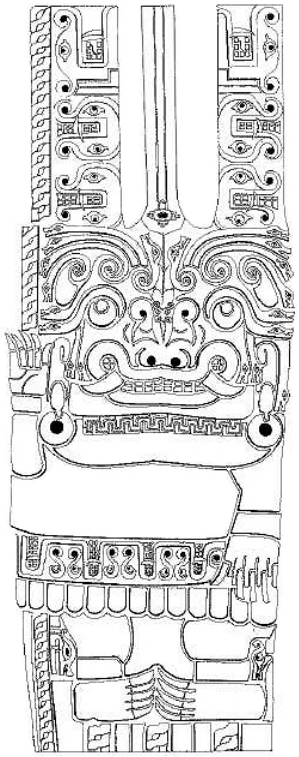
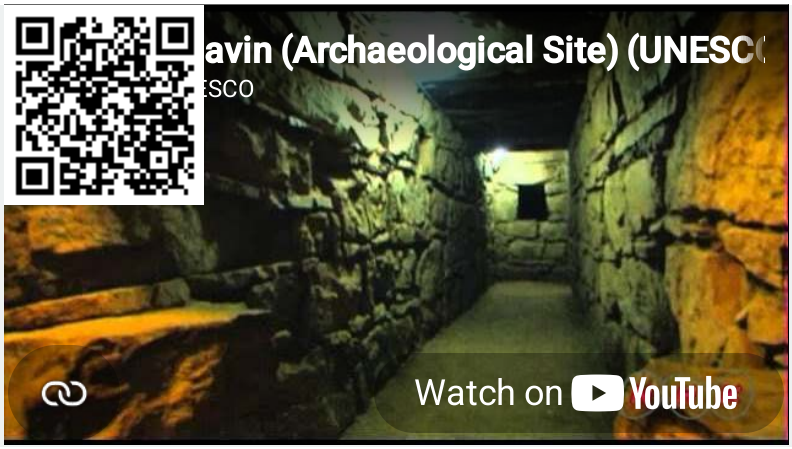


Figure \(\PageIndex{3}\): Lanzón Stela line drawing (CC BY-SA 3.0)

Chavin

The archaeological site of Chavin gave its name to the culture that developed between 1500 and 300 B.C. in this high valley of the Peruvian Andes. This former place of worship is one of the earliest and best-known pre-Columbian sites. Its appearance is striking, with the complex of terraces and squares, surrounded by structures of dressed stone, and the mainly zoomorphic ornamentation.



Stone sculptures and architectural decorations were important methods the Chavín used to express spiritual beliefs. The **Raimondi Stele** (4.9.4) was created by carving detailed lines into the stone surface. The design of the stele is complex and difficult to interpret, as shown in the accompanying line drawing. The stele represents a powerful deity known as the **Staff God**, who holds staffs that end in snake heads. Within the intricate design are hidden images of animals important to the region, including jaguars, eagles, and snakes. The god's face is duplicated and arranged in unusual ways, creating a visual transformation that can appear different depending on how the viewer looks at the image. This layered design may have helped communicate spiritual meaning to followers while remaining difficult for outsiders to understand.

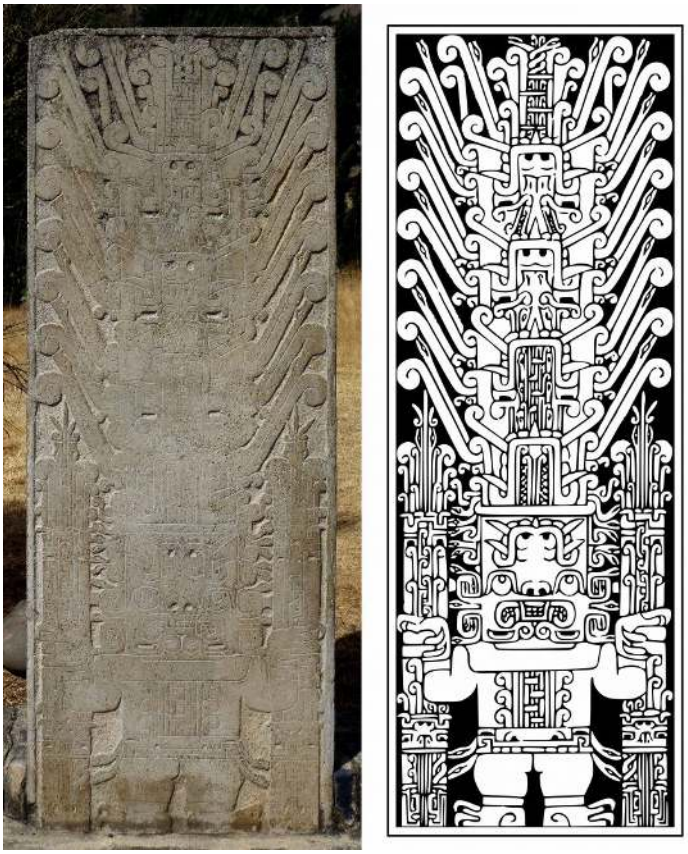


Figure \(\PageIndex{4}\): Raimondi Stele and Line drawing of the stele (CC BY-SA 3.0)

Decoding art: The Staff God relief from Chavin

Part One

Decoding Art: The Staff God relief from Chavin

Part Two

The **gold crown** (4.9.5) also depicts the image of the **Staff God**, demonstrating the widespread belief in this powerful deity across the Chavín region. Fine lines incised into the surface of the crown outline the traditional features of the god, including the distinctive fanged mouth and stylized facial forms commonly associated with the figure. These carved lines create a detailed image despite the thin sheet of gold used to form the crown. The use of **gold** was significant because it was considered a valuable and symbolic material in many ancient Andean cultures. Gold reflected light and was often associated with the power of the sun and divine authority. The crown may have been worn by an elite individual or religious leader during ceremonies, reinforcing the connection between political power and spiritual belief. The imagery of the Staff God on the crown further emphasizes the importance of religious symbolism in Chavín art and the role of sacred imagery in communicating cultural beliefs.

Figure \(\PageIndex{5}\): Gold crown (800-500 BCE, gold, 24 x 15.5 cm) (CC BY-NC 4.0)

A **stirrup-spout bottle** (4.9.6) was a common ceramic form in many **pre-Columbian cultures**, including the Chavín. The handle, shaped like a stirrup, connected to the spout and allowed the vessel to pour liquid efficiently. The main body of the vessel was often formed in molds, while the stirrup spout was usually made separately by hand and attached to the body using a clay slip. In this example, the bottle is decorated with the face of an **owl**, an animal frequently depicted in Chavín art. The owl may have been associated with night, wisdom, or spiritual power. Animal imagery was common in Chavín ceramics and often reflected the culture's connection to nature and religious symbolism.

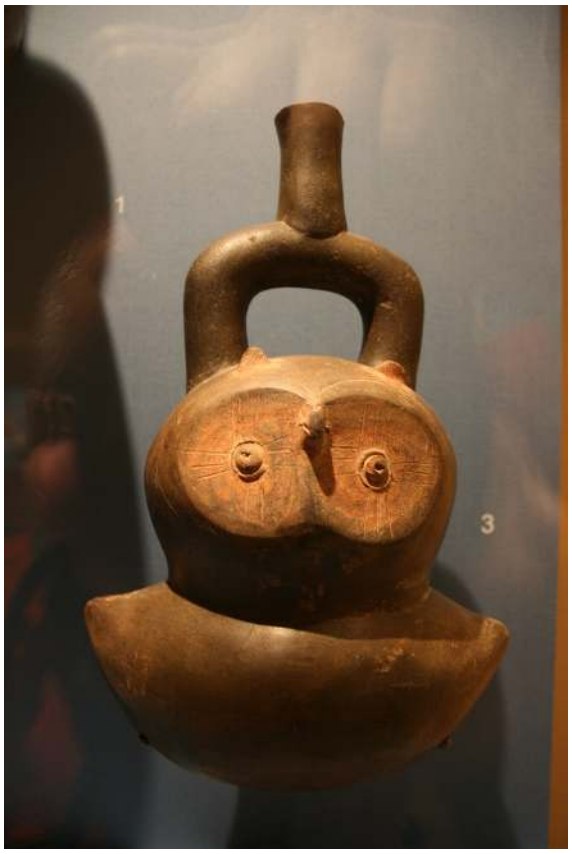


Figure \(\PageIndex{6}\): Stirrup spout bottle (1200-200 BCE, clay) (Public Domain)

The serpent motif (4.9.7) is visible in most of the Chavin's artwork. "This kind of nose ornament, which pinches or passes through the septum, is a common form in the Andes. The two serpent heads flank right and left, with the same upward-looking eyes as the Lanzón. The swirling forms beneath them also evoke the sculpture's eye shape. An ornament like this would have been worn by an elite person to show not only their wealth and power but their allegiance to the Chavín religion."[1] This nose ornament was made by hammering a piece of gold, cutting the shape, and finishing the details.

Figure \(\PageIndex{7}\): Nose ornament (500-200 BCE, hammered and cut gold, 2.3 cm high) (Public Domain)

[1] Retrieved from https://www.khanacademy.org/humanities/ap-art-history/indigenous-americas-apah/south-america-apah/a/chavin-de-huantar1

4.10: Olmec (1500 BCE – 400 BCE)

Definition: Term

Olmec – An early Mesoamerican civilization (c. 1200–400 BCE) located along the Gulf Coast of present-day Mexico, often considered one of the "mother cultures" of later Mesoamerican societies.

Coatzacoalcos River Basin – A river system in southeastern Mexico whose fertile floodplains supported early Olmec settlements and agriculture.

San Lorenzo – One of the earliest and most important Olmec ceremonial centers, flourishing around 1200–900 BCE and known for monumental architecture and colossal head sculptures.

La Venta – A major Olmec ceremonial and cultural center that became prominent after the decline of San Lorenzo, featuring large earthen pyramids, plazas, and ritual offerings.

Mesoamerica – A cultural region in present-day Mexico and Central America where advanced pre-Columbian civilizations such as the Olmec, Maya, and Aztec developed shared traditions, agriculture, and religious practices.

Mesoamerican Ballgame – An ancient team sport played with a rubber ball and associated with ritual, politics, and religion across many Mesoamerican cultures.

Colossal Heads – Massive basalt stone sculptures created by the Olmec, believed to represent rulers or important individuals, distinguished by their large scale and helmet-like headgear.

Great Pyramid (La Venta) – A large earthen mound at La Venta rising about 34 meters, one of the earliest monumental pyramidal structures in Mesoamerica.

Serpentine Mosaics – Large ritual designs created by arranging blocks of green serpentine stone in geometric patterns and burying them beneath plazas or ceremonial spaces.

Basalt – A dense volcanic stone commonly used in ancient sculpture and architecture because of its durability.

Jadeite – A rare, blue-green gemstone valued in many ancient Mesoamerican cultures for carving small sculptures, jewelry, and ritual objects.

As with most early civilizations, the **Olmec** developed near a reliable water source. They settled on the alluvial plains of the Coatzacoalcos River basin in present-day Mexico. Around **900 BCE**, the Olmec established several major ceremonial centers, including **San Lorenzo** and **La Venta**. La Venta eventually became the largest and most prominent center and functioned as the cultural and religious heart of Olmec society. From these centers, the Olmec developed complex religious traditions, long-distance trade networks, and organized leadership, becoming one of the earliest influential cultures in **Mesoamerica**. Archaeological discoveries from these sites have provided significant insight into Olmec life. The people fished and hunted, cultivated maize as their primary crop, and harvested rubber from local trees. Some scholars believe the Olmec may have developed one of the earliest forms of the **Mesoamerican ballgame**, a sport later adopted by many other cultures in the region.

The Olmec are particularly known for the monumental sculptures they created, especially the **colossal heads** carved from basalt. Their art demonstrates a distinctive and recognizable style made from materials such as jade, clay, and basalt. Many works are anthropomorphic and connected to spiritual or mythological beliefs. Common features in Olmec imagery include a cleft forehead, almond-shaped eyes, upturned lips, and downturned mouths, suggesting symbolic representations of rulers, ancestors, or supernatural beings.

One of the most impressive structures at La Venta is the large earthen mound often referred to as the **Great Pyramid** (4.10.1). Rising more than 34 meters above the surrounding landscape, it is the tallest known structure from the Olmec period. Earlier researchers believed the mound had a rounded shape meant to resemble nearby mountains; however, modern investigations suggest the structure was originally rectangular with stepped sides that gradually eroded over time. The ceremonial center also contains several additional pyramid-like mounds arranged across an area stretching more than a mile. Archaeologists discovered elaborate tombs in this area, along with large buried **serpentine mosaics** (4.10.2) constructed from carefully arranged blocks of serpentine stone and covered with layers of soil, demonstrating the importance of ritual and ceremonial activity in Olmec culture.

Figure \(\PageIndex{1}\): Grand Mound (Public Domain)

Figure \(\PageIndex{2}\): Oversized mosaics (CC BY-SA 2.0)

The **Olmec** were among the first people in Mesoamerica to create massive stone monuments along Mexico's southern Gulf Coast. Archaeologists discovered about eighty stone monuments at **La Venta**, including seventeen famous colossal heads. These giant heads (4.10.3) were carved from large basalt boulders and display facial features that resemble the people who lived in the region. Each head appears to wear a helmet or ball cap, which may relate to the **Mesoamerican ballgame**, an activity that held cultural and possibly ritual significance. The heads are enormous, measuring roughly 2.8 meters high and 2.15 meters wide, and each was carved from a single block of basalt. The stone was quarried in the mountains more than eighty kilometers from La Venta. Scholars are still uncertain how the Olmec transported these massive stones across rivers and difficult terrain before carving them with relatively simple hand tools. In addition to the monumental heads, the Olmec also produced smaller sculptures believed to have been used in ritual ceremonies. These figures were often carved from granite or **jadeite**, a blue-green stone that was highly valued throughout Mesoamerica for its beauty and symbolic importance.

Figure \(\PageIndex{3}\): Olmec head (CC BY-SA 3.0)

Seven altars made from **basalt** were found at La Venta, each measuring approximately two meters high and four meters wide. **Altar 4** (4.10.4) depicts a figure—possibly a ruler or deity—emerging from a cave-like opening while holding a large rope that wraps around the entire base of the monument. The altar features carved almond-shaped eyes, and the figure appears seated within the mouth of a supernatural creature, imagery that may symbolize connections between rulers, ancestors, and the spiritual world.

La Venta was likely the capital and ceremonial center of the **Olmec** culture, based on the large number of monuments, sculptures, and ritual objects discovered at the site. Archaeological evidence suggests a highly organized society governed by a hierarchy that may have included kings, priests, or other elite leaders. No fully developed written language from the Olmec has been confirmed; however, researchers have discovered a stone containing **glyphs** arranged in twenty-one columns that was recovered from a nearby riverbed. These symbols may represent an early form of writing and provide important clues about Olmec communication, religion, and political organization.

Figure \(\PageIndex{4}\): Altar 4 (C BY 2.0)

Giant Olmec Heads

The stone head sculptures of the Olmec civilization of the Gulf Coast of Mexico (1200 BCE - 400 BCE) are amongst the most mysterious and debated artefacts from the ancient world. The most agreed upon theory is that, because of their unique physical features and the difficulty and cost involved in their creation, they represent Olmec rulers.

The hollow clay figure (4.10.5) probably represents a child looking upward. The figure was made with fine, white clay and embellished with white slip and red pigment. "This pudgy figure is one of the best examples of this class of human figures

displaying characteristics of well-fed children, the so-called Olmec "babies." The baby's body was carefully modeled to indicate realistic skin folds and subcutaneous fat, evoking themes of abundance and plentiful resources. The face displays non-mortal characteristics, such as the stylized eyes, downturned mouth, and squared ears."[1] The headpiece is covered in cinnabar and red ochre, creating a reddish-to-pink color. The figure was found in a tomb. However, historians do not know if the figure represented the person who died or was some type of mythological character.

Figure \(\PageIndex{5}\): Seated figure with helmet (1200-800 BCE, ceramic, cinnabar, red ochre, 34 x 31.8 x 14.6 cm) (Public Domain)

The clay figure (4.10.6) is sitting informally with a relaxed pose, seemingly chatting with someone else who might be in the room. The arms and legs are human-like, with grooves delineating the fingers and toes. However, "the narrow, elongated, artificially deformed head has long ear flanges and tilts slightly to the left; the facial features with almond-shaped, puffy eyes, thick upper lip and half-open mouth with down-turned corners are typical of Olmec supernaturals. The eyebrows are drawn in a faint black; traces of red and white pigment remain in the eyes."[2] Many figures of this style were found in tombs and city sites. The images were very similar, yet each one was different. The actual use and meaning of the figures is unknown.

Figure \(\PageIndex{6}\): Seated figure (12^{th}-9^{th} century BCE, ceramic, 14.9 x 8.3 x 8.6 cm) (Public Domain)

The **blackware** (4.10.7) has relatively straight walls and a flat bottom. Curved, broad lines are incised around the bowl with narrow, rough, short lines. The areas with the incised patterns were left rough, while the rest of the surface was smooth and polished, creating a strong textural contrast. The potter likely used the coiling method to form the basic shape of the vessel and applied a dark slip made from minerals mixed with water. Some of these vessels were used during community feasts, while others were placed in tombs as funerary offerings.

The **Tecomate bowl** (4.10.8) was created with a full, rounded body and only a small opening at the top. It was also made using the coiling method with a kaolin-like clay. The bowl was carefully smoothed and shaped with thin walls. Unlike the blackware vessel, it was not decorated and was only covered with a slip. The form is called a **tecomate**, named after the natural shape of a gourd. These bowls were commonly used during community feasts and everyday food preparation.

Figure \(\PageIndex{7}\): Blackware bowl (12^{th} – 8^{th} century BCE, ceramic, 6 x 10.5 cm) (Public Domain)

Figure \(\PageIndex{8}\): Tecomate bowl (12^{th}-9^{th} century, ceramic, 12 cm) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/art/collec.../search/313327

[2] Retrieved from https://www.metmuseum.org/art/collec.../search/320346

4.11: Conclusion

The artistic achievements of these civilizations demonstrate that art has always been far more than decoration; it is a reflection of humanity's beliefs, ambitions, struggles, and identities. Across continents and centuries, cultures used architecture, sculpture, painting, textiles, ceramics, and metalwork to honor spiritual traditions, reinforce political authority, record history, and celebrate the natural world. Whether through the soaring Gothic cathedrals of Europe, the geometric mosaics of the Islamic world, the monumental stonework of the Maya and Khmer Empires, or the intricate weaving and metalworking traditions of the Inca and Aztec civilizations, each society developed unique artistic expressions shaped by its environment, religion, and social structure.

These civilizations also demonstrate the remarkable adaptability and ingenuity of human societies. Artists and builders often worked with the materials available in their local environments, transforming stone, clay, wood, feathers, bronze, gold, and pigments into enduring masterpieces. Some cultures developed sophisticated engineering techniques without modern technology, while others refined artistic traditions that emphasized spirituality, natural harmony, or political power. The catacombs of the Late Roman Empire, the mosaics of Byzantium, the mosques of the Islamic Golden Age, the Viking ships, the cave temples of the Gupta Period, and the ceremonial complexes of the Khmer Empire all reveal how art and architecture could shape both physical landscapes and cultural identity.

Religious belief was one of the strongest forces influencing artistic production throughout this period. Christian churches, Islamic mosques, Hindu and Buddhist temples, and sacred ceremonial centers across the Americas were designed not only as places of worship but also as symbols of cosmic order, divine authority, and communal identity. Artworks often served educational purposes, communicating stories, moral lessons, and spiritual concepts to populations that may not have had widespread literacy. Stained glass windows, frescoes, mosaics, carved reliefs, and painted manuscripts transformed architecture into immersive visual experiences that reinforced religious devotion and social unity.

The arts also reflected systems of trade, political power, and cultural exchange. The spread of papermaking from China into the Islamic world and later Europe transformed the preservation and transmission of knowledge. Trade routes carried pigments, textiles, precious metals, jade, feathers, and artistic ideas across vast distances. Civilizations borrowed, adapted, and transformed artistic concepts from neighboring cultures while still maintaining distinctive identities. This exchange of knowledge contributed to technological innovation and artistic diversity throughout the world.

In Africa, Asia, Europe, Oceania, and the Americas, artistic traditions were deeply connected to social organization and daily life. Textiles signified rank and authority in the Inca Empire, bronze and clay sculptures preserved ancestral traditions in Africa, and monumental architecture reinforced the power of rulers and religious institutions. Viking ships symbolized exploration and trade, while Song Dynasty paintings reflected philosophical ideas about nature and balance. Across the Pacific, the moai of Rapa Nui Island honored ancestors and embodied spiritual presence within the landscape.

Although many of these civilizations eventually declined because of warfare, conquest, environmental change, or disease, their artistic legacies endured. The destruction caused by invasions—such as the Spanish conquest of the Aztec and Inca Empires—resulted in the loss of countless artworks and cultural traditions. Yet surviving monuments, manuscripts, sculptures, ceramics, and textiles continue to provide valuable evidence of the intellectual and creative accomplishments of these societies. Archaeology and art history allow modern audiences to reconstruct the stories of cultures whose voices were often silenced or fragmented by time.

Ultimately, the study of global artistic traditions reveals both the diversity and interconnectedness of human civilization. Despite differences in geography, language, religion, and political systems, cultures throughout history shared a desire to understand the world, communicate ideas, and leave lasting records of their existence. Art became a universal language through which people expressed fear, devotion, power, memory, beauty, and hope. The surviving artistic achievements of these civilizations continue to inspire admiration today, reminding us that creativity and cultural expression are fundamental parts of the human experience and essential to understanding our shared global heritage.

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CHAPTER OVERVIEW

5: The Transition of Art (400 BCE – 200 CE)

Some civilizations were long lasting, others have almost disappeared, however, they left a record of their civilizations through sculptures. Depending on natural resources available, each culture used a variety of materials to create sculptures, some sculptures were practical and usable while others were merely decorative. Sculptures made of marble or stone came from quarries in nearby mountains, the raw marble or stone cut out by stonemasons and transported to the site where the figure would emerge under the guidance of the stone carver. Other sculptures were formed from the abundant clay found in alluvial plains, using the clay to build up layers to form an image.

5.1: Overview
5.2: Classical and Hellenistic Greece (510 BCE – 31 BCE)
5.3: Roman Empire (27 BCE – 393 CE)
5.4: Nok (700 BCE – 300 BCE)
5.5: Qin Dynasty (221 BCE - 206 BCE)
5.6: Yayoi Period (300 BCE – 300 CE)
5.7: Nazca (100 BCE – 800 CE)
5.8: Moche (100 CE – 800 CE)
5.9: Conclusion

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5.1: Overview

During this period, art moved beyond the immense structures erected for kings or priests and beyond simply decorated pottery. Art became aesthetically enjoyable for many people, not only pragmatically serviceable. In **Classical Greece**, temples were constructed throughout the region in similar designs, made from marble and painted in bright colors for all to observe. Greek sculptors studied anatomy and created naturalistic figures, and by the **Hellenistic period** they were producing highly realistic and expressive sculptures. Much of **Roman art** was based on Greek models, using both bronze and marble for sculpture while introducing greater realism through wrinkles, scars, and other imperfections. **Wall paintings** and **mosaics** also became common and highly detailed art forms.

Although the Romans controlled much of the Mediterranean region and parts of North Africa, the **Sahara Desert** created a barrier to the rest of Africa. African cultures used abundant natural resources to create their artwork. However, the warm, humid climate caused much of their art to deteriorate, making surviving examples difficult to find in many areas; clay figures are one of the major exceptions. In Asian societies, images often reflected a love of nature and moral ideals, expressed through established traditions in poetry, music, painting, and sculpture. In the Western Hemisphere, cultures created art based on transformed figures in which the lines between humans and the natural world were often blurred, using metals, stone, jade, and clay, often enhanced with bright colors.

Some civilizations endured for long periods, while others have nearly disappeared; however, surviving sculptural works preserve a record of their cultures. Depending on the natural resources available, each culture used a variety of materials to create both large and small sculptures. Some works were practical and functional, while others were decorative. Marble and stone sculptures were quarried from nearby mountains, cut by stonemasons, and transported to the site where the figure was shaped by the sculptor. Other sculptures were formed from abundant clay found in alluvial plains, built up in layers to create an image, or made from metals such as gold shaped into representative figures. **Terracotta** was a common sculptural material because it was widely available in many civilizations. The **Terracotta Warriors** and **Nok statues**, for example, were both made from terracotta found near their burial sites.

During this period, art flourished, and **scale** and **proportion** became especially important in relation to the human form. The **Terracotta Warriors** and horses are nearly life-sized, creating the illusion of an army of 8,000 soldiers. If some of the warriors were only half the size of the others, the figures would appear out of proportion and lose the powerful effect created by their uniform scale. Even the horses and chariots were made life-sized, giving the impression that they were ready to carry the warriors into battle. Each culture developed specific techniques to create artwork efficiently and effectively, including methods such as modeling, carving, and casting.

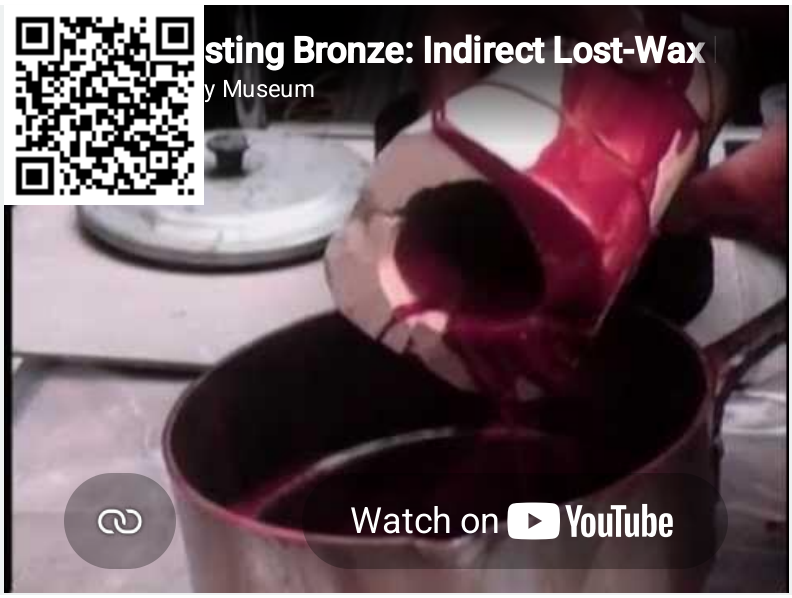
Modeling process: Modeling clay is similar to kneading dough for bread; the strength of the hands and arms shapes the clay into different forms over time. The wetter the clay, the easier it is to shape; however, it also becomes more fragile, so the right consistency is essential for the statue to maintain its intended form. The Nok hand-modeled their complex figures and then fired them in a hot kiln, making the sculptures durable

Carving process: The clay used for the **Terracotta Warriors** was yellow earth clay, abundant in China. Its adhesive quality and plasticity made the clay ideal for creating life-sized figures. The basic construction of a warrior included three main parts: the legs, the body, and the head. Many details were carved into the uniforms and faces, giving the illusion of a vast army in which no two warriors appear exactly alike.

Metal casting process: A model is first formed in clay to represent the exact shape the artist intends to cast. A thin layer of wax is then applied over the clay, covering the entire piece. Next, a plaster or clay mold is placed over the wax to enclose it. When the mold is heated, the wax melts and drains out, leaving a hollow space that perfectly replicates the original form. Melted bronze is then poured into the mold and allowed to cool, creating a detailed metal sculpture, as seen in intricate **Hellenistic statues** or **Yayoi bells**.

Casting Bronze: Indirect Lost-wax Method

Bronze, a combination of copper, tin, and small amounts of other metals, has long been prized for its preciousness, endurance, and its ability to register fine details and reflect light. Beginning about 1500, patrons became intrigued by the famed bronze collections of antiquity and began their own collections of ancient and contemporary bronzes. After much experimentation, artists in the 1500s refined a technique of making bronzes called indirect lost-wax casting. This technique made possible the production of multiple versions of the same piece.



Marble process: The Greeks preferred **marble** as their primary stone for carving because it was durable yet workable. Large architectural elements and statues were often made in several pieces, with separately carved parts such as arms attached using dowels. Sculptors first used larger tools to shape the basic form and then refined the surface with smaller chisels and drills. The final smoothing was completed with emery powder. Greek statues were rarely polished; instead, they were painted with bright colors, most of which have faded over time.

Carving Marble with Traditional Tools

Prior to the use of power tools, the same basic implements were used for stone carving for hundreds of years. Many of the sculptor's tools had a variety of functions and could be used at different stages of the carving process. In this video, watch a contemporary sculptor demonstrate the use of traditional tools--such as the tooth chisel, the point chisel, the drill, and the rasp--as he creates a finished figure of a woman from a block of marble.

This chapter, *The Transition of Art*, examines the sculptures created in seven cultures.

DEB NOTE: make Greece first and then Roman

Civilization	Approximate Time Frame	Starting Location
Classic and Hellenistic Greece	510 BCE – 31 BCE	Athens
Roman Empire	27 BCE – 393 CE	Rome
Noks	700 BCE – 300 BCE	Nigeria
Qin Dynasty	221 BCE - 206 BCE	China
Yayoi Period	300 BCE – 300 CE	Japan
Nazca	100 BCE – 800 CE	Peru
Moche	100 CE – 800 CE	Peru

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5.2: Classical and Hellenistic Greece (510 BCE – 31 BCE)

Definition: Term

- **Achaemenid Empire** – The Persian Empire that invaded Greece during the early 5th century BCE.
- **Classical period** – A period in Greek history (about 480–323 BCE) known for balance, proportion, and naturalism in art and architecture.
- **Athens** – A major Greek city-state known for developing democracy and becoming a center of art, philosophy, and culture.
- **Democracy** – A system of government in which citizens participate in political decision-making.
- **Human form** – The realistic representation of the human body in art.
- **Contrapposto** – A sculptural pose where the figure stands with weight shifted onto one leg, creating a natural, relaxed stance.
- **Hellenistic period** – The period following Alexander the Great's conquests (323–31 BCE), characterized by dramatic, emotional, and highly realistic art.
- **Alexander the Great** – The Macedonian ruler who conquered much of the known world and spread Greek culture across a vast empire.
- **Propaganda** – Art or images created to promote political power, military success, or the authority of rulers.
- **Didymaion (Temple of Apollo at Didyma)** – A massive Hellenistic temple dedicated to Apollo located at Didyma in Asia Minor.
- **Hellenistic period** – The era following the conquests of Alexander the Great (323–31 BCE), known for dramatic and elaborate art and architecture.
- **Apollo** – The Greek god associated with the sun, prophecy, music, and healing.
- **Temple of Artemis** – One of the largest temples in the ancient Greek world, located at Ephesus and dedicated to the goddess Artemis.
- **Parthenon** – A famous temple dedicated to Athena located on the Acropolis in Athens.
- **Ionic order** – An architectural style recognized by slender columns, bases, and capitals with scroll-like volutes.
- **Corinthian order** – The most decorative classical order, characterized by capitals with acanthus leaf designs.
- **Adyton** – The innermost sacred chamber of a Greek temple, often restricted to priests.
- **Relief carving** – A sculptural technique where figures are carved into a flat surface so that they project slightly from the background.

In 490 BCE, the **Achaemenid Empire**, a powerful military force, invaded Greece, which was made up of independent city-states with relatively small armies. Against the odds, the Greeks repelled the Achaemenids, and the victory helped unify the Greek states. In 480 BCE, the Greeks strengthened their defenses, and when the Achaemenids invaded again, the Greeks were victorious. This triumph marked the beginning of the **Classical period** in Greece.

By about 400 BCE, Greece—especially **Athens**—had become a thriving center of culture and political development. Athens moved toward **democracy**, art flourished, and the Mediterranean climate supported agriculture. During the late Classical period, artists began creating more realistic statues of the human body, moving away from the upright, stiff figures of earlier periods. Sculptures displayed the **human form** with greater movement and balance. Figures often stood with one leg placed slightly in front of the other in a **contrapposto** stance, creating a natural shift in weight. The torso turned gently to one side, and the arms suggested motion, giving the impression that the figure might step forward from its pedestal.

The **Hellenistic period** marked a time of expansion and transformation for Greek culture. Under **Alexander the Great**, Greek armies conquered large portions of the known world, establishing Greek-influenced cities across these regions. Greek art and architecture spread widely, blending with local traditions. Art during this period often became dramatic, emotional, and elaborate. Sculptures and monuments were frequently used as **propaganda**, celebrating military victories and reinforcing royal authority.

Ancient Greece

From artistry to politics, ancient Greece left a considerable impression on world history. Learn why Greek and Roman gods share so many similarities, how the alphabet got its name, and how the legacy of ancient Greece has evolved over thousands of years.

Columns

A significant way to describe a building style is through its **architectural order**. The order is identified by its proportions, profiles, and specific details, especially the column. In many cases, the type of column defines the entire structure. The three classical orders are **Doric**, **Ionic**, and **Corinthian** (5.2.1). All three developed in Greek architecture and were later adopted by the Romans, and they continue to influence architecture today.

The **Doric order** developed when builders transitioned from temporary materials such as wood to more permanent materials like stone. The Doric order (5.2.2) is characterized by fluted columns, a plain and unadorned capital at the top of the column, and the column sitting directly on the floor without a base. Doric buildings often include **triglyphs** and **metopes** decorating the upper sections of the structure.

The **Ionic order** (5.2.3) is more slender and graceful and often includes a sculpted frieze that runs along the top of the building. The Ionic capital features **volutes**, or scroll-like decorative elements, and the column stands on a base. Ionic columns are generally considered more elegant than Doric columns.

The **Corinthian order** (5.2.4) is the most elaborate of the three. The Corinthian capital is decorated with stylized carved leaves resembling the **acanthus** plant that wrap around the column. The Corinthian column also includes a base and is typically more slender than the Doric column. The Romans especially favored the decorative Corinthian style.

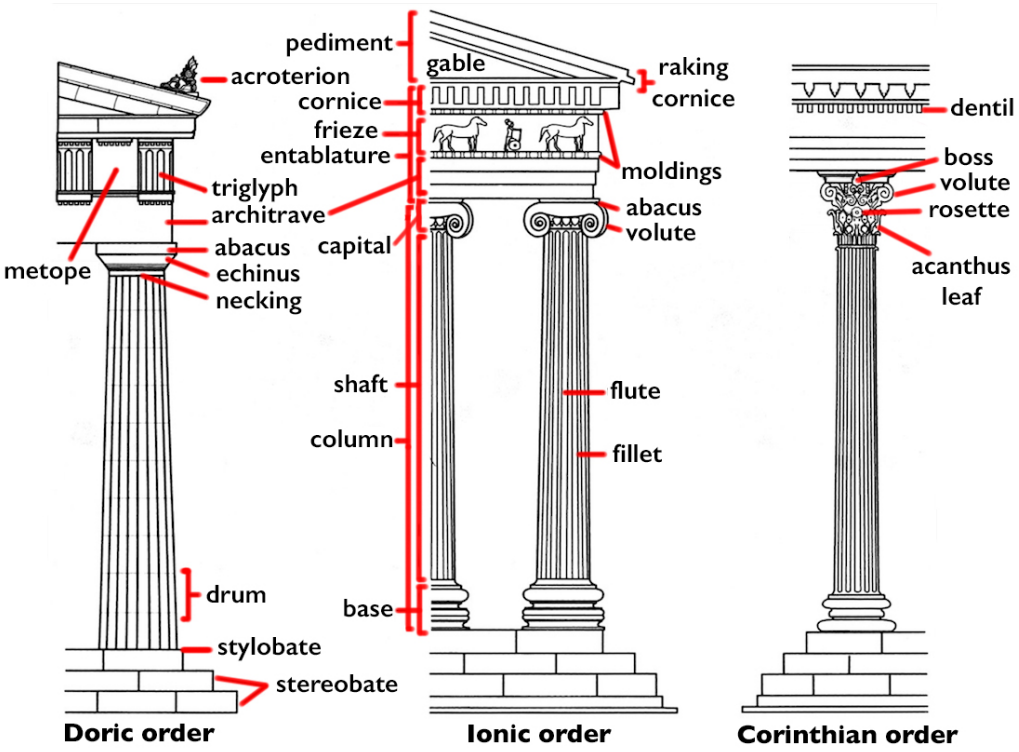


Figure \(\PageIndex{1}\): The Greek orders (Public Domain)

Figure \(\PageIndex{2}\): Doric capital (CC BY-SA 3.0)

Figure \(\PageIndex{3}\): Ionic capital (CC BY 2.0)

Figure \(\PageIndex{4}\): Corinthian capital (CC BY 2.0)

The Classical Orders

In classical architecture, the Orders consist of variations of an assembly of parts made up of a column (usually with a base), a capital, and an entablature. These structural units may be repeated and combined to form the elevation of a building and its architectural vocabulary. There are eight Orders in total: Doric (Greek and Roman versions), Tuscan, Ionic (Greek and Roman), Corinthian (Greek and Roman), and Composite. The simplest is the Tuscan, supposedly derived from the Etruscan-type temple. It has a base and capital and a plain column. The Doric is probably earlier, however, its Greek version having no base, as on the Parthenon. The Ionic Order, with its twin volute capitals, originated in Asia Minor in the mid-6th century B.C.E. The Corinthian Order was an Athenian invention of the 5th century B.C.E. and was later developed by the Romans. The Composite Order is a late Roman combination of elements from the Ionic and Corinthian Orders.

Buildings

Two earlier temples were constructed and later destroyed on the site at Didyma. The **Didymaion** (5.2.5), built during the **Hellenistic period**, became the third and final temple dedicated to **Apollo**. The temple was designed to rival the nearby **Temple of Artemis** and was nearly twice the size of the **Parthenon** in Athens. The design was based on an enormous platform measuring over 5,500 square meters. Rising from this platform were 122 massive columns, each about 2.5 meters in diameter. The columns reflected **Ionic** and **Corinthian** styles. When completed, the walls rose to a height of about 28 meters, and the pillars supported a coffered roof covering much of the platform.

In Greek temples, the inner chamber, or **adyton**, was typically built directly on the raised platform. At Didyma, however, a sacred underground spring required the adyton to remain at ground level. To accommodate this feature, the architects designed two long, narrow vaulted tunnels that led from the top of the temple platform down to the grassy floor of the adyton. This design allowed the builders to create a traditional-looking temple while preserving the sacred spring. Although the temple appeared to be fully roofed, the inner chamber remained open to the sky. The temple was decorated with **marble relief carvings** on the columns (5.2.6) and walls.

Figure \(\PageIndex{5}\): Didymium (CC BY-SA 4.0)

The temple was the site of religious festivals, offerings, and sacrifices. As the temple became increasingly important to the people of Rome, Emperor **Trajan** built a new sacred road connecting the temple to the nearby town. Over time, successive emperors added to and modified the complex, which is one reason the temple was never fully completed. Despite this, the temple had a significant influence on the political and religious life of the region.

Figure \(\PageIndex{6}\): Didymium column (CC BY-SA 4.0)

The Ancient Greeks frequently portrayed mythological battles between some sort of giant and an Olympian god. The most famous portrayal comes from the altar first constructed in the ancient city of Pergamon and reproduced (5.2.7) with the surviving sculptures attached as originally. "The Altar's architectural framework alone is impressive—it comprises a monumental Π-shaped structure surrounded by columns and accessed by a grand staircase. However, its most eye-catching feature is undoubtedly the frieze, a massive 113-meter-long and 2.3-meter-high marble high-relief that wraps around the building's entire exterior and depicts the mythological battle between the Gods of Mount Olympus and Giants."[1]

Zeus, Athena, and Herakles are depicted in battles on the altar's sides. The battle scene with Athena (5.2.8) depicts her holding the giant Alkyoneos' hair and pulling his face. Athena's serpent wraps around the giant. On one side, the giant's mother pleads for her son's life. Nike, the goddess of Victory, is in the background, ready to crown Athena.

Figure \(\PageIndex{7}\): Pergamon Altar (c. 200-150 BCE, 35.64 x 33.4 meters) (CC BY-SA 3.0)

Figure \(\PageIndex{8}\): Pergamon Altar, *Athena & Nike*, East Frieze (CC BY-SA 2.0)

Great Altar of Zeus and Athena at Pergamon

The Pergamon Altar, c. 200-150 B.C.E., 35.64 x 33.4 meters, Hellenistic Period (Pergamon Museum, Berlin)

Earlier versions of the **Parthenon** were destroyed during the wars with the **Persians**. In the mid-fifth century BCE, the Greeks decided to rebuild the temple on top of the burned foundations and dedicate the new structure to the goddess **Athena**. The current structure (5.2.9) was built between 447–432 BCE and measures about 30.8 by 69.5 meters. Builders reused some materials that had not been damaged by fire, preserving elements of the earlier structure. Decorative friezes and sculptures on the building depicted scenes recalling the battles with the Persians. Over time, later rulers modified parts of the structure. Although the temple may have served several purposes, it is known to have functioned as a treasury at one point. Its original purpose, however, was to house the massive statue of Athena.

The Parthenon's foundation was constructed of limestone, while the columns were made of **Pentelic marble** from Mount Pentelicus. This marble was widely used in many buildings in **Athens** because of its quality and appearance. Today the structure appears bright white, but traces of paint and descriptions in ancient texts show that the temple was once brightly colored. When first built, the Parthenon would have appeared spectacular with its vivid painted surfaces. Although the construction appears

perfectly symmetrical, careful measurements reveal subtle **optical refinements** designed to improve the visual appearance of the building.

The columns of the Parthenon (5.2.9) follow the **Doric order**, with eight columns across the front and seventeen along the sides, arranged according to a proportional ratio of **9:4**, which defines both vertical and horizontal relationships in the structure. The porch contains six Doric columns, and additional smaller columns were arranged around the statue of Athena. Inside the temple, columns followed the **Ionic order**, making the combination of Doric and Ionic elements unusual in Greek architecture. Each column was carefully adjusted so that, to the viewer's eye, they all appear perfectly uniform.

The structure's exterior was decorated with multiple sculptures, a frieze around the top of the wall, and many metopes (small marble carvings). The entire scene of statues on the east pediment (5.2.10) portrayed "the miraculous birth of Athena from the head of her father Zeus. The scene occurs on Mt Olympus in the presence of the other gods who watch standing, sitting, or half-reclining. The pediments' corners contained the chariots of Helios (Sun), which emerges from the sea, and Selene (Moon), which sinks in the ocean waves, indicating thus that the goddess' birth takes place at dawn. The statues of Zeus and Athena occupied the center of the scene."[2] The pieces in this image are a small part of the set of sculptures on the pediment.

Figure \(\PageIndex{9}\): Parthenon on the hill (CC BY-SA 2.0)

Figure \(\PageIndex{10}\): Parthenon (CC BY-SA 2.0)

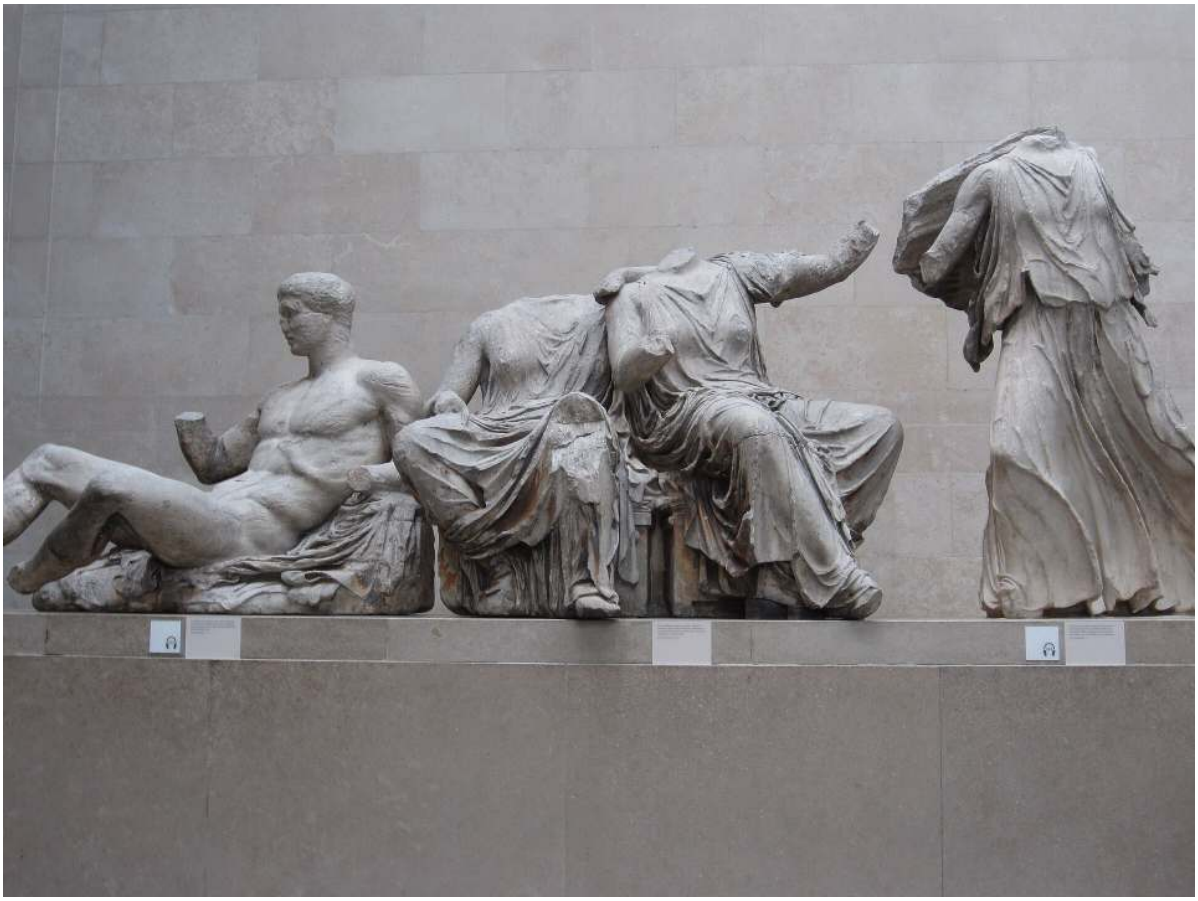


Figure \(\PageIndex{11}\): Group from east pediment (CC BY-SA 4.0)

Parthenon

Iktinos and Kallikrates (Phidias directed the sculptural program), Parthenon, Athens, 447 - 432 B.C.E.

Statues

The statue (5.2.12) of **Hercules** by **Lysippos**, the official sculptor of **Alexander the Great**, was one of the most famous sculptures of the late **Classical period**. This massive marble statue appears powerful and muscular, yet it presents a weary image of Hercules leaning on his club after killing the lion. The muscles of his body are slightly exaggerated to portray an idealized hero beyond the proportions of an ordinary human, suggesting a nearly perfect figure. Despite his strength, his face appears tired, worn from the effort of battle. Hercules stands in a **contrapposto** position while resting on his club, combining strength with a sense of exhaustion.

Figure \(\PageIndex{12}\): *Hercules* (CC BY 2.5)

Lysippos, Farnese Hercules

Lysippos, Farnese Hercules, 4th century B.C.E. (later Roman copy by Glycon)(Archaeological Museum, Naples)

The **Hellenistic period** of art began in the late 4th century BCE and continued until Greece came under Roman control. The **Winged Victory of Samothrace** (5.2.13) is a marble sculpture representing the goddess **Nike**, the personification of victory. This magnificent work stands over 2.5 meters tall and is missing its arms and head. The figure's clothing appears to be blown by the

wind, creating a powerful sense of movement. The statue conveys a triumphant spirit, and the dramatic pose gives the impression that the figure has just landed or is about to take flight from the prow-like base beneath her.

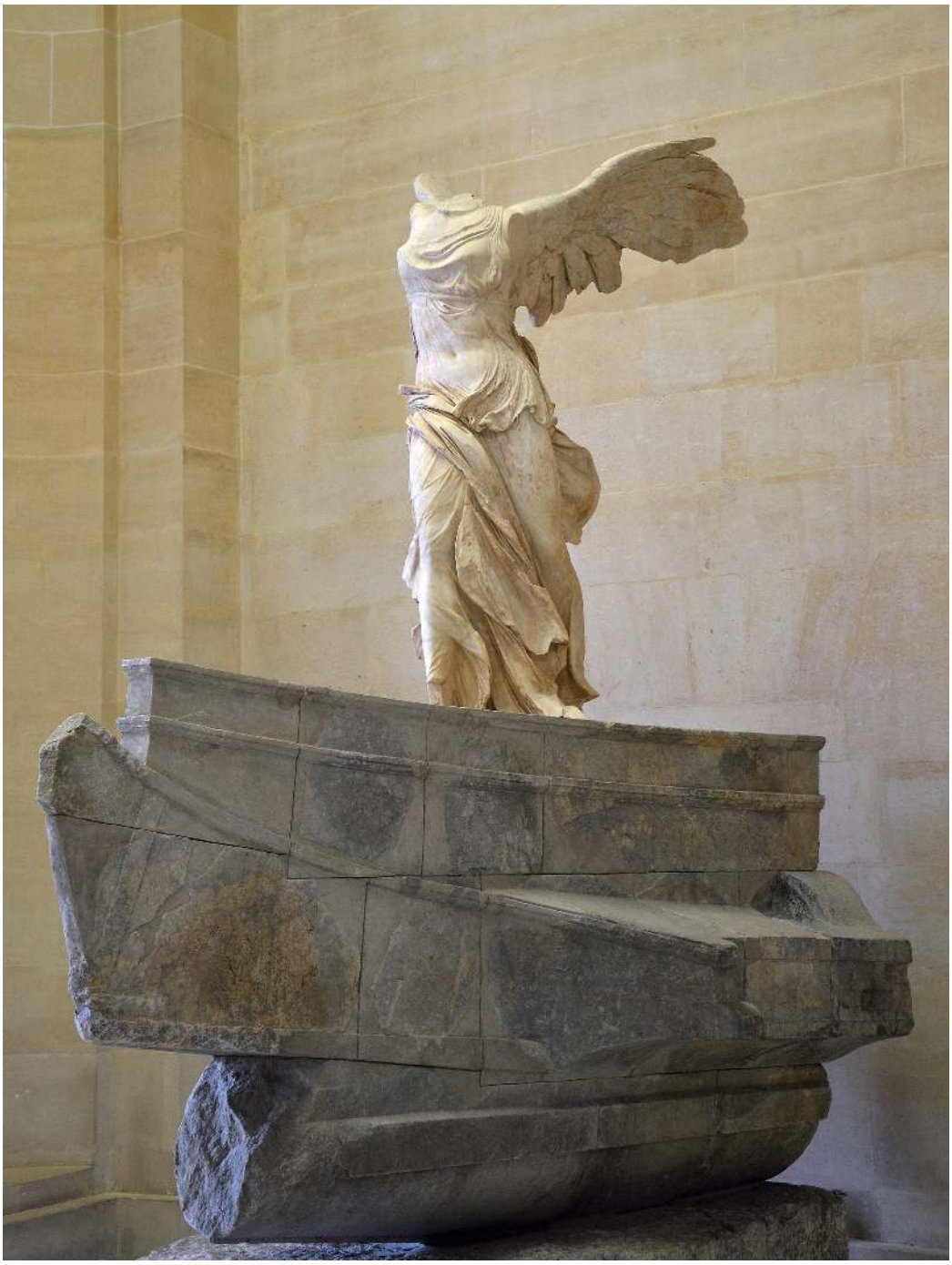
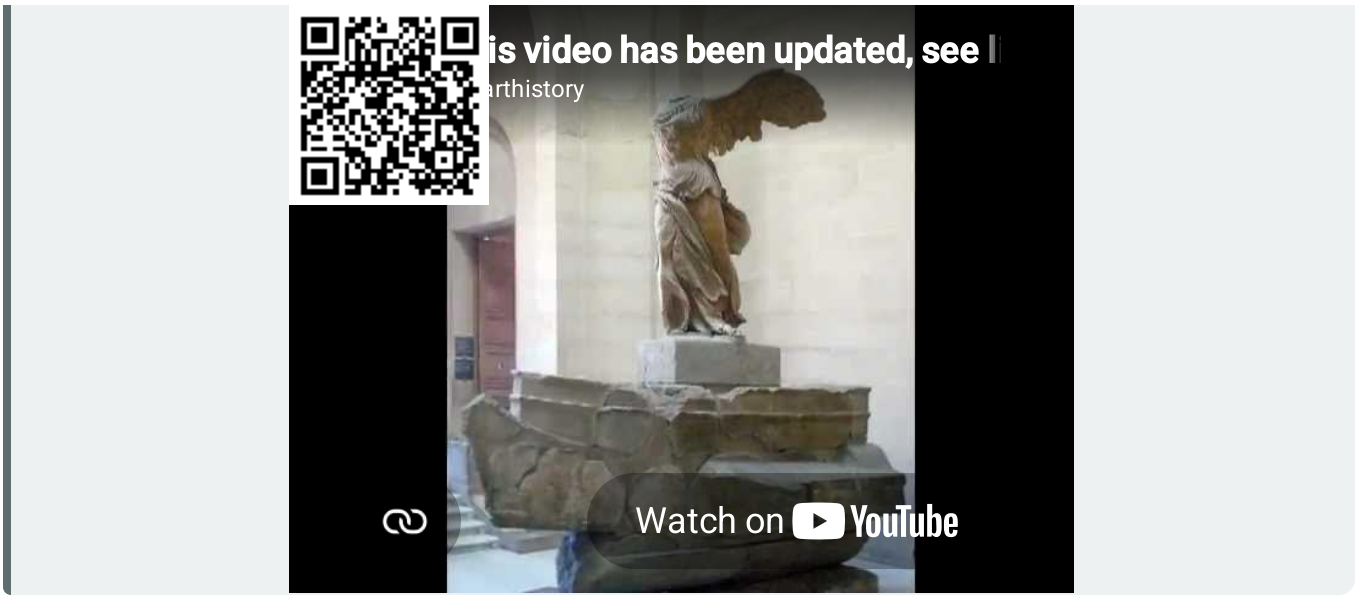


Figure \(\PageIndex{13}\): *Winged Victory of Samothrace* (200-190 BCE, Parian marble, 244 cm) (CC0)

Nike of Samothrace

Nike (Winged Victory) of Samothrace, Lartos marble (ship) and Parian marble (figure), c. 190 B.C.E. 3.28m high, Hellenistic Period (Musée du Louvre, Paris). The sculpture was unearthed in 1863 after its discovery under the direction of Charles Champoiseau, the French Vice-Consul to Turkey. Please note that the theoretical reconstruction of the Nike as a trumpeter mentioned in the video has been largely abandoned; the monument is now thought to have been part of a fountain possibly commemorating a naval victory.



The **Seated Boxer** (5.2.14), a Hellenistic bronze sculpture from the 4th century BCE, depicts a weary fighter looking back, perhaps reflecting on the battle he has just endured. The boxer has curly hair and a full beard, his body bent forward with his elbows resting on his knees and his hands held in front of him, emphasizing his exhaustion. His bruised face, broken nose, swollen ears, and traces of blood reveal the physical toll of the fight. Scars across his body and the leather boxing gloves further identify him as a professional athlete. Unlike the youthful, idealized athletes of earlier Greek art, this figure is shown as a battered, aging man, reflecting the Hellenistic interest in realism, emotion, and the hardships of human experience.

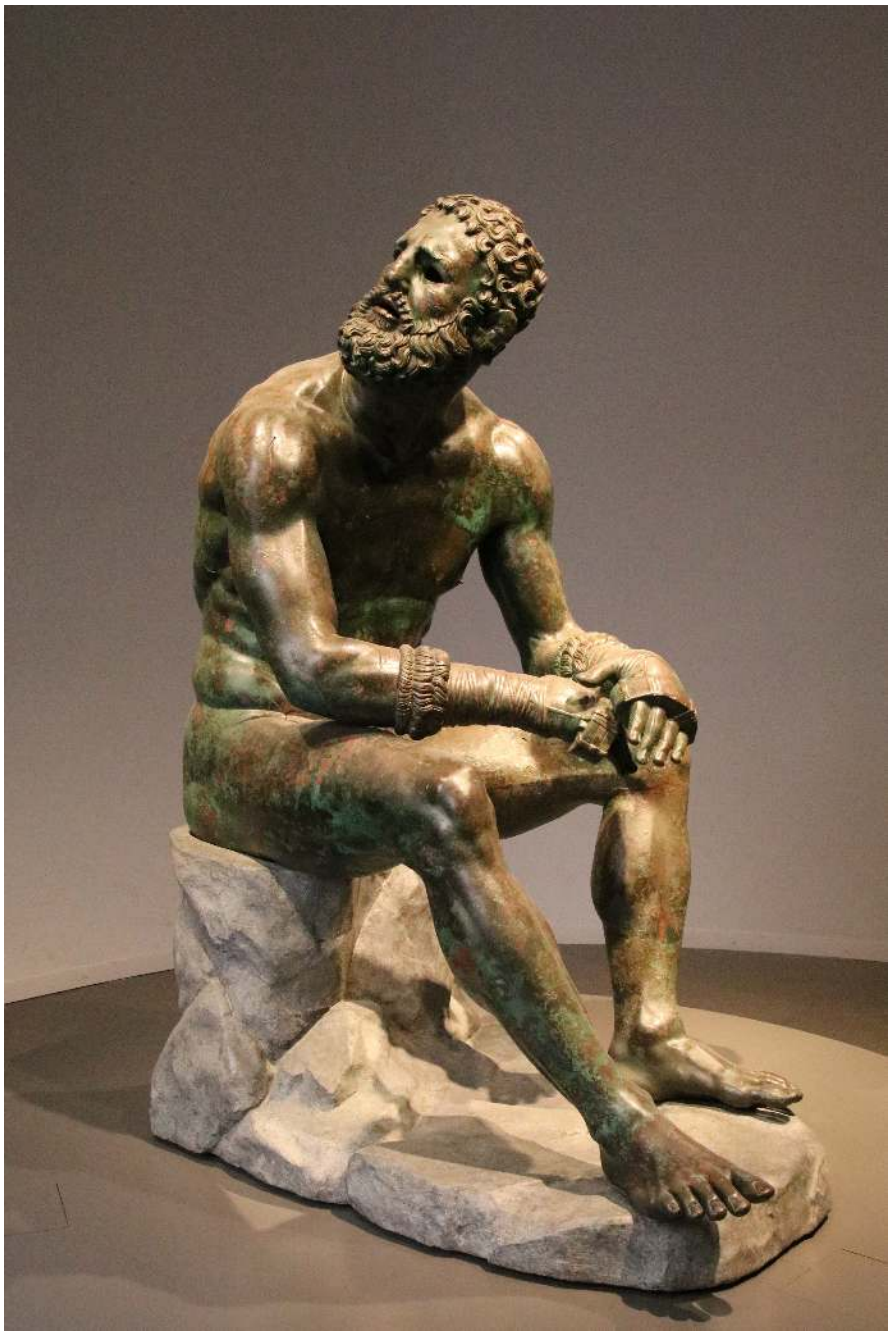


Figure \(\PageIndex{14}\): Boxer at Rest (100 BCE, bronze (CC BY-SA 4.0)

Apollonius, Seated Boxer

Apollonius, Boxer at Rest, c. 100 B.C.E., bronze, Hellenistic Period (Palazzo Massimo, Museo Nazionale Romano, Rome)

Pottery

From the sixth through the fourth century BCE, the Greeks used **black-figure** and **red-figure** techniques to decorate pottery. Large vessels were made in sections, with the handles, foot, or neck attached later. Once the vessels dried, they were covered with a slip. In **black-figure vase painting** (5.2.15), artists applied a slip to create decorative and figural motifs that turned black during firing, while the rest of the vase retained the natural red color of the clay.

In contrast, **red-figure vase painting** (5.2.16) left the figures the color of the clay while the background was painted with a black slip. Artists then added fine glaze lines to define details of the figures. The vessels were fired in three stages. First was the **oxidizing stage**, when the entire vase turned the natural clay color. In the second stage, the kiln was reduced by limiting oxygen and adding green wood, turning the slipped areas black. In the final stage, oxygen was reintroduced, restoring the red color of the clay while the slipped areas remained black. Greek pottery was made in many shapes designed for specific uses, and the painted scenes provide valuable insights into the daily life, mythology, and beliefs of the ancient Greeks.

Figure \(\PageIndex{15}\): Achilles Killing the Amazon Queen Penthesilea (540-530 BCE, clay, 46 cm high) (Public Domain)

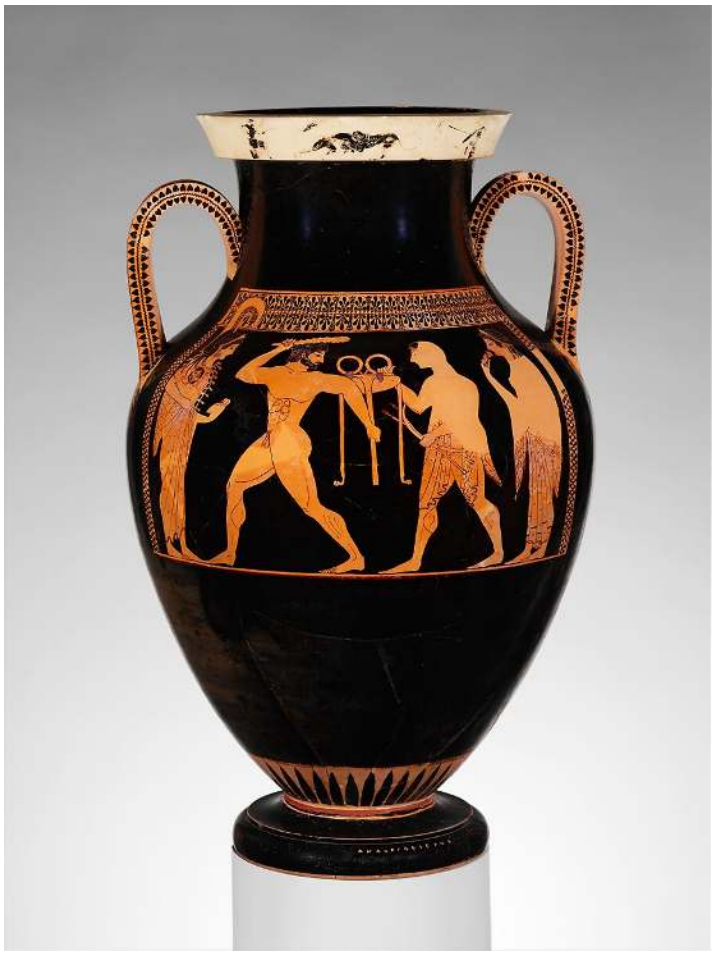


Figure \(\PageIndex{16}\): Terracotta amphora (530 BCE, terracotta, 57.5 cm) (Public Domain)

Ancient Greek Vase Production and the Black-Figure Technique

Used for the storage and shipment of grains, wine, and other goods, as well as in the all-male Greek drinking party, known as the symposium, ancient Greek vases were decorated with a variety of subjects ranging from scenes of everyday life to the tales of heroes and gods. The two most popular techniques of vase decoration were the black-figure technique, so-named because the figures were painted black, and the red-figure technique, in which the figures were left the red color of the clay. The black-figure technique developed around 700 B.C. and remained the most popular Greek pottery style until about 530 B.C., when the red-figure technique was developed, eventually surpassing it in popularity. This video illustrates the techniques used in the making and decorating of a black-figure amphora (storage jar) in the Art Institute of Chicago's collection.

[1] Retrieved from https://smarthistory.org/the-pergamon-altar/

[2] Retrieved from https://www.theacropolismuseum.gr/en...t-heads-horses

5.3: Roman Empire (27 BCE – 393 CE)

Definition: Term

Roman Empire – A powerful ancient civilization centered in Rome that controlled lands around the Mediterranean from 27 BCE to 476 CE in the west, known for its military strength, government, engineering, and cultural influence.

Mediterranean Sea – The large body of water bordered by Europe, Africa, and Asia that served as the center of trade, travel, and cultural exchange in the Roman world.

Architecture – The art and science of designing and constructing buildings and structures.

Engineering – The practical application of scientific and mathematical principles to design and build structures, machines, and systems.

Roman Roads – Carefully constructed transportation routes made from layers of stone and concrete that connected cities and military sites across the Roman Empire.

Sewers – Underground drainage systems used to remove waste and stormwater from cities.

Aqueducts – Elevated channels and bridges built by the Romans to transport fresh water from distant sources into cities.

Concrete – A durable building material made by mixing lime, volcanic ash, water, and stones, widely used by the Romans in construction.

Masonry – A construction technique using individual units such as stone, brick, or concrete blocks bound together with mortar.

Cement – A binding material that hardens when mixed with water and other materials, used by the Romans to create strong and durable concrete for buildings.

Brick – A rectangular building unit traditionally made from clay and hardened by heat in a kiln.

Mobile kilns – Portable ovens used to fire clay bricks on-site so builders could produce construction materials wherever projects were located.

Roman legion brick stamps – Marks impressed into bricks identifying the Roman military unit responsible for producing or using the bricks in construction.

Tufa – A soft, gray, porous volcanic rock commonly used by the Romans as a building material because it was easy to cut and shape.

Peperino – A greenish-brown volcanic stone used in Roman construction that could be easily cut and polished.

Marble slabs – Thin, flat pieces of marble used to decorate or cover building surfaces, giving structures a more refined and luxurious appearance.

Pantheon – A large temple-like building in Rome completed in 126 CE during the reign of Emperor Hadrian, famous for its massive concrete dome and central oculus.

Granite – A very hard natural stone commonly used in construction and columns because of its strength and durability.

Tufa – A soft, porous volcanic stone used by the Romans as a building material because it was easy to cut and shape.

Concrete – A strong building material made by mixing lime, volcanic ash, water, and stones; widely used by the Romans for large structures such as domes and walls.

Corinthian columns – A decorative Greek column style recognized by its slender shape and ornate capital decorated with acanthus leaves.

Rotunda – A large circular interior space, often covered by a dome.

Oculus – A circular opening at the top of a dome that allows light and air into a building.

Dome – A rounded, hemispherical roof structure often used to cover large interior spaces.

Coffered ceiling – A ceiling with recessed square or rectangular panels used to reduce weight and add decoration.

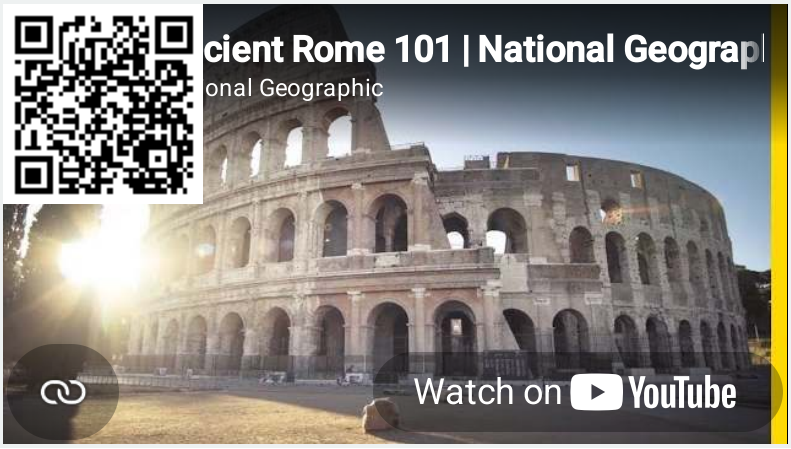
Scoria (pumice) – A lightweight volcanic rock used in Roman concrete to make structures lighter and easier to support.

The **Roman Empire** spread across three continents, surrounding the **Mediterranean Sea** and absorbing many cultures through the strength of its massive and highly trained army. A formidable force to neighboring civilizations, the Romans expanded their influence while developing remarkable achievements in art, **architecture**, and **engineering**. Across the empire, they built cities connected by an extensive network of **roads** and infrastructure. The Romans constructed canals, heated water systems, **sewers**, **aqueducts**, coliseums, earthen dams, and large public baths that supported daily life in urban centers. Roman roads were carefully engineered using layers of stone and **concrete**, many of which remain visible today—giving rise to the famous saying, "All roads lead to Rome."

The Romans were highly advanced in creating sculptures and using masonry techniques in construction. While other ancient societies relied on massive stacked stone blocks to build large structures, the Romans developed a sophisticated form of cement that allowed them to construct buildings without depending on enormous stones. Earlier cultures had already invented bricks; however, the Romans refined brickmaking by producing slimmer, longer bricks that improved building efficiency and spread widely throughout the empire. Mobile kilns allowed Roman builders to manufacture bricks wherever construction occurred. These bricks were often stamped with the mark of the legion responsible for the project. In their cement mixtures, the Romans used **tufa**, a gray, porous volcanic rock that was common in the region and easy to cut into bricks, and **peperino**, a greenish-brown volcanic stone that could also be easily cut and polished. Using these materials, Romans constructed durable structures and often enhanced monumental buildings with smaller bricks covered by decorative marble slabs.

Ancient Rome 101

Spanning over a thousand years, ancient Rome was a civilization of constant evolution. This great empire flourished through innovation and incorporation of the diverse cultures they conquered, such as the adoption of Latin and gladiatorial combat. Learn about the rise and fall of this ancient civilization and how its influence still endures today.



Buildings

Travertine, a yellowish limestone located in several areas near Rome, became another popular stone of Roman construction, including the Colosseum, giving the building its golden appearance. The exterior façade had four levels. Eighty arches were built into each of the lower three floors, making the building less bulky. The Colosseum (5.3.1) is 189 meters long, 156 meters wide, and over 48 meters high and is still considered today as the largest amphitheater in the world.[1]

Figure \(\PageIndex{1}\): Colosseum (CC BY-SA 4.0)

The **Colosseum**, built-in 80 CE, is located just east of the Roman Forum and opened with a celebration of one hundred days of games. The Colosseum was host to gladiator wars, animal fights, and other spectacles in a building so advanced it contained bathrooms and drinking fountains. Some estimates claimed the Colosseum could seat up to 87,000 people, though modern estimates put the number closer to 50,000. Spectators were seated by social status, with the elite class closest and the lower class near the top.[2] The **basement** (5.3.2) formed a staging area where participants and animals were prepared for the day's events. Above the basement was a wooden floor covered with sand to absorb blood and provide traction during contests. Elevators from the basement lifted participants and animals to the arena floor through trap doors, creating a dramatic entrance for the spectacles.

colFigure \(\PageIndex{2}\): Interior of Colosseum (CC BY-SA 3.0)

Colosseum

Colosseum (Amphitheatrum Flavium), c. 70-80 C.E.

The **Pantheon** (5.3.3) in Rome was built in 126 CE using **granite**, **tufa**, and **concrete**. The original purpose of the structure is uncertain. Some historians believe it functioned as a temple dedicated to the Roman gods, while others suggest it may have been used as a ceremonial space where the emperor addressed the public. The Pantheon features eight **Corinthian columns** of red granite at the porch entrance, leading up a grand staircase made with yellow marble. The column style reflects classical Greek design, while the interior structure demonstrates Roman architectural innovation.

Visitors enter the **rotunda** and dome through two immense bronze doors measuring 12 by 7.5 meters. At the center of the perfectly round dome is an **oculus**, an opening that allows the only natural light into the building. The **dome** (5.3.4) was constructed using

poured concrete formed into a **coffered ceiling**, which becomes lighter toward the top. The concrete mixture included **tufa** and **scoria (pumice)**, a lightweight volcanic material that helped reduce the weight of the structure. Still standing after nearly 2,000 years, the Pantheon remains a remarkable testament to Roman engineering and building techniques.

Figure \(\PageIndex{3}\): Pantheon (CC BY-SA 4.0)

the Figure \(\PageIndex{4}\): Pantheon dome (CC BY-SA 4.0)

The Pantheon

The Pantheon, Rome, c. 125

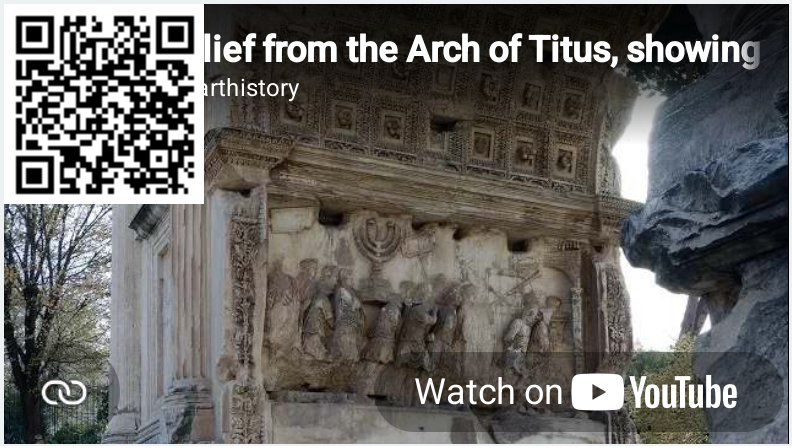
The **Arch of Titus** (5.3.5) was erected in 82 CE to commemorate the death of Titus and celebrate his many victories, including the Siege of Jerusalem. The arch is an example of historical relief and a general model for many triumphal arches, including the **Arc de Triomphe** in Paris. The chariot panel (5.3.6) depicts Titus in his chariot with the goddess Roma, and the other figures represent the people of Rome. The carved panels give an impression of space, while the figures are positioned and shaped in different spatial reliefs; Roman reliefs created this illusion for the first time. “The most historically important element of the Arch’s iconography is the display of spolia from the war, including such sacred vessels from the Jerusalem Temple as the seven-branched Menorah and the Table of the Showbread.”[3]

Figure \(\PageIndex{5}\): Arch of Titus (Public Domain)

Figure \(\PageIndex{6}\): Chariot panel (CC BY-NC-SA 4.0)

Relief from the Arch of Titus

Relief panel showing The Spoils of Jerusalem being brought into Rome, Arch of Titus, Rome, after 81 C.E.



Built in 113 CE to honor the victory of **Emperor Trajan** and Rome in the **Dacian Wars**, **Trajan's Column** (5.3.7) was erected as a war memorial celebrating one of the Roman Empire's most important military achievements. The standing **marble column** rises about 35 meters high and is wrapped with a spiral **frieze** illustrating scenes from the two wars. The detailed narrative includes more than **2,350 figures** carved in **low relief** into the marble as the imagery winds around the column.

Originally, some of the carved soldiers held metal spears and swords that have since disappeared. The approximately **200 meters of continuous carvings** (5.3.8) form a visual record of the Roman army, depicting battles, military organization, and daily life during the campaigns. Each section of the massive column was carved separately and then lifted into place using an extensive **pulley system**. Inside the column is a spiral staircase of **185 steps** leading to the top. The hollow interior helped reduce the overall weight

of the structure while also allowing access to the upper levels. Trajan's Column demonstrates Roman mastery of engineering and sculpture and served to impress the public while commemorating the power and success of the Roman army.

Figure \(\PageIndex{7}\): Trajan's Column (CC BY-SA 4.0)

Figure \(\PageIndex{8}\): Column carvings (Public Domain)

Trajan Column's

Column of Trajan, Carrara marble, completed 113 C.E., Rome Dedicated to Emperor Trajan (Marcus Ulpius Nerva Traianus b. 53 , d. 117 C.E.) in honor of his victory over Dacia (now Romania) 101-02 and 105-06 C.E.

The **Temple of Venus and Roma** (5.3.9) was the largest temple in Rome and was located near the **Colosseum**. It was dedicated to the goddesses **Venus Felix** and **Roma Aeterna**. Construction began in 121 CE under the direction of **Emperor Hadrian** and was completed in 141 CE. The platform for the temple measured about 145 meters long and 100 meters wide, while the building itself was approximately 110 meters long and 53 meters wide. The temple contained two main chambers: one housing a statue of Venus

and the other a statue of Roma. Positioned back-to-back, the chamber of Venus faced the Colosseum, while the chamber of Roma looked toward the **Roman Forum**.

The short side of the temple featured ten white columns, and the long sides had eighteen white columns spaced about 1.8 meters apart. Inside the chamber of Venus was an altar where newly married couples made sacrifices. Nearby stood large statues of **Marcus Aurelius** and **Faustina**. Over time, fires, earthquakes, and looting destroyed much of the original structure. In 630 CE, a pope removed the gilt-bronze tiles from the roof to decorate **St. Peter's Basilica** in Rome, and during the Middle Ages much of the temple's marble was taken for use in other construction projects.

Figure \(\PageIndex{9}\): Temple of Venus and Roma (CC BY-SA 2.0)

Statues

The variety and sophistication of art distinguished the **Roman Empire** during the **Classical Roman period** (100 BCE–315 CE). **Roman sculpture** is generally divided into four categories: **portraits**, **busts**, **equestrian statues**, and **full-length statues**, often representing rulers or important political figures. Many **sarcophagi**, or stone coffins, were richly decorated with sculptures to honor the deceased and emphasize their wealth, status, and achievements.

Reliefs and **historical reliefs** were also common and frequently decorated Roman buildings and monuments. Although the Romans often copied **Greek sculptures**, their approach differed from the Greek ideal of perfect, youthful beauty. Instead, Roman artists focused on representing individuals realistically, highlighting distinctive facial features and signs of age or experience. Roman sculptors based many works on classical Greek models but added stronger emotional expression. The **faces** (5.3.10) in Roman sculpture often appear passionate, determined, regal, and authoritative—qualities intended to communicate the power, dignity, and leadership of the individuals portrayed.

Figure \(\PageIndex{10}\): Menander of Ephesus (CC BY-SA 3.0)

Figure \(\PageIndex{11}\): Statue of Augustus (CC BY-SA 4.0)

Augustus was the commander of the Roman army, and statues commemorating his victories were often placed in public plazas. In the statue **Augustus of Prima Porta** (5.3.11), he is depicted wearing the military armor of the Roman army and raising his right hand as if addressing his troops before battle. His calm and distant expression, along with the carefully draped garments, presents him as a powerful and dignified leader. The stance of the figure recalls the posture of **Mars**, the Roman god of war, emphasizing Augustus's authority and connection to divine power.

Augustus

Augustus of Primaporta, 1st century C.E. (Vatican Museums).

Pottery

The Romans did not produce pottery with the same artistic focus seen in Greek ceramics. Instead, they concentrated on practical **tableware** and small vessels used for serving food and drink. As the Roman population expanded across large geographic regions, the production of **grave goods** also became common, similar to practices in many other ancient cultures. Roman potters did produce more refined ceramics used for dining and entertainment. Much of this tableware was molded rather than painted and decorated with **relief designs**. One of the most widespread types was **red-gloss ware** (5.3.12), known as **terra sigillata**. These vessels were highly fired and ranged in color from light orange to deep red depending on the slip used in production. The decorative patterns often identified the specific workshop and sometimes the approximate date the vessel was made. Although red-gloss ware resembles early **Greek pottery**, the Roman versions were decorated with molded relief scenes instead of painted imagery.

Figure \(\PageIndex{12}\): Red gloss *terra sigillata* ware (1st century BCE – late 2nd century CE, clay) (Public Domain)

Amphorae (5.3.13) were large ceramic vessels used for storing and transporting liquids such as wine, olive oil, and grain. They were made on a **potter's wheel**, forming the main body first. Additional clay coils were added to create the neck, rim, and handles. The interior of the vessel was often coated with a **resin layer** to prevent liquids from leaking or soaking into the clay. Amphorae were commonly stamped or inscribed when the clay was partially dry to record the workshop or location where the vessel was produced. Painted inscriptions on the amphorae often listed the weight and the contents stored inside. A typical amphora (x.x) includes the following parts: **1 – rim, 2 – neck, 3 – handle, 4 – shoulder, 5 – belly (body), and 6 – foot**.

Figure \(\PageIndex{13}\): Roman amphoras (late 2nd century BCE - middle 1st century BCE, clay) (CC BY-SA 3.0)

[1] Retrieved from https://www.turismoroma.it/en/places...atre-colosseum

[2] Retrieved from http://omeka.wellesley.edu/piranesi-...%20higher%20up.

[3] Retrieved from https://www.yu.edu/cis/activities/arch-of-titus

5.4: Nok (700 BCE – 300 BCE)

Definition: Term

Nok – An early Iron Age culture that existed from about 700 BCE to 300 BCE in present-day Nigeria, known for its distinctive terracotta sculptures and early ironworking.

Nigeria – A modern country in West Africa where the archaeological remains of the Nok culture were discovered.

Wattle and daub – A building method using woven wooden sticks (wattle) covered with a mixture of clay, mud, straw, and water (daub) to create walls.

Ritual ceremonies – Religious or cultural activities performed according to established traditions, often connected to spiritual beliefs.

Terracotta – A type of fired clay commonly used to create pottery, sculptures, and architectural decorations.

Stylized – An artistic approach in which figures are simplified or exaggerated rather than realistically represented.

Coil method – A pottery technique in which long rolls of clay are stacked and smoothed together to build the walls of a vessel or sculpture.

Alluvial river mud – Soil and clay deposited by rivers over time, often rich in minerals and commonly used for making pottery and sculptures.

Slip – A liquid mixture of clay and water applied to the surface of pottery or sculpture for decoration or to create a smooth finish.

Burnishing – The process of polishing clay with a smooth tool or stone to create a shiny surface before firing.

Terracotta – Fired clay used to create pottery, architectural decoration, and sculptures.

Almond-shaped eyes – A stylized artistic feature where the eyes are elongated and shaped like almonds, commonly seen in Nok sculptures.

Headdress – Decorative or ceremonial headwear that may indicate status, identity, or cultural tradition.

Mold – A hollow form used to shape materials such as clay so that multiple identical objects can be produced.

Iron-smelting furnaces – Structures used to heat iron ore at very high temperatures in order to extract usable iron metal.

Iron smelting – The process of separating iron from iron ore using heat in a furnace.

Stone tools – Tools made from stone that were shaped or chipped to create cutting edges, used before the widespread use of metal tools.

Civilization – A complex society with organized communities, shared culture, technology, and systems of governance.

Iron tools – Tools made from iron, such as farming implements, weapons, or cutting tools, which are stronger and more durable than stone tools.

Iron technology – The knowledge and techniques used to produce, shape, and use iron for tools, weapons, and other objects.

The **Nok** culture (700 BCE–300 BCE) developed in present-day **Nigeria** in West Africa and disappeared around 300 BCE. The Nok people did not build large cities; instead, they lived in multiple small settlements. Their homes were **wattle and daub huts**, constructed by weaving sticks to form walls and covering them with a mixture of clay, mud, straw, and water. Stones were often used as a foundation for the huts. Some archaeological sites include special areas likely used for **ritual ceremonies**, sometimes featuring a large sculpture placed in the center. Historians also believe these spaces may have served governmental or community functions. The Nok society does not appear to have had palaces or a clearly defined royal elite, and each settlement was likely self-sufficient with nearby farms. Archaeologists have found evidence that the Nok cultivated **millet, legumes, sorghum, and pumpkins**.

The Nok culture is especially known for producing some of the earliest **life-sized terracotta sculptures** (5.4.1) in sub-Saharan Africa. Many of these figures have not survived because of environmental damage, breakage, or looting by treasure hunters. The

surviving human figures are highly stylized, often with exaggerated features and elaborate hairstyles, while the animal figurines tend to appear more naturalistic. Many of the terracotta sculptures were first discovered during mining operations in Nigeria. Later excavations revealed **iron smelting furnaces** in the same locations as the sculptures, dating to the same period, suggesting the Nok were also among the early iron-working cultures in the region.

Figure \(\PageIndex{1}\): Nok Figure (Public Domain)

The Nok were also early makers of iron tools. Iron was found in nearby rocks, and by crushing and heating the rock, the iron melted and was used to form tools and art. They became known for their terracotta sculptures and ironwork. Because of corruption and government chaos, archaeologists have difficulty researching in some African countries. Looting and selling artifacts on the black market are a significant problem. One anthropologist said, "For every ton of earth moved by archaeologists on the Nile, a teaspoon is moved on the Niger."[1]

Researchers believe the **Nok** constructed their sculptures using the **coil method**, shaping the figures from clay taken from nearby **alluvial river mud**, which contained a coarse grain common in the region. Because the clay appears to come from the same source, some scholars believe a central authority may have controlled the supply. The Nok created life-sized human heads and bodies in unusual poses and often decorated them with elaborate adornments. When the sculptures were nearly dry, the figures were coated with **slip** and then **burnished** to produce a smooth, glossy surface. The statues were hollow and included openings that may have helped the clay dry or allowed for the addition of metal jewelry. To fire the sculptures, the Nok covered them with leaves, twigs, and logs and set them ablaze for several hours to harden the **terracotta**.

The figures are recognizable by their large heads and distinctive **triangular or almond-shaped eyes**, often with openings for the eyes, mouth, and nose that create a natural appearance. Many sculptures display elaborate **headdresses or hairstyles**, which may have symbolized status or served as decorative elements. The figures frequently appear in active poses, such as dancing with rattles, standing in rows with ropes around their waists and necks, or playing drums and singing. Each sculpture appears to have been made individually rather than cast from molds. Although many figures were originally **painted**, the colors visible today are not the original ones. The purpose of the statues remains uncertain, and they range in size from small figures only a few centimeters tall to life-sized sculptures.

Figure \(\PageIndex{2}\): Figure on horseback (CC BY-SA 3.0)

Figure \(\PageIndex{3}\): Nok male figure (195 BCE-205 CE, terracotta, 49.5 x 22.2 x 16.8 cm) (Public Domain)

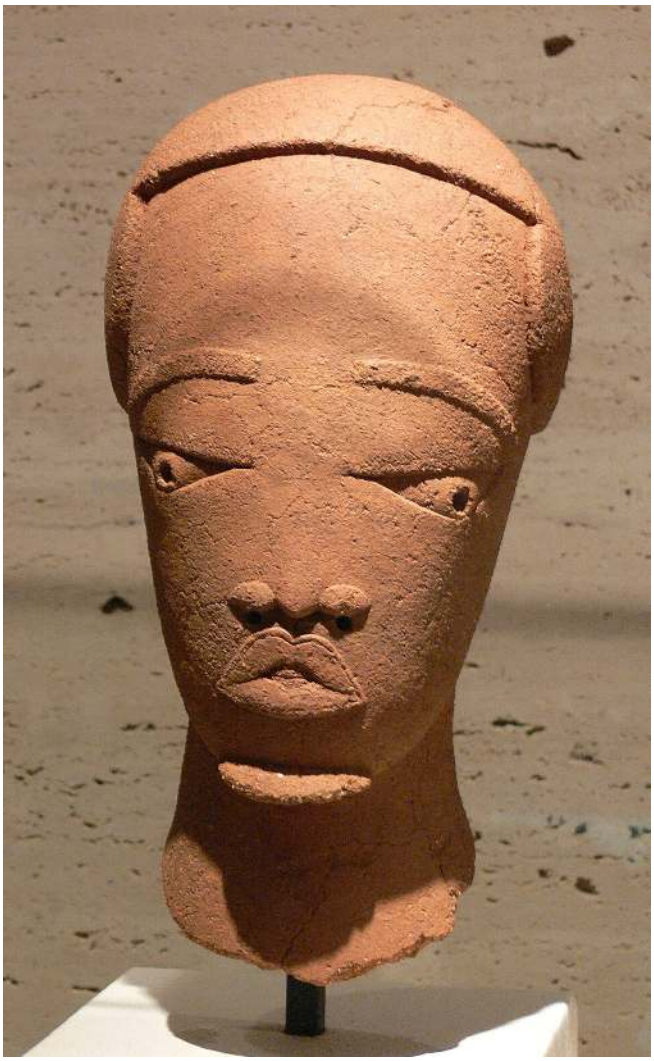


Figure \(\PageIndex{4}\): Nok head (Public Domain)

Figure \(\PageIndex{5}\): Nok sculpture (Terracotta, 54 x 50 x 50 cm) (CC BY-SA 3.0)

Figures (5.4.1) and (5.4.2) are classic examples of the **oversized head** commonly found in Nok sculpture. The top portion of the head begins with normal proportions, while the rest of the face becomes elongated. Even the horse depicted in the sculpture has an oversized head. The two figures appear mostly intact and demonstrate the unusual poses often used by Nok artists. The clay surface on the first figure is very smooth, and the jewelry details are clearly defined. In contrast, the second figure has a rougher surface texture, making the details more difficult to distinguish.

Figures (5.4.3) and (5.4.4) do not display the same exaggerated head proportions, although the heads are still relatively large. Both sculptures are missing significant portions of the original figures. The statue of the man is richly decorated and wears a considerable amount of jewelry. The statue of the woman appears to have a simple headdress with little additional ornamentation. All of the statues feature **almond-shaped eyes**, a characteristic and recognizable feature of Nok sculpture.

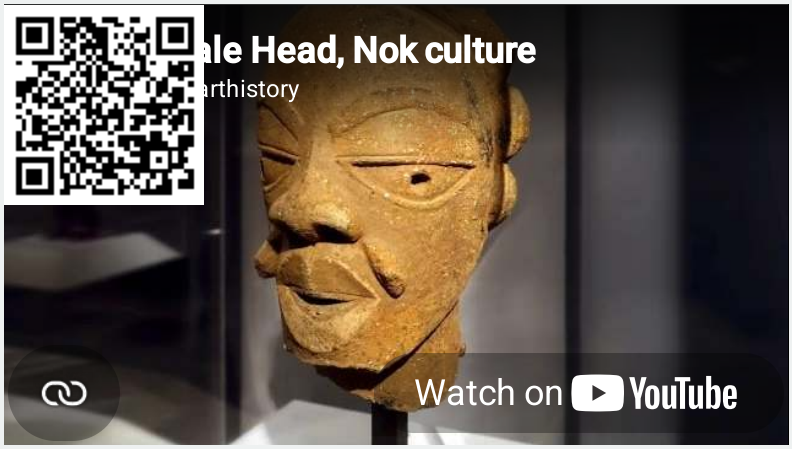
The unusual sculpture (5.4.5) appears intact primarily and is described as; "A circular piece featuring reliefs arranged in successive registers illustrating scenes from daily life. A number of agricultural tasks are depicted: threshing bales of grain, carrying water jars, and preparing foodstuffs. There are also female figures with children. Six figures, three men and three women, depicted on a larger scale, carry an imposing snake (whose head is missing) at arm's length, which forms the upper part of the object. The piece is hollow and forms a sort of neck in the center."[2]

Archaeologists discovered at least thirteen **iron-smelting furnaces** in one Nok village along with artifacts such as weapons and farming tools. However, while the Nok clearly possessed **iron-smelting** technology, they continued to use **stone tools** as well as

metal ones, suggesting that iron materials were limited and not widely available. The Nok are significant because they were one of the few **civilizations** in the world to transition directly from stone tools to **iron tools**without first developing copper or bronze technology. Researchers debate how this technology developed; some believe travelers introduced ironworking to the region, while others suggest the Nok independently developed the technology.

Nok Culture

Male Head, c. 550-50 B.C.E., Nok culture, Nigeria, terra-cotta, 30/5 x 19.1 x 24.1 cm



[1] Retrieved from https://archaeology.org/issues/onlin...ok-of-nigeria/

[2] Retrieved from https://www.quaibranly.fr/en/collect...n-des-sessions

[3] Retrieved from https://education.nationalgeographic...e/nok-culture/

5.5: Qin Dynasty (221 BCE - 206 BCE)

Definition: Term

- **Qin dynasty** – China's first imperial dynasty (221–206 BCE) that established centralized rule.
- **Warring States period** – A time of intense conflict (475–221 BCE) when rival kingdoms fought for control of China.
- **Qin Shi Huang** – The first emperor of a unified China and founder of the Qin dynasty.
- **Provinces and prefectures** – Administrative divisions governed by officials appointed by the central government.
- **Writing system** – A standardized set of Chinese characters used across the empire to unify communication.
- **Weights and measures** – Standardized systems for measuring length, volume, and mass to support trade and construction.
- **Great Wall** – A series of defensive fortifications built and expanded to protect China's northern borders.
- **Burning of books** – The destruction of texts, especially philosophical and historical works, to control ideas and suppress opposition.
- **Terracotta Army** – Thousands of life-sized clay soldiers buried with Qin Shi Huang to protect him in the afterlife.
- **Lintong County** – The location of Qin Shi Huang's tomb complex near Xi'an.
- **Xi'an** – An ancient Chinese capital city near the Terracotta Army site.
- **Mausoleum** – A large and elaborate tomb built to house the remains of an important person.
- **Pits or vaults** – Underground chambers where the warriors and burial objects were placed.
- **Infantrymen** – Foot soldiers who formed the main body of the army.
- **Kneeling archers** – Soldiers shown in a crouched position, prepared to shoot arrows.
- **Chariots** – Wheeled vehicles pulled by horses, used in ancient warfare and transport.

The **Qin dynasty** began after the end of the **Warring States period**, when China was unified into a single state rather than divided among competing kingdoms. Although the dynasty lasted only a short time, it was highly influential in Chinese history. Under **Qin Shi Huang**, China became its first imperial dynasty, lasting from **221 BCE to 206 BCE**. He reorganized the government into **provinces and prefectures**, helping establish a centralized system that influenced later Chinese rule.

Qin Shi Huang also standardized important aspects of daily life, including the **writing system**, **weights and measures**, and **currency**. He expanded and connected **roads**, **canals**, and defensive walls, including early sections of what later became known as the **Great Wall**. These reforms strengthened the empire and improved communication, trade, and military control.

However, the emperor was also known for his harsh rule. He enforced strict laws and suppressed ideas he saw as threats to his authority. Historical accounts describe the **burning of books**, especially works of philosophy and history, and the punishment of scholars who opposed the regime. One of the Qin dynasty's most famous legacies is the discovery of the **Terracotta Army**, a vast collection of life-sized clay soldiers buried with Qin Shi Huang to protect him in the afterlife.

Terracotta Warriors

Located in **Lintong County** (the site of the Qin emperor's tomb complex) just east of **Xi'an** (ancient capital city of China), the emperor took extreme measures to build his **mausoleum** (a large, monumental tomb), (5.5.1) a mound larger than the Great Pyramids in Egypt at 55 meters high and 2000 meters wide, constructed by over 700,000 workers. In 1974, farmers digging a well discovered buried clay fragments, leading to the excavation of the site, which had been hidden for over 2,000 years.

Uncovering the tomb revealed over 8,000 life-size **Terracotta Warriors** (clay soldier sculptures) (5.5.2), along with horses and chariots. Across a 22-square-mile area, archaeologists have uncovered about 600 **pits or vaults** (underground chambers used for burial storage) of different sizes. Two of the pits contained long columns of soldiers, each uniquely detailed in appearance. Some figures represent **armored officers** (higher-ranking military leaders), others **infantrymen** (foot soldiers), and even **kneeling archers** (soldiers posed with bows ready to shoot). One section includes multiple **chariots** (two-wheeled vehicles used in ancient warfare) (5.5.3) drawn by horses and decorated realistically.

Figure \(\PageIndex{1}\): Terracotta Warriors (CC BY 2.0)

Figure \(\PageIndex{2}\): Rear view of warriors (CC BY-SA 3.0)

Figure \(\PageIndex{3}\): Horses and chariot (CC BY-SA 4.0)

The Terra Cotta Warriors

In 1974, farmers digging a well near their small village stumbled upon one of the most important finds in archaeological history – vast underground chambers surrounding a Chinese emperor's tomb that contained more than 8,000 life-size clay soldiers ready for battle. Megan Campisi and Pen-Pen Chen shares the fascinating history of Emperor Qin Shi Huang.

During this period, art began to flourish, and the importance of **scale and proportion** (the size relationship between parts of a figure and to real life) became essential. The **Terracotta Warriors** (life-sized clay soldier sculptures) and horses are almost exactly the size of real people and animals, creating the illusion of a full 8,000-person army. If some figures were smaller, they would

appear out of proportion and lose their visual impact. Even the horses and chariots were life-sized, enhancing the realism and suggesting readiness for battle.

The clay warriors were produced individually, and no two are alike; modern **facial recognition software** (technology used to compare and identify unique facial features) (5.5.4) has confirmed the distinctiveness of each face. The figures were assembled and organized by **rank and position** (military hierarchy and placement), with detailed clothing such as patterned tunics tied with knots. Their hairstyles and headdresses were also carefully crafted and unique.

How the statues were constructed remains theoretical, but most researchers believe artisans used **coiling** (building forms with rolled strips of clay) to shape much of the body, while the arms were attached later. The legs were thick and sturdy to support weight. The torsos were formed using coiling and **slab building** (flattened pieces of clay joined together). Fine details were carved into the surface and left to dry. Arms, hands, and the head were made separately and attached using **clay slip** (a liquid clay mixture used as an adhesive). The head may have been molded or coiled, with facial features added before attachment. Finally, the entire figure was fired in a **kiln** (a high-temperature oven used to harden clay).

Figure \(\PageIndex{4}\): Individual soldiers (Public Domain)

All the warriors, horses, and carriages were **hand-painted** (individually painted by artisans rather than mass-produced) (5.5.5) with hair and beards colored black and clothing decorated in multiple hues using a range of pigments. A layer of **lacquer**(a protective coating made from tree sap) was applied over the paint, creating a hard, glossy surface. This lacquer was derived from the sap of

lacquer trees (trees that produce resin used for coating objects), and it is estimated that about 25 trees were needed to cover a single warrior, or roughly 200,000 trees for the entire tomb complex.

Unfortunately, much of the original color has faded to gray. While some loss occurred over time, most damage happened during **excavation** (the process of uncovering buried artifacts), when exposure to dry air caused the lacquer to curl and flake off. Today, the **Terracotta Warriors** (life-sized clay soldiers buried with Qin Shi Huang) are considered one of the most significant archaeological discoveries of the 20th century.

Figure \(\PageIndex{5}\): Painted warrior (CC BY-SA 4.0)

The section of the site containing the emperor's **tomb** (the burial chamber of Qin Shi Huang) remains buried beneath a forested hill and has never been excavated. Historical texts describe the emperor being buried with great wealth and surrounded by flowing rivers of **mercury** (a toxic liquid metal believed to symbolize rivers in the afterlife). Archaeologists have not opened the tomb due to the challenges of **preservation** (protecting artifacts from damage). When exposed to air, delicate materials such as paper, silk, and textiles can quickly deteriorate. In addition, researchers consider **ethical considerations** (respect for cultural values and human remains), choosing to honor the emperor's final resting place while waiting for better technology to safely excavate the site.

Men of the People: Restorers bring Terracotta Army back to life

The Terracotta Army was discovered in northwest China's Shaanxi Province in 1974. It's part of the mausoleum of Qinshihuang, known as China's first emperor. When the life-sized clay figures were unearthed, most of them were damaged or ruined by either natural factors like floods or human activities. For nearly 50 years, experts have been working to restore the life-sized clay figures. It takes months, or even years to complete the restoration of a single piece. Lan Desheng, a senior restorer, has spent 25 years repairing the Terra Cotta army.

Great Wall of China

For millennia, Chinese rulers initiated various **wall-building projects** (defensive construction efforts) (5.5.6) to protect the country from northern **nomadic peoples** (groups who moved from place to place rather than settling permanently) who frequently sought land and resources. The earliest sections of the wall, dating back about 2,500 years, were constructed using **rammed earth** (a building technique in which layers of soil are compacted to form solid walls). These early walls were built in separate regions, but when **Qin Shi Huang** (the first emperor of unified China) came to power, he began to connect and expand them into a more unified defensive system.

During this period, builders continued to use **wood**, **stone**, and rammed earth as primary materials. Construction relied heavily on **local materials** (resources found near the building site), meaning the wall's appearance varied depending on the region. Workers transported these materials manually, often carrying them on their backs or using shoulder poles. There is little evidence that, during the Qin dynasty, animals were used for transportation. Emperor Qin decreed, "The wall be six horses wide at the top, eight horses wide at the bottom, and five men high."[1]

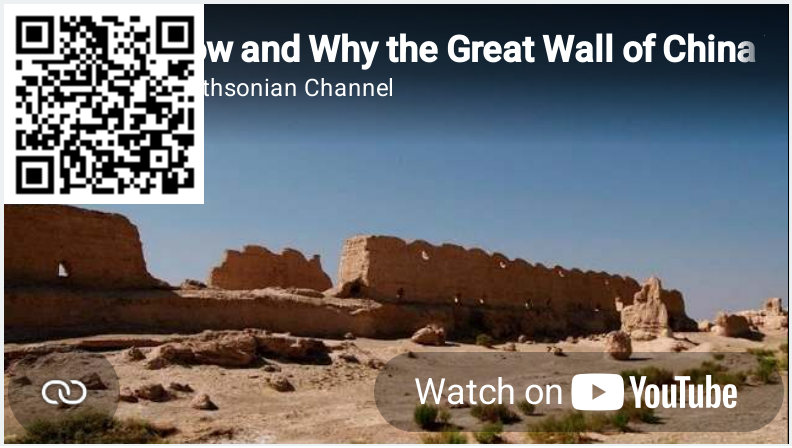
Emperor Qin sent 300,000 soldiers to the north to begin construction of the wall. He also made many crimes punishable by **forced labor** (compulsory physical work as punishment), requiring prisoners to work on the wall. In addition, people were required to participate through a **corvée system** (a form of unpaid labor required by the state), in which each citizen had to spend time building or defending the wall. Individuals of higher status could fulfill this obligation by sending a servant in their place.

Later emperors continued to extend and improve the wall using advancing technology. Many sections were rebuilt with **brick** (fired clay building material) and **quarried granite** (stone cut from the earth for construction), making the structure more durable. During the **Ming dynasty** (1368–1644), emperors added **watchtowers** (elevated structures for observation and defense) and platforms to strengthen military control. Today, the wall stretches approximately 20,000 kilometers. Although it eventually became **obsolete** (no longer effective for defense), it remains a powerful symbol of China's ancient culture and engineering achievements.

Figure \(\PageIndex{6}\): Great Wall of China (CC BY 2.0)

How and Why the Great Wall of China was Really Built

The Great Wall of China was built 2,200 years ago out of military necessity: to combat the Mongolian ancestors of Genghis Khan. Its construction was a marvel of military engineering.



Banliang Coin

After Emperor Qin unified China, he decreed a new coin to standardize the nation's monetary system. The Banliang coin (5.5.7) was made from a bronze round with a square cutout in the center. The circle represents the sky, and the square is the earth; the two together symbolize the completeness of the world. The coins were easy to carry by stringing them on a cord and enabling the coins to be circulated. The emperor ordered the coins to be 'half-ounce' coins. Fabric was an important commodity, and the emperor decreed that "standard-sized bolts of cloth were a medium of exchange, with one length of cloth equaling eleven coins."[2]

Figure \(\PageIndex{7}\): Qin era Banliang coin (221-208 BCE, mostly bronze, 8 grams) (Public Domain)

[1] Retrieved from https://www.asianstudies.org/publica...he-great-wall/

[2] Retrieved from https://www.metmuseum.org/art/collec.../search/717364

5.6: Yayoi Period (300 BCE – 300 CE)

Definition: Term

- **Yayoi Period** – A period in Japan (300 BCE–300 CE) marked by agriculture, metalworking, and social development.
- **Jōmon Period** – An earlier Japanese period known for hunter-gatherer life and early pottery.
- **Wet-rice cultivation** – Farming rice in flooded fields, a key agricultural advancement.
- **Iron and bronze casting** – Techniques used to melt and shape metals into tools and objects.
- **Hunter-gatherers** – People who obtain food by hunting animals and gathering plants.
- **Settled agricultural society** – A community that lives permanently in one place and relies on farming.
- **Pit houses** – Semi-underground homes with thatched roofs and earthen floors.
- **Social classes** – Divisions in society based on wealth, power, or occupation.
- **Clan nations** – Groups organized by extended family ties that function as political units.
- **Yoshinogari Historical Park** – A reconstructed Yayoi-period settlement and major archaeological site in Japan.
- **Bronze knives** – Metal tools or weapons made from bronze.
- **Iron tools** – Implements made from iron used for farming, building, or daily tasks.
- **Bronze mirrors** – Polished metal objects used for reflection and often symbolic or ritual purposes.
- **Glass beads** – Small decorative objects used for jewelry or status display.
- **Pit houses** – Semi-subterranean homes with roofs built over a dug-out space.
- **Raised-floor buildings** – Structures elevated above ground level, often to protect stored goods.
- **Burial mounds** – Earth-covered graves for important individuals.
- **Burial jars** – Large ceramic containers used to hold human remains.

The **Yayoi Period** (300 BCE–300 CE), which followed the **Jōmon Period** (earlier era known for hunter-gatherer culture and pottery), marked a major transformation in Japanese society. During this time, Yayoi people developed **wet-rice cultivation** (farming rice in flooded fields) and mastered **iron and bronze casting** (techniques for shaping metal tools and objects), using resources available from surrounding rock. As a result, people shifted from **hunter-gatherers** (those who rely on hunting and gathering for food) to a more **settled agricultural society** (communities based on farming and permanent homes). They lived in small villages, growing rice along rivers and coastal plains, and built **pit houses** (partially underground dwellings) with thatched roofs and dirt floors. As the population increased, society became more complex, and **social classes** (groups based on status or role) began to form. These developed into **clan nations** (family-based political groups), which often competed and fought for dominance.

Yoshinogari

Yoshinogari Historical Park (5.6.1) (a reconstructed archaeological site from the Yayoi period in Japan) recreates the remains of an ancient settlement. Excavations uncovered **dwellings** (places where people lived), **granaries** (buildings used to store grain), and other structures, along with over 3,000 **tombs** (burial sites), including those of elite families. Yoshinogari is the largest Yayoi site discovered and has yielded many important artifacts, including **bronze knives**, **iron tools**, **bronze mirrors**, and **glass beads** (decorative objects often associated with status and trade).

Initially, the site consisted of a small cluster of buildings, but by the middle of the Yayoi period, a large circular **moat** (a defensive ditch, often filled with water) was constructed around the village, followed later by a second moat for additional protection. The settlement included **pit houses** (semi-underground dwellings) (5.6.2) and **raised-floor buildings** (structures elevated above the ground, often used for storage). The towers allowed guards to see approaching armies (5.6.3) Archaeologists also discovered **burial mounds** (raised earth graves for important individuals) and cemeteries containing **burial jars** (large ceramic vessels used to hold human remains).

Figure \(\PageIndex{1}\): Yoshinogari site recreation (public domain)

Figure \(\PageIndex{2}\): Thatched roof dwellings (public domain)

Figure \(\PageIndex{3}\): Tower (public domain)

Jar burial (the practice of placing human remains inside ceramic vessels) was common in Japan, especially at Yoshinogari. The placement of these jars may reflect **social hierarchy** (the ranking of individuals by status or importance). Groups of jars were often arranged facing one another and could be reopened to accommodate additional burials. Many burial groups included **grave goods** (objects placed with the dead), suggesting varied **funerary rituals** (ceremonial practices associated with death).

For burial, the body of the deceased was typically bent and placed inside an **unglazed jar** (a ceramic vessel without a glossy coating), which was then buried. At Yoshinogari, archaeologists discovered about 2,000 jars arranged along a 600-meter row (5.6.4). Two main styles of burial jars were identified: one type consisted of a jar split into two halves, while the other was a single jar covered with a flat stone lid. The exact purpose or meaning behind these two styles remains unknown.

Figure \(\PageIndex{4}\): Yoshinogari burial jar cemetery (CC BY-SA 4.0)

The Yayoi Period

Breaking down the main points of Japan's second historical era: the Yayoi Period! (~1000 BCE - ~250 CE)

Pottery

Unlike **Jōmon pottery** (earlier Japanese ceramics known for elaborate decoration), **Yayoi pottery** (ceramics from the Yayoi period) was more **functional** (designed for everyday use) and featured simpler shapes. Yayoi vessels included long-necked jars, basins, wide-mouthed pots, and bowls on pedestals, often decorated with **geometric patterns** (repeating shapes such as lines and

triangles). These vessels were likely made using the **coil method** (building forms with rolled strips of clay), and **slip** (liquid clay) was applied to create a smoother surface. Some **ceremonial vessels** (objects used for ritual purposes) were decorated with red pigment. Surfaces were often **burnished** (polished to a smooth sheen) and **incised** (carved with lines), typically in symmetrical designs.

The **storage jar** (5.6.5) (a vessel used to hold food or liquids) was constructed from clay coils and carefully smoothed. Decorative bands of clay encircle the jar, and its rounded bottom required support, either from a separate base or by being placed in the ground. This type of jar likely stored liquids or grains. Another **vessel** (5.6.6) (a general term for a container) has a flat base and a bulbous body that narrows into a turned neck. Its surface is enhanced with red pigment and small incised markings that form a patterned design.

Figure \(\PageIndex{5}\): Storage jar (ca. 100 BCE-100 CE, earthenware with applique, 40.6 x 22.2 x 27.9 cm) (public domain)

Figure \(\PageIndex{6}\): Jar, Yayoi period (100 CE – 300 CE, earthenware with incised decoration, 25.4 x 22.9 cm) (public domain)

Bronze Bells

The origin and use of the **dōtaku** (large bronze ceremonial bells from the Yayoi period) remain uncertain. Many dōtaku have been discovered buried on hillsides, and evidence suggests they were repeatedly **buried and re-excavated**(intentionally placed underground and later dug up), indicating possible ritual use and storage. Their infrequent use suggests they were associated with **agricultural rituals** (ceremonies connected to farming cycles and fertility).

Early dōtaku were made using **carved sandstone molds** (stone forms used to shape molten metal), while later examples used **clay molds** (molds made from fired clay), allowing for more detailed line decoration and larger, thinner forms. The surfaces of the bells were decorated with scenes of animals, farming activities, and insects, reflecting connections to agriculture and the natural world. Most dōtaku range in size from about 10 to 127 centimeters in height.

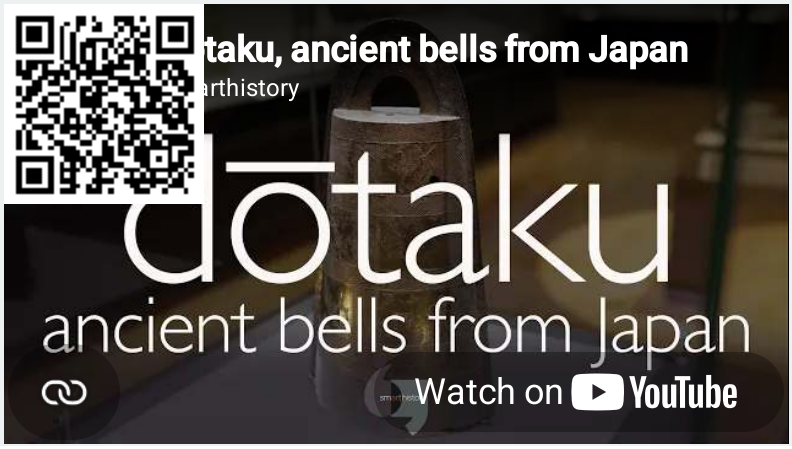
The **dotaku** (5.6.7) has a truncated cone shape with horizontal and vertical bands forming squares. Small, half-circles protrude from each side. The arched top piece was used to hold or hang the bell. The more ornate dotaku (5.6.8) was made in the same style. However, incised images are seen on the bell. Deer appear in the illustrations, although the Yayoi people generally ate wild boar. One record from the Nara period stated, "a magical ritual of sowing seeds in deer blood was used to speed up the germination of rice plants and that people believed that the deer's life force helped in the growth of rice."[1]

Figure \(\PageIndex{7}\): Dotaku (Yayoi period, bronze, 10 x 127 cm) (public domain)

Figure \(\PageIndex{8}\): Bronze bell (Yayoi period, bronze, 126.5 cm high) (public domain)

Dotaku, ancient bells from Japan

Dōtaku (bell-shaped bronze, national treasure), 1st–2nd century B.C.E., bronze, found in Kagawa Prefecture, 42.7 cm high (Tokyo National Museum)



[1] Retrieved from https://www.kyohaku.go.jp/eng/learn/...ouko/45dotaku/

5.7: Nazca (100 BCE – 800 CE)

Definition: Term

- **Nasca** – A pre-Columbian culture that lived on the southern coast of Peru (c. 100 BCE–800 CE), known for irrigation systems and geoglyphs.
- **Cahuachi** – The ceremonial and religious center of the Nasca, located on a desert plateau and active between 1–400 CE.
- **Geoglyphs (Nasca Lines)** – Large-scale designs etched into the desert floor, depicting animals, plants, and geometric shapes, visible from above or surrounding hills.
- **Irrigation System** – A network of canals, wells, and underground aqueducts (puquios) used by the Nasca to bring water to crops in the desert.
- **Puquios** – Underground water channels constructed by the Nasca to access and distribute groundwater in arid environments.
- **Geoglyphs** – Large designs or images created on the ground by removing or arranging stones, best seen from above.
- **Nasca Lines** – The famous geoglyphs created by the Nasca culture in southern Peru, featuring lines, geometric shapes, and animal figures.
- **Desert Pavement** – The dark surface layer of rocks and pebbles that was removed to create the lighter-colored geoglyph designs.
- **Stylized** – Represented in a simplified or abstract way rather than realistic detail.
- **Zoomorphic Figures** – Designs that depict animals, such as birds, spiders, or monkeys.
- **Geometric Shapes** – Non-representational forms such as lines, trapezoids, zigzags, and spirals.
- **Trapezoid** – A four-sided geometric shape with at least one pair of parallel sides, commonly seen in Nasca designs.
- **Petroglyph vs. Geoglyph** – A **petroglyph** is carved into rock surfaces, while a **geoglyph** is created on the ground over a large area.
- **Ritual Pathways** – A theory suggesting the lines were walked during ceremonial or religious practices.
- **Astronomical Alignment** – The idea that some lines may align with celestial events like solstices or star patterns.
- **Fertility Symbolism** – The interpretation that the geoglyphs are connected to water, agriculture, and life cycles in the desert environment.

The **Nasca** were a culture that lived in the desert valleys along the southern coast of Peru and developed into a flourishing civilization. Their central city, **Cahuachi**, was located on a high desert plateau and served as the ceremonial center of the Nasca people between **1 CE and 400 CE**. Although they lived in an arid environment, the Nasca transformed the desert for agricultural use by building reservoirs, wells, and canals to bring water to crops and settlements. They are also well known as builders of the famous **geoglyphs**, enormous designs drawn on the desert floor that are best seen from nearby hills or from the air.

The **Chauchilla Cemetery**, (5.7.1) located in the desert region of Peru, is known for its remarkably preserved mummified human remains. The dry climate helped preserve the bodies, which were placed in **mud-brick tombs** beginning around **200 CE**, with burials continuing until the **ninth century**. Many tombs contained family members or individuals connected by close relationships. Over time, grave robbers removed many of the most valuable burial objects. The bodies were wrapped in richly embroidered cotton textiles, and a resin coating was applied to help protect them from insects and bacteria. Because of the dry conditions, many of the mummies still retain hair and skin tissue.

Figure \(\PageIndex{1}\): Mummies and archeological remains (CC BY-SA 2.5 ES)

Geoglyphs

The desert plains and surrounding hills of southern Peru contain over **400 geoglyphs**, large-scale designs carved into the earth by the **Nasca** people. These **geoglyphs** consist of long lines—some stretching for miles—as well as shapes such as swirls, zigzags, trapezoids, and stylized animal figures. The designs were created by removing the top layer of dark, oxidized stones to reveal the lighter soil beneath, forming shallow grooves about **15 cm deep**. Remarkably, the lines rarely intersect, suggesting careful planning and intentional design.

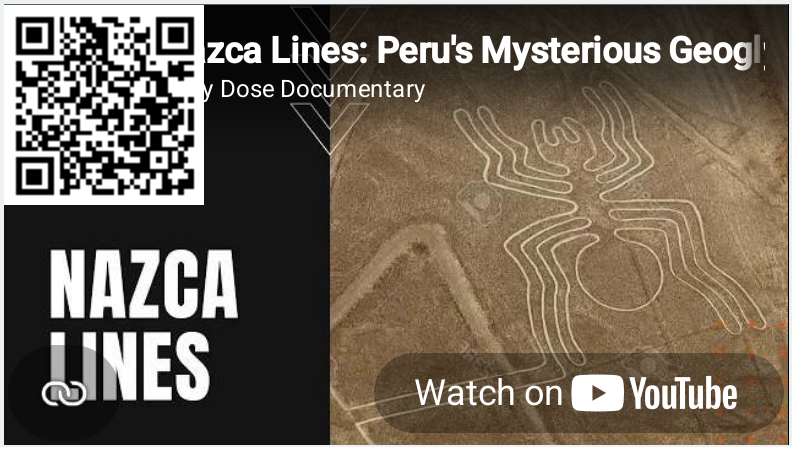
Many of the geoglyphs depict animals, including the famous **Spider** (5.7.2) and **Hummingbird** (5.7.3), rendered in a highly stylized manner. Some figures appear to represent animals not commonly found in the immediate Nasca region, such as parrots or pelicans. This raises questions about **cultural exchange**, environmental knowledge, or symbolic meaning. The purpose of the Nasca Lines remains uncertain. Scholars have proposed several theories, including their use in **ritual practices**, **astronomical alignments**, or as pathways related to **water and fertility ceremonies**. Despite extensive research, the exact meaning and function of the geoglyphs are still unknown, adding to their mystery and significance.

Figure \(\PageIndex{2}\): Spider (CC BY-SA 4.0)

Figure \(\PageIndex{3}\): Hummingbird (CC BY-SA 4.0)

Nazca Lines

Created by ancient Nazca people as long ago as 2000 years, more than 800 lines--sometimes stretching for miles--ancient Nazca Lines form animal, plant and anthropomorphic geoglyphs of debated purpose.



Pottery

The **Nasca** created highly refined **polychrome pottery** depicting animals, plants, people, and supernatural beings. Their vessels often feature detailed hairstyles, elaborate nose ornaments, and richly decorated clothing. Many of these ceramics were used in **ceremonial contexts**, where large gatherings took place. Participants in these ceremonies sometimes took pottery objects home, believing they carried **religious or spiritual knowledge**. Nasca artistic style dominated the region between **1 and 600 CE**.

Nasca potters achieved their vibrant colors by applying **slips**, a mixture of clay, pigments, and water, before firing the vessels. This technique allowed the colors to become permanently fixed during the firing process. Early Nasca pottery featured relatively simple images of animals and plants combined with geometric designs. Over time, these images became increasingly complex and stylized. Many vessels—such as **double-spouted bottles**, vases, bowls, and cups—were decorated with large, bold figures resembling the geoglyphs found in the desert. These designs often depicted **mythical or supernatural creatures**, visually connecting pottery to the broader symbolic world of Nasca culture. Notably, Nasca artists used an exceptionally wide range of colors, exceeding those of other cultures in the Americas prior to European contact.

Certain images were repeated throughout Nasca art. One of the most prominent figures is the **Masked Being**, typically shown as a richly adorned figure with large, wide-open eyes. Much of the face is obscured, except for a prominent nose featuring feline whiskers and an elaborate nose ornament. Often depicted as flying or floating, the Masked Being is sometimes shown holding a severed human head in one hand and a weapon in the other, with additional heads hanging from its body like ornaments—imagery that may relate to ritual practices and beliefs surrounding power, sacrifice, and the supernatural. In this depiction of the Masked Being (5.7.4), the figure holds a plant while devouring its fruit. The same plant sprouts from the mouth of a disembodied head in the back of the Masked Being, suggesting a connection between death and fertility."[1]

The **Nasca** established ceremonial centers where people gathered to participate in ritual activities. **Ceramics** played a prestigious role in these ceremonies and carried important symbolic meanings. Participants often took pottery objects home, believing they embodied **religious or spiritual significance**. Among these objects, **head jars** (5.7.5) held a special and exclusive meaning and were typically owned by elite members of society. In Nasca belief, the head was thought to contain a person's **soul, knowledge, and life force**. Head jars may have symbolized this same concept in ceramic form. These vessels were often decorated with elaborate headdresses, exaggerated eyes, and expressive mouths. The nose was typically modeled in relief, adding a sense of dimension to the otherwise stylized face.

Figure \(\PageIndex{4}\): Bottle with masked figure (200-400 CE, ceramic, slip, 13 x 11.4 cm) (Public Domain)

Figure \(\PageIndex{5}\): Head jar (100-500 CE, ceramic, slip, 19.8 x 15.9 cm) (Public Domain)

The Hidden Language of Clay

Discover the extraordinary world of Nazca pottery—where ancient Peruvians painted their gods, rituals, and myths onto clay with unmatched precision and color. Learn how this stunning art form reveals the secrets of a vanished civilization that spoke through symbols instead of words.

Textiles

Nasca textiles have been remarkably well preserved due to their burial in Peru's arid desert sands, where the dry conditions helped organic materials retain their color and structure. Many textiles were used to wrap the deceased into **mummy bundles**, an important funerary practice. Some of the materials used in textile production were likely obtained through **trade networks**. While cotton was grown in the coastal valleys where the Nasca lived, fibers from camelids—such as **llamas, alpacas, and vicuñas**—came from the high Andes mountains.

The Nasca were highly skilled textile artists, known for their intricate weaving techniques. Yarn spun from alpaca or llama wool, as well as cotton, was woven using a **backstrap loom**, a method still used by artisans today. Clothing reflected both function and status: men typically wore two-part garments, while women wore dresses. Both men and women wore richly decorated **mantles** or shawls draped over their shoulders. The **bag** (5.7.6) was used to carry **coca leaves**, which were chewed in both social and ceremonial contexts. The bag was woven in a single piece using red thread and a technique known as **discontinuous weaving**, allowing for complex patterning. The loose ends of the red threads formed a fringe at the bottom. Seven horizontal bands, woven with yellow, blue, and black threads, depict stylized animal faces. A cord attached at the top allowed the bag to be securely closed.

Figure \(\PageIndex{6}\): Embroidered bag with fringe (7th century, camelid hair, 21.2 x 41.9 cm) (Public Domain)

The **mantle or cloak** (5.7.7) was made from dyed camelid fibers, while the base fabric was woven from cotton on a loom. The design features borders filled with plants and animals surrounding images of human and supernatural beings. A repeated pattern across the textile includes thirty-two faces representing the god known as the **Oculate Being**, a figure associated with **fertility and agricultural abundance**.

Most mantles were larger than this example and likely functioned as **ceremonial garments**. The ninety figures along the border were created using a technique called **needle knitting**, allowing for intricate and detailed imagery. These costumed figures appear to act as intermediaries between worlds and are shown alongside severed human heads, imagery that suggests connections to **ritual practices and sacrifice** within Nasca belief systems.

Figure \(\PageIndex{7}\): Mantle (100-300 CE, cotton, camelid fiber, 170.8 x 84.5 cm) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/art/collec.../search/308570

5.8: Moche (100 CE – 800 CE)

Definition: Term

- **Moche** – A pre-Columbian culture that flourished on the northern coast of Peru (c. 100–750 CE), known for advanced art, agriculture, and engineering.
- **Iconography** – The system of images and symbols used in art to convey cultural beliefs, rituals, and narratives.
- **Naturalism** – A style of art that represents figures and objects in a realistic and detailed manner.
- **Irrigation Canals** – Engineered waterways used to divert river water to agricultural fields, essential for farming in arid environments.
- **Andes Mountains** – The mountain range in western South America that provided water sources for coastal civilizations like the Moche.
- **Ceramics** – Objects made from clay and hardened by firing; Moche ceramics are especially known for their detailed, lifelike forms.
- **Stirrup-Spout Vessel** – A distinctive type of Moche ceramic with a looped handle and spout, often decorated with sculptural imagery.
- **Metalwork** – The craft of shaping and decorating metals such as gold, silver, and copper into tools, ornaments, and ceremonial objects.
- **Regional Variation** – Differences in artistic styles or practices between northern and southern Moche groups.
- **Monumental Architecture** – Large-scale structures such as temples or pyramids built for ceremonial or political purposes.

The **Moche civilization** flourished along the northern coast and inland valleys of Peru between **100 CE and 750 CE**. Rather than forming a single unified empire, the Moche consisted of regional groups that shared a common culture characterized by rich **iconography** and monumental **architecture**. Although they had no written language, the detailed imagery and narratives depicted in their art provide historians with valuable insights into their society, beliefs, and daily life. The Moche developed a highly productive **agricultural system**, using irrigation canals to divert water from rivers flowing out of the Andes Mountains to sustain their crops and population. Their art is noted fo r its **naturalism**, as well as its complexity, color, and expressive detail. Moche communities in different regions specialized in distinct artistic traditions: those in the southern areas were particularly skilled in **ceramics**, while northern groups were renowned for their advanced **metalwork**, including finely crafted objects made from gold, silver, and copper.

Figure \(\PageIndex{1}\): Huaca del Sol (Temple of the Sun) (CC BY-SA 3.0)

The **Moche** left behind two massive pyramids **(5.8.1)**, each rising approximately **50 meters high** and constructed from more than **140 million adobe bricks**. These structures featured multiple stepped levels, sloping (or pitched) surfaces, and ramps that provided access to upper platforms. Rather than true pyramids in the Egyptian sense, they are better understood as **platform mounds** used for ceremonial and administrative purposes. While some burials may have been associated with these sites, many tombs were later disturbed or looted following the Spanish invasion, resulting in the loss of valuable artifacts.

Along Peru's **north coast**, numerous monumental mudbrick complexes were built by the Moche. Archaeologists believe these centers functioned as hubs for **ceremonial activities, political authority, and artistic production**, supporting both religious practices and the creation of highly skilled works in ceramics, textiles, and metal.

Tombs

The tomb of the **Señora de Cao (5.8.2)** is located in the foreground of the site, accompanied by four additional burials believed to be individuals who "accompanied" her into the underworld. **Funerary bundles** filled the wall niches and were also placed around the tombs on the floor. The walls were decorated with stylized images of fish and felines, reflecting important symbolic motifs in Moche culture. Although historians have named her the Señora de Cao, her original name remains unknown.

The **Señora de Cao (5.8.3)** mummy was exceptionally well preserved. Numerous **funerary objects** were discovered in her burial, including textiles, gold jewelry, and elaborate headdresses. Scientific analysis confirmed that she was female and likely died shortly after childbirth. Interestingly, the tomb contained objects typically associated with male elites—such as war clubs, spears, nose ornaments, earspools, and ceremonial regalia—alongside traditionally female-associated items like needles and weaving tools. This combination suggests that she held a position of **high status**, possibly as a political or ritual leader.

Anthropological studies indicate that the woman was approximately **1.48 meters tall** and died around the age of **25**. Evidence suggests she suffered from a dental abscess and died during the **postpartum period**, possibly due to **eclampsia**. Her body was ritually prepared, including being washed with seawater before burial. Also, the hair study allowed us to know that she consumed corn grains and marine products."[1] She had tattoos of snakes and spiders on her body, both images considered necessary for the fertility of the earth and the abundance of water. The tattoos indicated the Señora was associated with spiritual activities.

Figure \(\PageIndex{2}\): Tomb of Señora de Cao (CC BY-SA 2.0)

Figure \(\PageIndex{3}\): Señora de Cao (CC BY 2.0)

Gender and power

The funerary bundle of the Señora de Cao, headdress ornament and six nose ornaments, found in what is now the El Brujo Archaeological Complex, c. 400 C.E., Moche (Museo Cao, Magdalena de Cao, Peru)

The **Lord of Sipán** was buried in a large tomb **(5.8.4)** containing some of the finest examples of Moche **metalwork** and **ceramics** ever discovered. The broader site included thirteen royal tombs that were remarkably undisturbed by looters. Because the artifacts

remained in their original positions, archaeologists were able to accurately associate objects with specific individuals. The man was named the *Lord of Sipán* due to the extraordinary richness of his burial, which included more than **400 objects** made of gold, silver, and turquoise. Several other individuals—including warriors, attendants, and possible concubines—were buried alongside him, likely sacrificed at the time of his death to accompany him into the afterlife.

Analysis of the skeleton indicates that he was approximately **1.63 meters tall** and died in his **thirties or early forties**. His body was adorned with elaborate regalia, including jewelry, a headdress, a face mask, nose ornaments, and earrings made from gold and precious materials. The Lord's **(5.8.5)** attire and adornments clearly signified his elite status and authority. One of the most striking objects is a necklace composed of large beads shaped like peanuts. One side of each peanut is made of gold, while the other is silver, symbolizing the **duality of day and night**, with gold representing the sun and silver the moon. Peanuts themselves were an important agricultural crop, further emphasizing themes of sustenance and life. His elaborate gold headdress served as a powerful symbol of his high rank and leadership within Moche society.

Figure \(\PageIndex{4}\): Tomb of Lord of Sipan reconstruction (CC BY 2.0)

Figure \(\PageIndex{5}\): Lord of Sipan (CC BY-SA 4.0)

The Lord of Sipan

The Lord of Sipan

Gold

The sophisticated culture of the **Moche** produced art that vividly expressed daily life and ceremonial practices through detailed and narrative imagery. Moche artists and metalworkers were highly skilled, creating elaborate objects such as headdresses, chest ornaments, and ritual icons using **gold, silver, and copper alloys**. Their metalworking techniques were advanced; after shaping an object, they often applied a form of **gilding**, sometimes described as depletion gilding, which brought a thin layer of gold or silver to the surface so the object appeared to be made entirely of precious metal. Objects such as the **headdress (5.8.6)** were created through techniques including hammering, crimping, punching, and embossing thin metal sheets, often over molds that allowed for repeated forms. Artists frequently incorporated **semi-precious stones**, enhancing both the visual impact and symbolic meaning of the objects.

Figure \(\PageIndex{6}\): Gold headdress (Public Domain)

The **gold whistle (5.8.7)**, inlaid with small pieces of turquoise, was crafted to resemble a warrior figure. Whistles were likely used in ceremonial contexts, including funerary rites or rituals associated with sacrifice, possibly to communicate with ancestors or the spiritual realm. Music played an important role in Moche ceremonies, with instruments such as drums, rattles, and flutes accompanying these events.

The **nose ornament (5.8.8)** was made from hammered metal sheets and often combined both gold and silver, reflecting the Moche interest in **duality and contrast**. The ornament features serpents with pronounced ears and large teeth, with gold wires attached to circular elements that would catch and reflect light as the wearer moved. These nose ornaments were suspended from the **nasal septum**, often covering the mouth. Worn by individuals of high status, they served as visible symbols of power and authority and were buried with the individual to accompany them into the afterlife.

Figure \(\PageIndex{7}\): Gold whistle (Public Domain)

Figure \(\PageIndex{8}\): Gold nose ornament (c. 390-450 CE, gold, silver, shell, 12.5 x 21.1 x 1.1 cm) (Public Domain)

Pottery

Moche ceramics were typically thin-walled and decorated with painted **slip**. Artists commonly used a limited but effective color palette of cream, red-brown, red-orange, and black. Many vessels were produced using molds, allowing artisans to create multiple versions of the same form and image. Early ceramics depicted humans, animals, plants, and supernatural figures, while later works

incorporated increasingly complex **fine-line drawings**. A distinctive feature of Moche pottery is the **stirrup spout**, shaped like an inverted U, which strengthened the vessel and controlled the flow of liquid. Elegant ceramics were used by both elite and middle-class individuals in domestic, ritual, and funerary contexts, and thousands of such vessels have been discovered.

Portrait head vessels are among the most remarkable Moche ceramics, often representing specific individuals with highly realistic features. The **portrait vessel (5.8.9)** was made using a mold and painted with cream and red slip. The figure wears a head cloth tied under the chin and a geometric-patterned headband across the forehead. The eyes are emphasized with cream-colored slip, creating a striking and lifelike gaze. The vessel is topped with the characteristic stirrup spout.

On the **stirrup-spout bottle (5.8.10)**, detailed fine-line imagery depicts two warriors wearing fox masks. They move across a hilly landscape carrying shields and war clubs, their angled bodies conveying a strong sense of motion and narrative action. Moche potters also created sculptural vessels in the form of birds, particularly owls, condors, falcons, and other birds of prey. **Owl vessels (5.8.11)** were often associated with burial practices and may have symbolically guided the deceased—especially warriors—into the afterlife. The owl is typically depicted with a heart-shaped facial disk and no ear tufts, emphasizing its distinctive features.

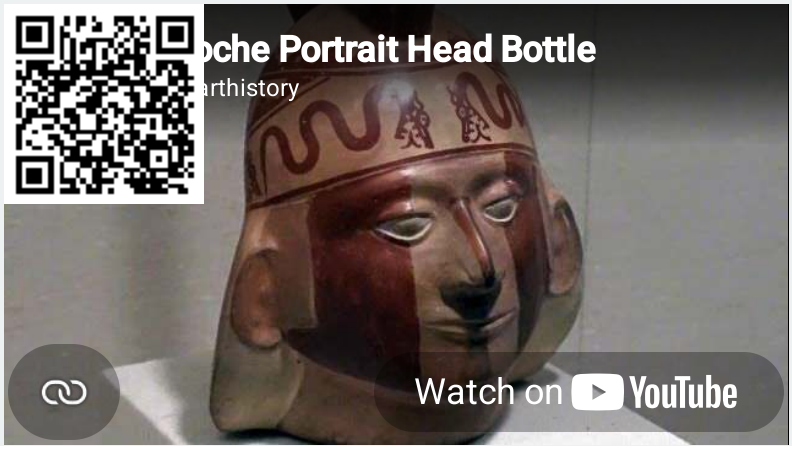
Figure \(\PageIndex{9}\): Portrait vessel (500-8—CE, ceramic, slip, 25.4 x 16.2 x 17.8 cm) (Public Domain)

Figure \(\PageIndex{10}\): Stirrup-spout bottle (500-800 CE, ceramic, slip, 29.8 x 16.5 x 15.2 cm) (Public Domain)

Figure \(\PageIndex{11}\): Stirrup-spout owl (200-500 CE, ceramic, slip, 24.1 x 11.7 x 14.6 cm) (Public Domain)

Moche Portrait Gead Bottle

Portrait Head Bottle, 5th–6th century (Moche culture), Peru, ceramic, 32.39 cm high (The Metropolitan Museum of Art)



[1] Retrieved from https://www.elbrujo.pe/en/lady-of-cao-history

5.9: Conclusion

Many civilizations during this period were shaped by **military power, conquest, and social hierarchy**, and these ideas were clearly expressed through their art. Monumental works often functioned as visual statements of authority, reinforcing the power of rulers and the state. For example, the **Terracotta Warriors of China** were created to guard the tomb of the emperor in the afterlife, symbolizing both military strength and imperial control. Similarly, the portrait statues of leaders in ancient Rome emphasized realism and individual identity, projecting power, experience, and legitimacy.

Across different regions, artistic representation developed along diverse paths. The Greeks pursued **naturalism**, striving to depict the human body with idealized proportions, balance, and anatomical accuracy. In contrast, cultures such as the **Nok** of West Africa and the **Nasca** of Peru created more **stylized and symbolic imagery**, often emphasizing spiritual meaning over physical realism. Exaggerated features, abstract forms, and repeated motifs conveyed ideas about identity, power, and the supernatural rather than lifelike appearance.

These artistic differences reflect broader cultural values and worldviews. In some societies, art focused on the individual and the physical world, while in others it emphasized connections to ancestors, deities, and unseen forces. Materials also played a crucial role in shaping artistic expression. Civilizations worked with the resources available in their environments—such as **clay, stone, metal, and textiles**—developing specialized techniques that defined their artistic traditions.

The accompanying chart highlights the major art forms of each culture alongside the natural materials they used. Together, these comparisons reveal both the diversity of artistic expression across the world and the shared human desire to communicate power, belief, and identity through visual culture.

Civilization	Major Art	Material
Classical and Hellenistic Greek	Statues, temples	Marble, stone, bronze
Roman Empire	Monument sculptures and buildings	Marble, stone
Nok of Nigeria	Human and animal sculptures	Terracotta
Qin Dynasty	Terra Cotta Warriors	Terracotta, paint
Yayoi Period	Vessels, bells	Clay, bronze
Nacca	Geoglyphs, pottery, textiles	Incised rock/earth, clay, wool, cotton
Moche	Pyramids Metal jewelry, vessels	Adobe brick Gold, metals, clay

CHAPTER OVERVIEW

6: The Sophisticated Art of Cultures (200 CE – 1400 CE)

Civilizations have emerged, expanded and collapsed over the last 40,000 years in previous chapters. Civilizations have ascended to power independently due to geographic location (Jomon) or learned to coexist together (Mesopotamia). To become a civilization, people must be capable of social development, sustainable farming/harvesting, obtaining access to water, organizing a government, emanating progress and innovation, and possessing an enlightened culture. The word “civilization” is derived from the Latin “civilis”.

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6.11: Khmer Empire (802 CE – 1431 CE)
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6.1: Overview

Over the past 40,000 years, civilizations have risen, flourished, and declined, reflecting diverse paths of development. Some societies, such as the Jomon, emerged independently due to geographic isolation, while others, like those in Mesopotamia, developed through interaction and coexistence with neighboring groups. A civilization is typically defined by key characteristics, including **complex social structures**, **sustainable agriculture**, **organized systems of governance**, and the presence of a **sophisticated cultural tradition**.

> ***The word "civilization" is derived from the Latin "civilis".***

This period produced an explosion of sophisticated and beautiful artwork across worldwide civilizations—art that conveyed a sense of completeness, pleasure in viewing, and cohesiveness. Saint Mark's Basilica displays unity with symmetrical balance radiating from the front doors and large central dome, while also demonstrating variety through the use of sculpture on the façade and the diversity of colors and materials used during construction. The basilica also features repeated arches and domes, contributing to a grand appearance when approached from afar. This **illusion of grandeur** may have been intended to impress or even intimidate viewers.

Paint in this period was a combination of a **binder** and **pigment**, mixed to form a liquid that dries as a solid. **Egg tempera** was the standard medium, made from egg yolk, water, and mineral pigments. These minerals were sourced directly from the earth and shaped into sticks before being mixed with the egg yolk. A new technique, **encaustic painting**, emerged as early as the 1st century BCE, combining wax with pigment to create a rich, durable surface. Some cultures used encaustic painting to create vivid portraits on wooden panels, which were then attached to mummies wrapped in linen, producing remarkably lifelike images of the deceased.

During the **Romanesque** and **Gothic** periods, **vellum** was the primary material used for books and scrolls. Smooth, durable, and typically white, vellum provided an excellent writing surface. The term originates from the Latin *vitulinum*, meaning "made from the calf." Because vellum was a limited and labor-intensive material, written works were generally reserved for the **elite and clergy**.

Making Manuscripts: Vellum

What material did scribes use instead of paper for the pages in their books? Patricia Lovett discusses how animal skins were selected and prepared for use in medieval manuscripts.

Paper was invented in ancient China but did not become widely used in Europe until the 14th century. Paper was typically made from linen rags that were left to decompose in large vats of water, then crushed into pulp, poured into molds, and left to dry. The result was large sheets suitable for use in the newly invented **printing press**. Because paper was relatively inexpensive compared to vellum, it allowed information to be distributed more broadly.

Brush-and-ink artwork originated in China and Japan before spreading to other parts of the world. Artists crafted bamboo brushes with fine tips and created ink from charred wood, adding water to achieve the desired flow and consistency. **Calligraphy** became a significant art form during the Song Dynasty. In Europe, **iron gall ink** was widely used from about 500 CE to 1800 CE and became

the standard for writing and drawing. This purple-black ink was made from tannic acids and iron salts derived from plant materials. **Dip pens** were commonly used to transfer the ink from the container to the paper for writing and illustration.

Appreciating Chinese Callifgraphy

Learn more about the art of Chinese calligraphy.

Linen is made from flax plant fibers and is known for its absorbency and ability to remain cool in hot weather. **Wool**, produced by shearing animals such as sheep, llamas, or yaks, is woven into textiles that retain warmth even when wet. **Cotton** has been cultivated since around 4500 BCE and used for clothing and weaving; it became a common fabric during the Middle Ages and was typically handwoven on wooden looms. **Silk** is produced from the cocoon spun by the silkworm, which is processed into thread and woven into fine fabric. China was the first to develop silk production and traded it extensively with other civilizations, giving rise to the Silk Road.

Sustaining the Acient Chinese art of sericulture and sild craftsmanship

Sericulture originated in China and is a cultural symbol of the nation. With a history of more than 5,000 years, silk-making is a lengthy and complicated process which includes planting mulberry, raising silkworms, unreeling silk, making thread, weaving fabric, dyeing and embroidery. In 2009, sericulture and silk craftsmanship joined the UNESCO's Representative List of the Intangible Cultural Heritage of Humanity.

Jade is a metamorphic stone composed of silicate minerals. Typically light green when carved, jade was used to create jewelry, daggers, and ornamental sculptures and was highly valued due to its rarity and difficulty to work. In civilizations with access to

jade, these objects were often reserved for the **elite** and held particular significance in **Mesoamerican cultures**.

Civilizations in *The Sophisticated Art of Cultures (200 CE – 1400 CE)* continued to grow and used many different varieties of resources to develop and create their artwork, leaving outstanding examples of their capabilities and artistic styles.

Civilization	Approximate Time Frame	Starting Location
Late Roman Empire	3rd C – 6th C	Mediterranean Sea Countries
Byzantine	330 – 1453	Constantinople
Islamic Golden Age	mid 7th C – mid 13th C	Saudi Arabian Peninsula
Viking	Late 8th C – late 11th C	Scandinavia
Romanesque	1000 – 1150	Western Europe
Gothic	12th C – end of 15th C	France
Igbo	10th C – 13th C	Nigeria
Djenne	9th C – 15th C	Mali
Gupta Period	320 – 550	India
Khmer Empire	802 - 1431	Cambodia
Song Dynasty	960 – 1276	China
Asuka, Nara, Heian Periods	538 – 1185	Japan
Rapa Nui	7th C est. – ongoing	Rapa Nui Island (Easter Island)
Ancestral Puebloans	700 – 1300	Southwest United State
Mayan Classic Period	250 – 1539	Yucatan Peninsula
Incan Empire	Early 12th C – 1572	Peru
Aztecs	14th – 16th	Mexico

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6.2: Late Roman Empire (3rd C – 6th C)

Definition: Term

- **Roman Empire**: A powerful ancient empire centered in Rome that controlled much of Europe, North Africa, and the Middle East from about 27 BCE to 476 CE (Western Empire).
- **Christianity**: A monotheistic religion based on the life and teachings of Jesus Christ that spread throughout the Roman Empire, especially after the 4th century CE.
- **Tetrarchy**: A system of government established by Diocletian in which four rulers shared control of the Roman Empire to improve administration and defense.
- **Constantinople**: The capital city established by Constantine the Great (formerly Byzantium), which became the center of the Eastern Roman (Byzantine) Empire.
- **Byzantine Empire**: The eastern continuation of the Roman Empire after the fall of the Western Empire, centered in Constantinople and lasting until 1453.
- **Pantheon**: A collection or group of gods worshipped in a polytheistic religion, such as that of ancient Rome.
- **Aqueduct**: An engineered structure designed to transport water over long distances, often using elevated channels.
- **Amphitheater**: A large, open-air structure used for public events such as gladiator games and performances (e.g., the Colosseum).
- **Paganism**: Religious beliefs and practices that involve multiple gods and were common in the Roman Empire before the rise of Christianity.
- **Porphyry**: A dense, purple-colored stone used in Roman imperial art and architecture, symbolizing power and status due to its rarity and difficulty to carve.
- **Inhumation**: The practice of burying the body, rather than cremating it.
- **Tufo**: A soft volcanic rock commonly used in ancient construction and carving.
- **Fresco**: A painting technique where pigment is applied to wet plaster so the image becomes part of the wall.
- **Mosaic**: An image created by assembling small pieces of colored glass, stone, or tile.
- **Iconography**: The use of symbols and images to represent ideas, beliefs, or religious concepts.
- **Basilica**: A large building used for Christian worship, often with a central nave and side aisles.

One of the most powerful empires in history was the Roman Empire, which at its height ruled much of the Mediterranean region. By the end of the second century CE, it reached its greatest territorial extent. The Romans were renowned for their engineering, constructing roads, aqueducts, sewers, and monumental structures such as amphitheaters. Roman religion centered on a pantheon of gods; however, they often allowed conquered peoples to maintain their own cultural and religious traditions. Since the second century BCE, Jewish populations lived under Roman rule while preserving their language and beliefs. By the fourth century CE, **Christianity** began to spread widely throughout the empire.

In 284 CE, Diocletian became emperor and reorganized the empire by dividing it into eastern and western regions. He established the **Tetrarchy**, a system of rule shared by four leaders. This system was short-lived. Constantine the Great eventually consolidated power and reunified the empire. He moved the capital to Constantinople as Rome's influence declined. Invasions by groups such as the Huns and Visigoths further weakened the empire, contributing to its transformation into the Byzantine Empire. Over time, **Christianity** became increasingly dominant, shaping the empire's religious and cultural identity.

There are many theories explaining the empire's decline. One suggests that shifting the capital to Constantinople weakened Rome's political importance, while repeated external invasions accelerated its collapse. The vast size of the empire made it difficult to defend, and internal tensions—including the transition from pagan traditions to **Christianity**—further destabilized Roman society, particularly after Constantine's conversion.

Portraits of the Four Tetrarchs

Tetrarch comes from the Greek words meaning "four rulers." The sculpture **The Four Tetrarchs** (6.2.1) represents Diocletian and his three co-rulers, who governed the Roman Empire under the system known as the Tetrarchy. The figures are shown in a close, unified embrace, symbolizing harmony and shared power—although this unity was short-lived. The sculpture is carved from **porphyry**, a hard, purple stone associated with imperial authority and typically reserved for elite use. Today, the sculpture is attached to Saint Mark's Basilica, where it was likely brought from Constantinople.

Figure \(\PageIndex{1}\): *Portraits of the Four Tetrarchs* (305 CE, porphyry, 131.0 cm) (CC BY-SA 3.0)

Portraits of the Four Tetrarchs

Portraits of the Four Tetrarchs, from Constantinople, c. 305, porphyry, 4' 3" high (St. Marks, Venice).

VIDEO: https://www.youtube.com/watch?v=Dui5V8TZYbE

Colossus of Constantine

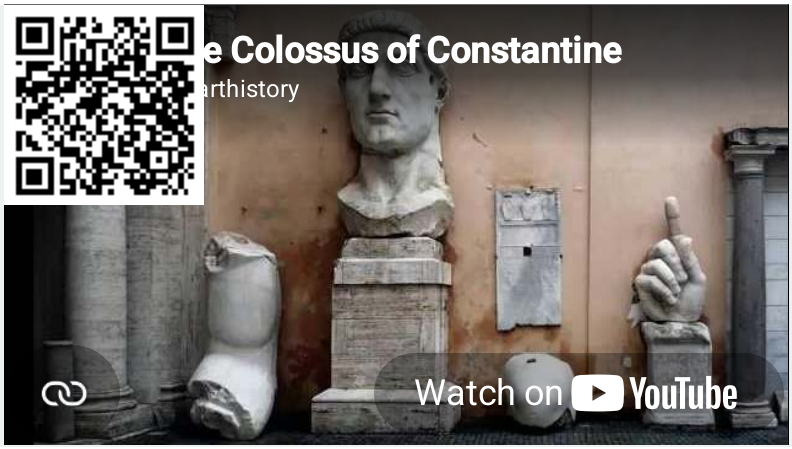
The monumental body parts are the remaining sections of the original Colossus of Constantine. "The head alone is over eight feet (approx. 2.5 meters) tall, and the statue would have measured over 40 feet (12 meters) in height. In its original form, the statue represented the Emperor Constantine seated on an imperial throne, with his right arm raised and pointing towards the sky."[1] The original pose was like other seated statues, including the statue of Abraham Lincoln in Washington, D.C. It was made of white marble, and the face had smooth cheeks and deep-set eyes. From the original sculpture, only two feet, a kneecap, an arm part, and a chest portion remain with the head. The parts were realistic, with bulging muscles, visible veins, and delicate toenails. The remaining hand has the index finger pointing skyward, perhaps to the heavens.

The Colossus of Constantine (6.2.2) was initially located in the Basilica Nova, a secular building used for court proceedings, not a religious facility. The fragments were found during the Renaissance when Europeans visited Rome to find artifacts. The statue is one of the most significant works in Rome.

Figure \(\PageIndex{2}\): Colossus of Constantine (312-15 CE, marble) (CC BY-SA 2.5 ca)

The Colossus of Constantine

The Colossus of Constantine, c. 312-15 (Palazzo dei Conservatori, Musei Capitolini, Rome).



Catacombs

During the establishment of **Christianity**, catacombs became important spaces for burial and the display of religious imagery. Several catacombs throughout Italy were originally underground burial sites for Jewish communities, later used by the growing Christian population beginning in the 3rd century. Romans had traditionally practiced cremation, storing ashes in urns; however, as **inhumation** (burial of the body) became more common, extensive underground chambers were carved into soft **tufo** rock. These tunnels provided both burial spaces and locations for religious gatherings and artistic expression.

The Catacombs of Callixtus (6.2.3) were built along the Appian Way as an official Christian cemetery. Covering approximately fifteen hectares and extending four levels about twenty meters underground, the site contains the tombs of sixteen popes and is sometimes referred to as the “Little Vatican.” Historians estimate that nearly half a million individuals are interred there.

Within the tombs, artwork was primarily created using **fresco** (6.2.5) techniques, sometimes combined with **mosaics**, both long-established artistic processes. The catacombs were also the birthplace of early **Christian iconography**, including symbolic imagery such as scenes representing the Eucharist.

The Catacombs of Domitilla (6.2.4) extend over seventeen kilometers and served as another major Christian burial site. These subterranean passageways feature wall niches and are decorated with frescoes (6.2.6) depicting Christian themes. The soft limestone walls made carving relatively easy. The site also includes a **basilica** used for religious ceremonies. One notable fresco depicts Saint Petronilla guiding Veneranda, a deceased woman, toward paradise.

Figure \(\PageIndex{3}\): Catacombs of Callixtus (CC BY-SA 3.0)

Figure \(\PageIndex{4}\): Catacombs of Domitilla (CC BY-SA 3.0)

Figure \(\PageIndex{5}\): Fresco in Catacombs of Callixtus (Public Domain)

Figure \(\PageIndex{6}\): Fresco in Catacombs of Domitilla (Public Domain)

Gold glass (6.2.7) was another common decorative element used as grave markers. These intricately designed glass vessels were created by placing **gold leaf** between layers of glass. Often, the design featured a portrait of an individual or family. After a person's death, the gold image was cut from the vessel and used to mark the grave. Gold glass artifacts are most commonly found in the **catacombs**, where they served as tomb ornaments.

Figure \(\PageIndex{7}\): Gold glass (Public Domain)

Catacomb of Priscilla, Rome

Catacomb of Priscilla, Rome, late 2nd century through the 4th century C.E.

Pottery

The **terracotta** jug (6.2.8) has a narrow mouth and a single handle, a form that made it practical for pouring liquids such as water, oil, or wine. The surface is decorated with relief imagery, including a human figure, animals, and leafy motifs, all carefully molded into the clay before firing. These decorative elements not only enhanced the visual appeal of the vessel but also reflected the artistic traditions and symbolic imagery common in Roman North Africa. This region was well known for its thriving pottery industry, producing large quantities of functional and decorative ceramics that were widely exported across the Roman Empire, demonstrating the interconnected trade networks of the time.

The vase (6.2.9), discovered in France, represents a different artistic tradition and material process. It was created using **champlevé enamel** on a **copper alloy** base, a technique that required both precision and technical skill. The artisan first carved or recessed broad lines and shapes into the metal surface. These recessed areas were then filled with powdered glass of various colors. When the object was fired in a kiln, the glass melted and fused to the metal, creating a smooth, durable, and vividly colored surface that contrasted with the exposed metal outlines. This process allowed for intricate decorative patterns and was particularly valued for its richness and durability.

The vase was excavated along with other Roman artifacts, indicating its role within a broader material culture of wealth and craftsmanship. The use of enamelwork highlights the Romans' ability to adapt and refine techniques from earlier cultures while contributing to the development of decorative arts in Europe. The **champlevé** technique did not disappear after antiquity; instead, it experienced a resurgence in popularity during the Middle Ages, particularly in religious objects and luxury items, demonstrating the lasting influence of Roman artistic innovations.

Figure \(\PageIndex{8}\): Terracotta jug (220-250 CE, terracotta, red slip, 15.4 cm) (Public Domain)

Figure \(\PageIndex{9}\): Vase (250-300 CE, champlevé enamel, copper alloy, 12.3 x 11.8 cm) (Public Domain)

[1] Retrieved from https://smarthistory.org/the-colossus-of-constantine/

6.3: Byzantine (330 CE – 1453 CE)

Definition: Term

Byzantine period: The time of the Eastern Roman Empire (330–1453 CE), centered in Constantinople, known for its strong connection to Christianity and distinctive artistic style.

Byzantine art: A style of art focused on religious themes, characterized by mosaics, gold backgrounds, stylized figures, and an emphasis on spiritual rather than realistic representation.

Constantinople: The capital of the Byzantine Empire (modern-day Istanbul), a major center of trade, culture, and religion.

Hagia Sophia: A massive church built in Constantinople in 537 CE, famous for its dome and elaborate mosaics; one of the greatest achievements of Byzantine architecture.

Mosaics: Images created by arranging small pieces of colored glass, stone, or tile (tesserae) to form detailed pictures, often used in churches.

Crusades: A series of religious wars (11th–13th centuries) led by European Christians to reclaim sacred lands in the Middle East; they also impacted the Byzantine Empire.

Fourth Crusade (1204): A crusade that resulted in the sack of Constantinople, severely weakening the Byzantine Empire.

Ottoman Turks: A powerful group who established the Ottoman Empire and captured Constantinople in 1453, ending the Byzantine Empire.

Byzantine Empire: The Eastern continuation of the Roman Empire, lasting from 330 to 1453 CE, known for preserving Roman law, Greek culture, and Christian traditions.

Gold background: The use of gold in the background of artwork to symbolize divine light and a heavenly realm rather than a natural setting.

Hierarchical style: A visual system where the most important figures are shown larger or more prominently than others.

Mosaic: An image made from small pieces of colored glass, stone, or tile arranged to form a picture, widely used in Byzantine churches.

Portable art: Small artworks, such as icons, that can be easily moved and used for private devotion.

In 330 CE, **Constantine the Great** was the Holy Roman Empire leader and moved the capital of Rome to Byzantium, which he renamed Constantinople after himself. The new “Roman Capital” signified the beginning of the Byzantine period extending from 330 CE as Christianity grew and replaced the Roman Empire until the fall of Constantinople in 1453 CE. Some eastern orthodox religions still use Byzantine art forms, and excellent examples remain today across Europe and into Western Asia.

The artistic influence of the **Byzantine period** spread across the Mediterranean world, including Egypt and North Africa, and continued into the **7th century** and beyond in some regions. Important examples of Byzantine architecture survived, including portions of the **Great Palace in Constantinople** and the magnificent church of **Hagia Sophia**. Byzantine art was primarily centered on **religious expression**, and its churches were renowned for their brilliant **mosaics**, which created a spiritual and awe-inspiring environment for worshipers. By the **13th century**, the **Crusader invasions**, especially the **Fourth Crusade and the sack of Constantinople in 1204**, severely weakened the Byzantine Empire and disrupted its government. Although the empire continued for nearly two more centuries, it never fully recovered. The final collapse came in **1453**, when the **Ottoman Turks captured Constantinople**, bringing an end to the **Byzantine Empire**, the eastern continuation of the Roman Empire.

Saint Mark’s Basilica

Architecture and art flourished during the **Byzantine period** as the empire’s wealth increased. One of the most important aspects of Byzantine art was the use of **icons**, images of holy figures created for veneration. Byzantine architects transitioned from flat or gabled (“A”-shaped) roofs to the use of **domes** (6.3.2), often incorporated into the **cross-in-square plan**, a defining feature of church design during this period. The curved and vaulted ceilings provided ideal surfaces for **frescoes** and **mosaics**, which were arranged according to a carefully planned **iconographic scheme**. The interior of the church became a unified visual and spiritual

environment. Typically, a commanding image of **Christ Pantocrator** appeared at the center of the dome, symbolizing his authority over the universe, surrounded by angels and saints, while ordinary people were depicted in the lower zones.

Figure \(\PageIndex{1}\): Saint Mark's Basilica (Public Domain)

Saint Mark's Basilica (6.3.1) in Venice is an excellent example of Byzantine influence in architecture. The church features multiple smaller domes rather than a single large dome and is richly decorated with shimmering gold mosaics covering its ceilings. The concept of **hierarchical scale** was also central to Byzantine art, where the most important figures—such as Christ or the Virgin Mary—are depicted as larger or positioned higher than other figures. This visual system emphasized spiritual importance and remained influential in art for centuries.

Figure \(\PageIndex{2}\): St. Mark's interior dome (Public Domain)

Byzantine art became the dominant style of early Christian visual culture, emphasizing spirituality over naturalism. Artists deliberately **de-emphasized individual features**, standardizing faces to convey timeless, universal religious ideals rather than specific identities. Figures often appear **flattened** (6.3.3), with little sense of depth or three-dimensional space. Drapery is rendered with **linear patterns and minimal shading**, giving garments a stylized, almost weightless appearance. Rather than focusing on physical realism, Byzantine artists transformed the human form into something **spiritual and ethereal**, often enhanced by the use of **brilliant colors and gold backgrounds**. Faces are characterized by **large, expressive eyes and an intense, penetrating gaze**, creating a solemn and otherworldly presence.

This shift marks a clear departure from the naturalism of **Classical Greek and Roman art**, moving instead toward a more **abstract and symbolic style**. During the Byzantine era, the production of large-scale sculpture declined significantly, partly due to religious concerns about idolatry. Instead, artists focused on **smaller, portable works**, such as icons, as well as **paintings and mosaics**. Although much Byzantine art was created for churches, smaller devotional images were also produced for **private worship**, particularly among wealthy individuals.

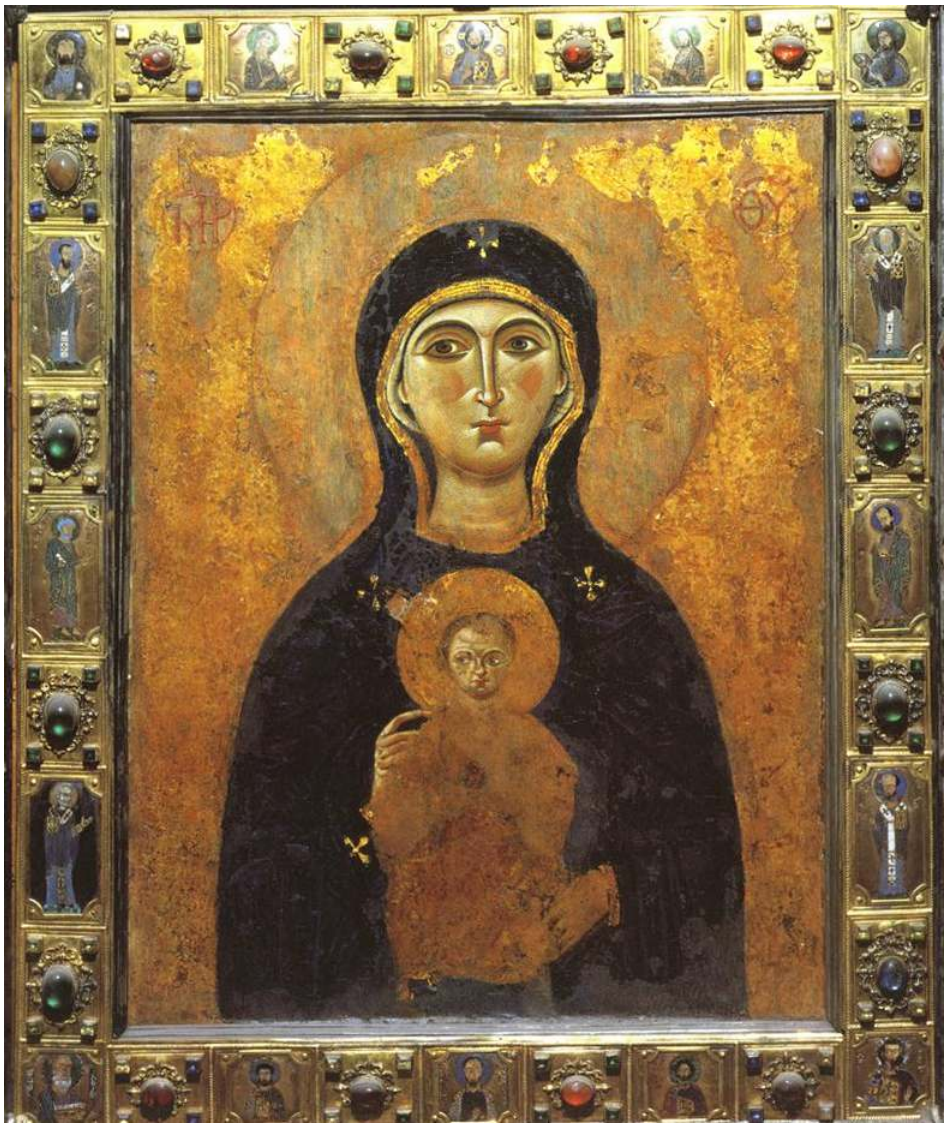
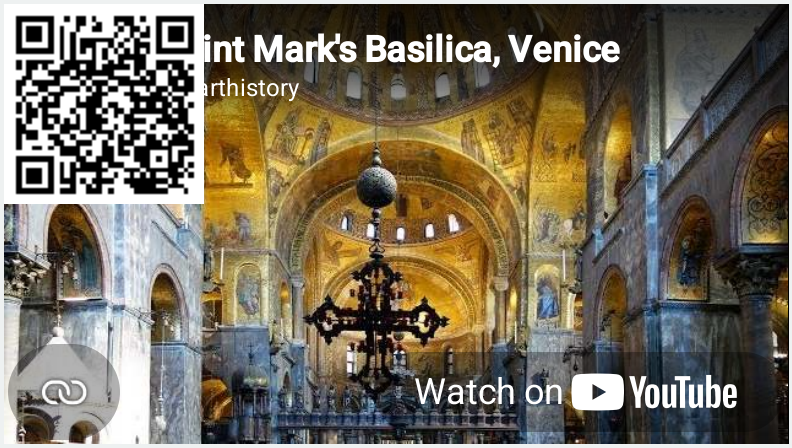


Figure \(\PageIndex{3}\): Madonna Nicopeia nella cappella della Madonna Nicopeia giunta a Venezia dopo la Quarta Crociata (1204) (Public Domain)

Saint Mark's Basillica, Venice

Saint Mark's Basilica, Venice, begun 1063 and Anastasis (The Harrowing of Hell) mosaic, c. 1180-1200, Middle Byzantine.



Hosios Loukas Monastery

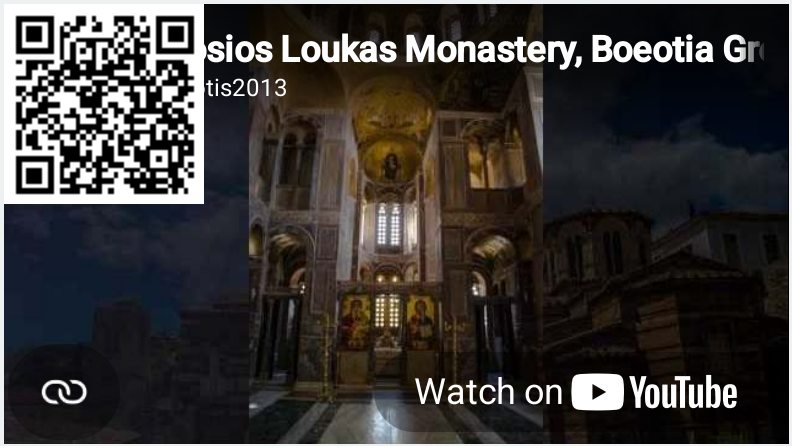
Clinging to the cliffs in Greece, the **Hosios Loukas Monastery** (6.3.4) is a remarkable example of **Middle Byzantine architecture**. Built with the support of wealthy patrons, the monastery reflects the strong connection between religious devotion and artistic production during this period. The church features **stone construction and domed roofs**, which symbolically create a visual path—or spiritual ladder—toward heaven. Inside, the soaring ceilings are covered with **iconic mosaics** (6.3.5), forming a unified decorative and spiritual environment. Figures are depicted with **large, wide, staring eyes**, conveying intense spirituality and a sense of solemn austerity. The mosaics at Hosios Loukas were highly innovative and influenced later Byzantine art. Artists used **tiny tesserae** (small pieces of glass or stone) to create a refined, almost **painterly effect**. The compositions are often simplified, with minimal background elements, focusing attention on the sacred figures. Draped garments and shimmering **gold backgrounds** emphasize the divine realm rather than the physical world.

Figure \(\PageIndex{4}\): Hosios Loukas Monastery (CC BY-SA 4.0)

Figure \(\PageIndex{5}\): Mosaic ceiling (Public Domain)

Hosios Loukas Monastery, Boeotia Greece

One of the best preserved byzantine monasteries in Greece, is the byzantine monastery of Hosios Loukas in Boeotia, Greece. The Monastery, located near the village of Distomo on the hills of Helicon mountain, has survived many generations since its foundation by the hermit St. Loukas in 953 A.D. Apart from being among the few monasteries that survived more than 1000 years, the architecture of the monastery as well as its frescoes are unique. It is by far, a magical journey into history and in times where art and culture flourished.



Mosaics

When the emperor **Constantine** moved the capital of the Roman Empire from Rome to **Constantinople**, Christianity expanded while the worship of Greco-Roman gods declined. This religious shift significantly changed the focus of art. Early Christian churches were constructed and richly decorated with **mosaics** and **icons**, which served as visual narratives to teach Christian beliefs and practices to a largely illiterate population. Byzantine art emphasized the **spiritual and unseen world** rather than physical reality. The naturalism of earlier classical traditions was replaced by **flattened figures, symbolic imagery, and a sense of mystery and transcendence**.

The **Basilica of San Vitale** is an important example of Byzantine art and architecture. Its mosaics reflect the influence of Emperor **Justinian I**, (6.3.6) who sought to unify religious and political authority. In one well-known mosaic, Justinian stands at the center wearing a **purple imperial robe**, symbolizing power. To his left are clergy, and to his right are members of the administration. This

arrangement emphasizes his authority over both church and state. The gold background enhances the sense of divinity and imperial power, while geometric borders frame the figures and reinforce their importance.

Another key image in San Vitale is the **Lamb of God** (6.3.7), located in the ceiling. The lamb symbolizes **Christ as a sacrificial figure**. Angels surround and support the lamb, while animals such as rams, stags, and peacocks appear nearby, each carrying symbolic meaning. The use of **gold tesserae and rich polychrome colors** creates a luminous, otherworldly environment, transforming the interior into a vision of the heavenly realm.

Figure \(\PageIndex{6}\): Justinian I in mosaic (CC BY-NC-SA 2.0)

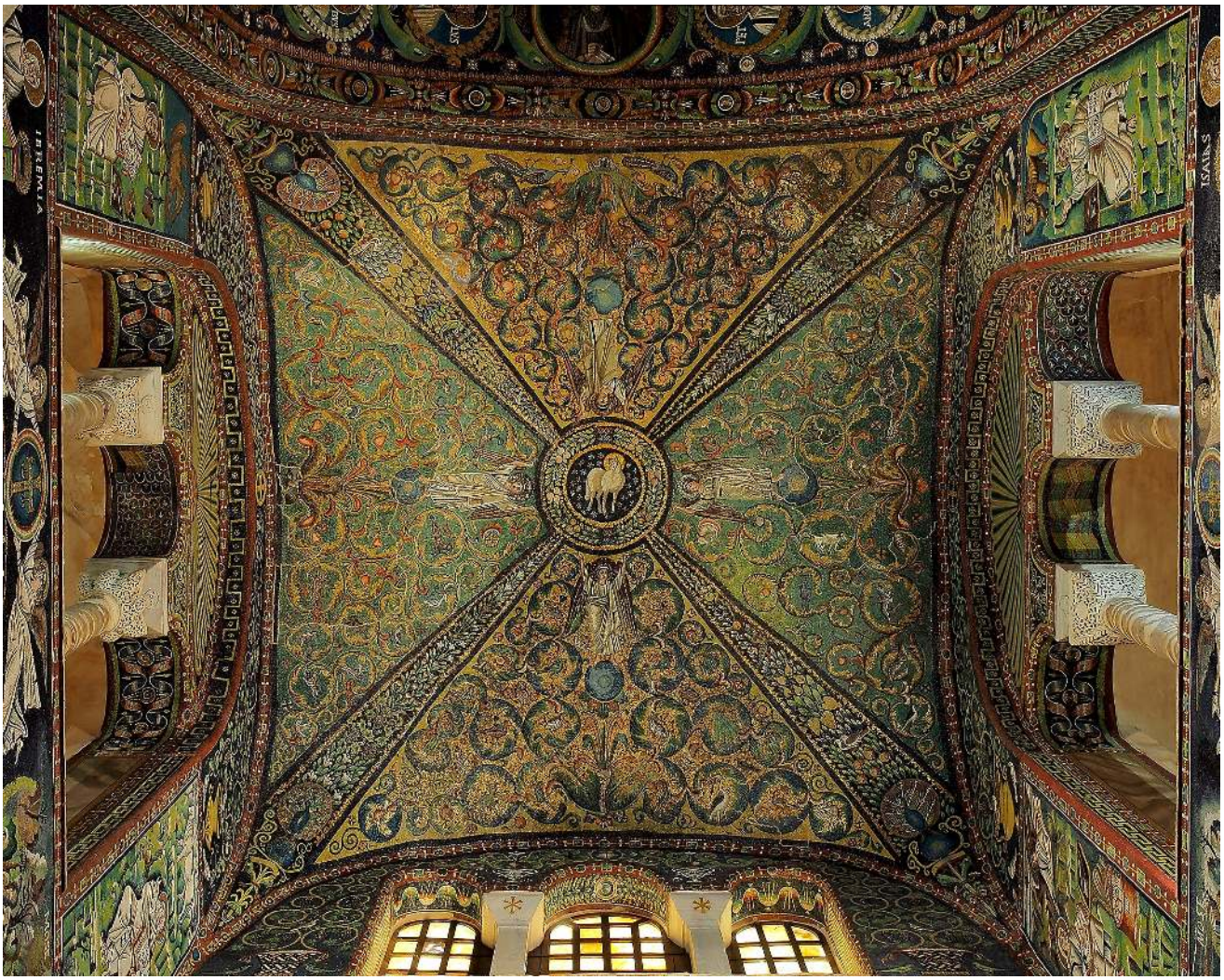


Figure \(\PageIndex{7}\): Lamb of God mosaic (CC BY-SA 4.0)

LaunchPad: Making Ancient and Byzantine Mosaics

There's more to mosaics than meets the eye. The design and arrangement of hundreds or thousands of tesserae (stone or glass cubes) was a complex process involving meticulous planning. However, before a mosaicist began any project, a solid foundation was necessary. From there, the artist could create a work of art that could last for centuries. In this video, a master mosaicist from the Chicago Mosaic School demonstrates the art of mosaic making by recreating a section of the Art Institute of Chicago's 5th century Byzantine mosaic fragment with a Man Leading a Giraffe.

Illuminated Manuscripts

Before the widespread use of books, **scrolls** were used to record and preserve religious and civil information. During the Byzantine period, the development of the **codex**—bound manuscripts with pages—was a major innovation, replacing rolled scrolls. This new format made texts easier to read, organize, and transport. Many important works have survived in manuscript form, including copies of the *Aeneid* and the *Iliad*, as well as medical treatises and both the Old and New Testaments of the Bible. Manuscripts were often made from **vellum** (prepared animal skin) and were richly decorated as **illuminated manuscripts**, featuring painted images and decorative elements that enhanced both study and devotion. These books were typically used by clergy or wealthy individuals.

The *Chludov Psalter* (6.3.8) is a 9th-century manuscript containing the Book of Psalms. Historians believe it may have been produced clandestinely during periods of **Iconoclasm**, when religious images were controversial or banned. The manuscript is relatively small (approximately 19.5 × 15 cm), making it portable for personal use. Emperor **Constantine I** supported the production of manuscripts by establishing a **scriptorium**—a dedicated space for writing and illustration—within the imperial palace, allowing scribes and illuminators to work efficiently.

Another important manuscript is the *Vienna Dioscurides* (6.3.8, 6.3.9), created in 512 CE for an imperial princess in **Constantinople**. This manuscript contains scientific and medical texts, many describing the therapeutic properties of plants and animals. Each page typically includes a detailed illustration alongside Greek text. Some illustrations reflect classical artistic traditions, while others show careful **naturalistic observation**. For example, the image of the blackberry bramble demonstrates the plant's life cycle, showing leaves, blossoms, and fruit across the page. Similarly, pages depicting birds present each species in detail, accompanied by descriptive text.

Figure \(\PageIndex{8}\): Page from Chludov Psalter (Public Domain)

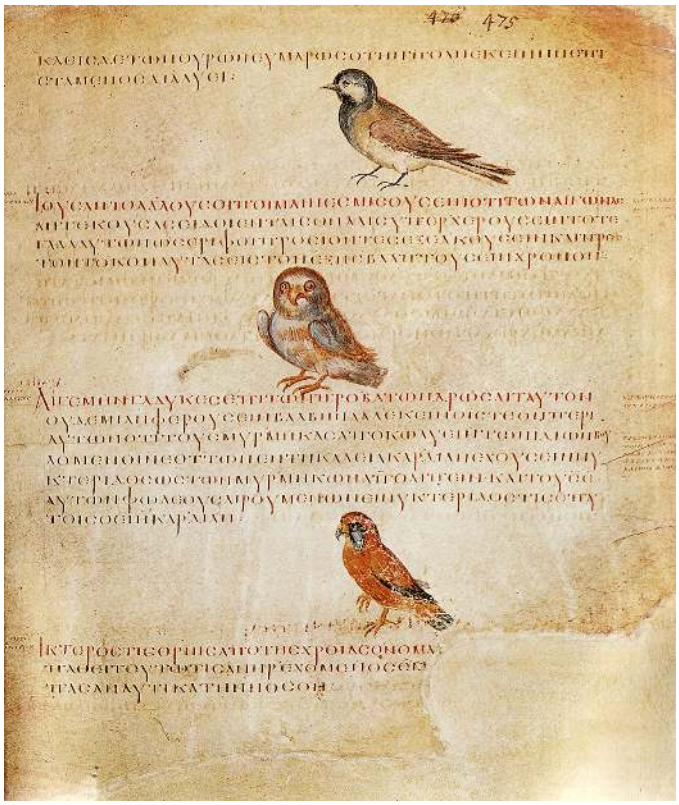


Figure \(\PageIndex{9}\): Page from *Vienna Dioscurides* (Public Domain)

Figure \(\PageIndex{10}\): Page from *Vienna Dioscurides* (Public Domain)

6.4: Islamic Golden Age (mid 7th C – mid 13th C)

Definition: Term

Baghdad: A major city in present-day Iraq that became the political, economic, and intellectual center of the Islamic Golden Age.

Damascus: An important city in present-day Syria that served as an early capital of the Islamic Empire and a center of trade and learning.

Cairo: A major city in Egypt known for its universities, libraries, and role in spreading knowledge during the Islamic Golden Age.

Córdoba: A city in present-day Spain that became a leading center of culture, education, and scholarship in the Islamic world, especially in Al-Andalus.

House of Wisdom: A renowned scholarly institution in Baghdad where scholars translated, studied, and expanded upon ancient Greek, Persian, and Indian knowledge.

Caliphate: A political and religious state led by a caliph, considered a successor to the Prophet Muhammad.

Hindu Numeral System: A number system developed in India using digits 0–9, which forms the basis of the modern number system used worldwide.

Zero: A number representing the absence of quantity; a key mathematical concept that allows for advanced calculations and place value systems.

Decimal Point: A symbol used to separate whole numbers from fractional parts in a number.

Observatory: A facility where scientists study stars, planets, and other celestial objects.

Library: A place where books, manuscripts, and other sources of knowledge are collected and preserved.

Scholar: A person dedicated to the study and pursuit of knowledge, often in academic fields.

Tin-glazing: A ceramic technique in which tin oxide is added to a glaze to create an opaque white surface that is ideal for painting designs.

Lusterware: A type of pottery decorated with a metallic glaze (often using silver or copper) that creates a shiny, iridescent surface after a second firing.

Glaze: A glass-like coating applied to ceramics that becomes smooth and often shiny after firing in a kiln.

Tin oxide: A compound added to glaze that turns it white and opaque, allowing artists to paint colorful designs on the surface.

Crazing: Fine cracks that can appear on the surface of glazed pottery when the glaze and clay expand or contract at different rates.

Earthenware: A type of clay pottery fired at relatively low temperatures, often porous unless coated with glaze.

Kiln: A high-temperature oven used to fire (harden) clay and set glazes on ceramics.

Iridescence: A shimmering, rainbow-like surface effect that changes color depending on the angle of light.

Metallic oxides: Chemical compounds of metals (such as copper or silver) used in glazes to create color and metallic effects.

Calligraphy: Decorative, artistic handwriting often used in Islamic art to include text as part of the design.

Tessellation: A repeating pattern of shapes that fit together perfectly without gaps or overlaps.

Non-figurative (aniconic): Art that does not include images of humans or animals, focusing instead on abstract or decorative elements.

The **Islamic Golden Age** began in the mid-7th century CE on the Arabian Peninsula and lasted until the mid-13th century. By around 750 CE, Islamic rule had expanded into **North Africa, Spain, and Western Asia**. During this period, a series of caliphates governed these lands and helped foster major scientific, cultural, and economic achievements. While much of Europe experienced

the **Dark Ages**, the Islamic world was home to some of the most prosperous and advanced cities in the world. These cities featured **streetlights, hospitals, medical advances, centers of learning, mathematicians, scientists, and strong systems of education and healthcare**. "While the rest of Europe was plunged in darkness and learning stagnated, scientific activity in the Muslim world during this period was phenomenal. Some scholars prefer the term "Arab science" because most documents were written in Arabic, which was the region's lingua franca. However, not all the scientists were Arabs, and not all were Muslims."[1]

Located at the crossroads of **Europe and Asia**, **Baghdad** emerged as a major center for trade and the exchange of intellectual ideas. Scholars and academics gathered in key cities such as **Baghdad, Damascus, Cairo, and later Córdoba**, fostering a vibrant culture of learning and innovation. Across the Islamic world, institutions such as **libraries, hospitals, observatories, and centers of higher learning** were established, attracting some of the most accomplished scholars of the time.

One of the most important intellectual centers was the **House of Wisdom** in Baghdad, where scholars translated ancient Greek scientific and philosophical texts into Arabic, preserving and expanding upon this knowledge. During this period, the **Hindu numeral system**, including the concept of **zero and the decimal point**, was introduced and eventually spread to other parts of the world, profoundly influencing mathematics and science.

Golden age of Islam

Overview of the changing relationship between the Roman Empire and Christianity from the time of Jesus to the reign of Theodosius.

Manuscripts

Leaders of the Islamic world sought to build vast libraries of knowledge, sending scholars across the known world to collect texts from a wide range of cultures. When these scholars returned, they gathered in **Baghdad** at the **House of Wisdom**, where they translated this accumulated knowledge into Arabic. These newly translated works (6.4.1) were made widely accessible, allowing more people to engage in learning and contributing to economic and intellectual growth. At the same time, a more accessible writing system developed, and the introduction of **paper** made the production and distribution of books easier and more efficient. Governments placed great value on scholarship, investing significant resources in the creation of books, the translation of texts into Arabic and Persian, and the dissemination of knowledge to a broader population.

Figure \(\PageIndex{1}\): House of Wisdom (Public Domain)

The widespread use of **paper**, introduced from China around 770 CE, transformed the production of books by making writing materials far more affordable and easier to manufacture than parchment. While Christian monasteries in Europe often possessed only a few laboriously hand-copied Bibles, the Islamic world developed more efficient, large-scale methods for reproducing manuscripts. Scribes worked in coordinated processes—similar to an assembly line—to produce multiple copies of texts. Papermaking techniques, including the use of linen fibers, were refined and later transmitted to other regions, significantly influencing global knowledge production.

Scholars translated works from **Greek, Roman, Indian, Chinese, Egyptian, and Phoenician civilizations**, preserving and expanding upon earlier knowledge. These translated texts were distributed throughout the Islamic Empire, allowing broader access to learning. Libraries, particularly in Baghdad, played a crucial role in safeguarding important works such as those by Aristotle, ensuring their survival for future generations. Manuscript production also became an important artistic practice, with **calligraphy** and **miniature painting** emerging as highly respected art forms used to enhance and illuminate texts.

Scientific and mathematical advancements flourished during this period. Scholars made significant contributions in fields such as **medicine, mathematics, physics, and biology**, (6.4.2) carefully recording and disseminating their discoveries. Medical texts, including those based on works by the Greek physician Pedanius Dioscorides, were translated and richly illustrated, combining detailed instructions with visual imagery to aid understanding. These manuscripts often included stylized figural elements, particularly when they supported the content of the text.

In the visual arts, Islamic artists developed complex decorative systems rooted in geometry. Their designs often followed principles similar to **quasi-crystalline geometry**, using symmetrical polygonal shapes to create intricate patterns that could extend infinitely without exact repetition. These geometric designs, along with vegetal motifs and calligraphy, became defining features of Islamic art and reflected both mathematical sophistication and aesthetic innovation.

Figure \(\PageIndex{2}\): Preparing medicine (Public Domain)

Pottery

Islamic art also included highly innovative and creative developments in **ceramics, textiles, paper, glass, and metalwork**. Among these, ceramics became especially significant, with techniques such as **tin-glazing** and **lusterware**achieving widespread popularity. Lusterware ceramics were often decorated with intricate mosaic-like patterns and **calligraphy**, reflecting both artistic and cultural values.

Tin-glazed ceramics (6.4.3) emerged as early as the 8th century and became widely used throughout the Islamic world. By the 10th century, the technique had spread to Spain and other parts of Europe. The process involved adding a small amount of tin oxide to a lead-based glaze, which, when fired, produced an opaque white surface. This white, tin-opacified glaze not only helped prevent **crazing** (cracking) but also provided an ideal surface for painted decoration. Early designs commonly featured green and brown

pigments. Because the natural clay in many Islamic regions fired to a yellowish-buff color, potters used tin glaze to achieve a bright white surface similar to the highly valued ceramics produced in China.

Lusterware (6.4.4) was created through a more complex, multi-step process. After an initial firing, artisans applied a metallic glaze containing compounds of silver and copper, followed by a second firing at a lower temperature in a reduced-oxygen (kiln) environment. This technique produced a shimmering, iridescent surface that resembled gold or other precious metals. Originally developed for glass, the luster technique was later adapted to **earthenware ceramics**. Each workshop often guarded its unique recipes for metallic glazes, contributing to the distinct appearance of different pieces. After firing, the surface was sometimes polished to enhance its reflective, metallic sheen.

These ceramic innovations demonstrate the technical sophistication of Islamic artisans, as well as their ability to combine scientific knowledge with artistic expression. One potter from a distinguished potter family wrote, "*When they are cold, take them out and rub them with damp earth so the color of gold comes out…That which has been evenly fired reflects like red gold and shines like the light of the sun.*"[2]

Figure \(\PageIndex{3}\): Tin Glazing (Public Domain)

Figure \(\PageIndex{4}\): Lusterware (Public Domain)

Making a 9th century Iraqi lustreware bowl replica

In 9th century Iraq, potters who could master the lustre technique were considered alchemists - people who could turn dull clay into something almost gold. We teamed up with ceramicist Andrew Hazelden to see if he could recreate a 9th century Iraqi lustre bowl in the British Museum collection.

Tile

During this period, tiles were widely used to decorate important buildings such as **mosques**, shrines, palaces, and scholarly structures. Because religious traditions discouraged the use of figurative imagery, artists focused on non-figurative designs. Instead,

early **Islamic art** emphasized intricate **geometric patterns** (6.4.5) created from shapes like circles and squares, carefully arranged into **tessellations**—repeating designs that fit together without gaps or overlaps. Over time, these patterns became increasingly complex. Artists incorporated multi-pointed stars, a variety of polygons, stylized plant forms, and **calligraphy** into their designs. By combining and repeating these elements, they created highly sophisticated and visually striking decorative surfaces that reflected both mathematical precision and artistic creativity. Islam was opposed to the depiction of human or animal forms for religious art and architecture. The opposition was based on "the belief that the creation of living forms is unique to God."[3]

Historians believe the **arabesque pattern** (6.4.6) was first developed in **Baghdad** during the 10th century. This decorative style features stylized plant forms, often inspired by the **acanthus plant**, with twisting stems and flowing leaves. The design typically extends beyond the edges of a surface, suggesting it could continue infinitely as a repeating pattern. Arabesque designs are also frequently combined with **calligraphy**, which holds special significance in Islamic culture. Calligraphy is considered the highest form of art because it often includes sacred words and passages from the **Qur'an**.

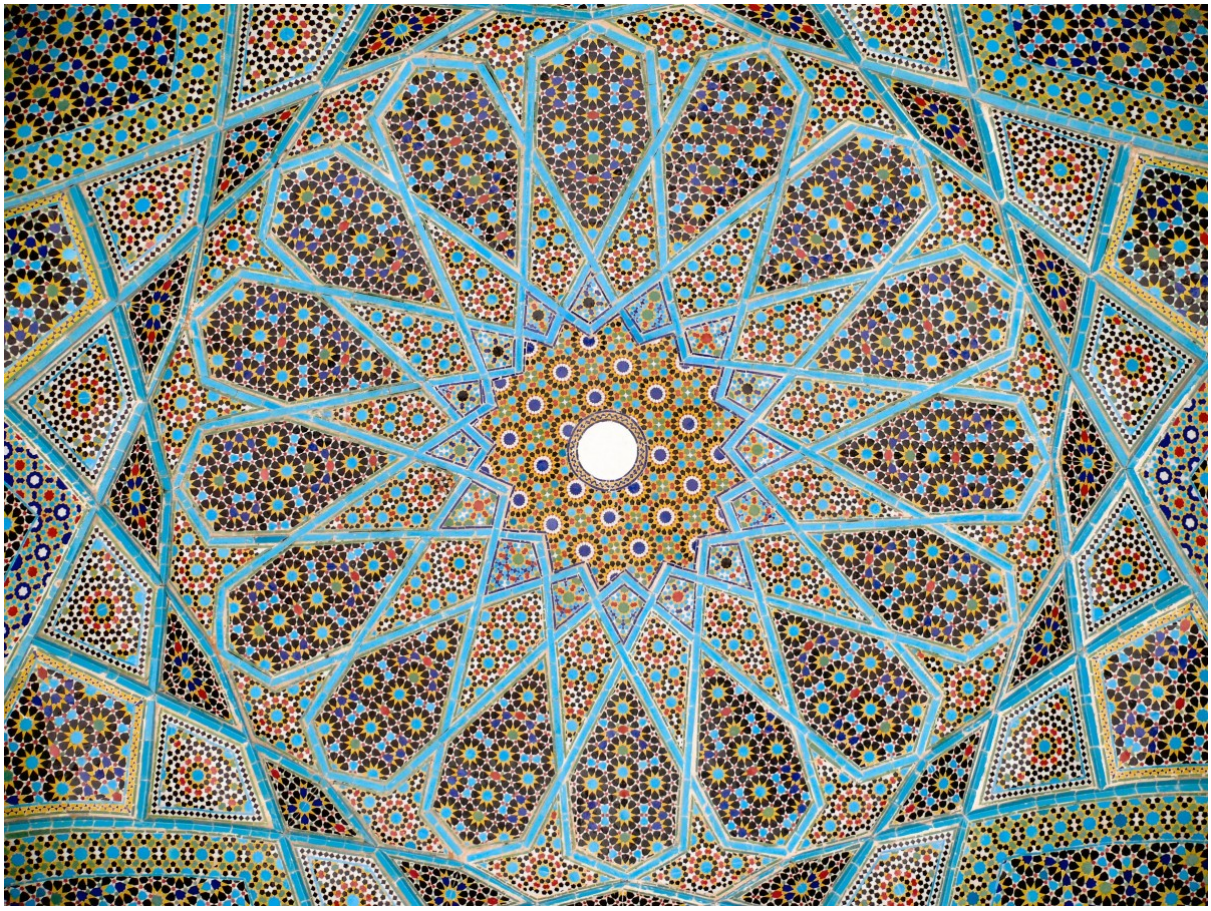


Figure \(\PageIndex{5}\): Geometric tile pattern (Public Domain)

Figure \(\PageIndex{6}\): Arabesque tile pattern (Public Domain)

Built in 670 CE, the **Great Mosque of Kairouan** in **Tunisia** is an important example of early **Islamic architecture**, featuring arches and richly decorated interior spaces in gold, red, and blue. The walls (6.4.7) are adorned with **Arabic inscriptions**, covered in glazed tiles and mosaics, including many made with **lusterware**. Lusterware tiles surrounding the **mihrab**, the central focal point indicating the direction of prayer, are arranged in a checkerboard pattern. Each tile is decorated with floral and plant motifs that shimmer with a metallic sheen.

Figure \(\PageIndex{7}\): Lusterware tile pattern (CC BY-SA 2.0)

The **Mongol invasions** of the 13th century brought widespread destruction to the Islamic world, devastating major cities such as Baghdad, which had long been a center of learning, culture, and political power. When the Mongols captured Baghdad in 1258, they destroyed much of the city, including its famed libraries and institutions of knowledge. One of the most significant losses was the destruction of the **House of Wisdom**, where centuries of scholarship in science, medicine, mathematics, and philosophy had been preserved and expanded.

As libraries were burned and manuscripts thrown into the Tigris River, an immense body of knowledge accumulated over generations was lost. At the same time, global trade patterns were shifting. The rise of **European sea trade routes** began to bypass traditional overland routes like the Silk Road, reducing the economic importance of many Islamic regions that had once thrived as trade hubs. Together, the destruction caused by the Mongol invasions and the shift in global trade contributed to a decline in political stability, economic prosperity, and intellectual leadership in the region. This period marked a major turning point in the history of the Islamic world.

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[1] Retrieved from https://pmc.ncbi.nlm.nih.gov/articles/PMC3621228/

[2] Retrieved from https://www.ashmolean.org/article/lu...across-borders

[3] Retrieved from https://www.metmuseum.org/essays/fig...in-islamic-art

6.5: Viking (Late 8th C – late 11th C)

Definition: Term

Vikings: Norse people from Scandinavia who explored, traded, and sometimes raided across Europe from the 8th to 11th centuries.

Scandinavia: A region in northern Europe that includes present-day Denmark, Norway, and Sweden.

Jelling Rune Stone: A stone monument in Denmark commemorating King Harald Bluetooth and the unification of Denmark and its conversion to Christianity.

Harald Bluetooth: A 10th-century king of Denmark who unified the kingdom and helped introduce Christianity.

Seafaring: The skill of traveling and navigating across the sea, especially using ships.

Trade networks: Systems of exchange connecting different regions where goods and resources are bought and sold.

Christianity: A religion based on the teachings of Jesus Christ that spread throughout Europe during the Viking Age.

Social hierarchy: The organization of society into different levels based on status, wealth, or power.

Family lineage: A person's ancestry or family background, often important for identity and status.

Myth (historical stereotype): A commonly believed idea about the past that is not supported by historical evidence (such as Vikings wearing horned helmets).

Rune stones: Large carved stones used by Vikings to record names, events, and memorials for individuals.

Runic alphabet: An early writing system used by Germanic peoples, including the Vikings, composed of characters called runes.

Scandinavia: A region in northern Europe that includes modern-day Denmark, Norway, and Sweden.

Angular letters: Letter forms made with straight lines rather than curves, designed for carving into hard materials like wood or stone.

Germanic languages: A group of related languages spoken in northern Europe that influenced early Viking writing systems.

Rune stone of Gunnarr: A Viking memorial stone commemorating a man named Gunnarr, carved by an individual named Tóki.

Runic inscription: Text carved using the runic alphabet, often recording names, events, or memorials.

Serpent motif: A decorative design featuring a snake-like figure, commonly used in Viking art to frame inscriptions.

Viking expeditions: Journeys undertaken by Vikings for trade, exploration, or raiding.

Longship: A fast, narrow Viking ship used for travel, exploration, and warfare.

Hull: The main body of a ship.

Draft (draught): The depth of a ship below the waterline; a shallow draft allows travel in shallow waters.

Merchant ship: A vessel designed for transporting goods rather than warfare.

Propulsion: The method used to move a ship, such as oars or sails.

The **Viking civilization** originated in the **Scandinavian countries** and expanded across northern and central Europe from the late 8th to the late 11th century. During this time, early kingdoms began to form. Around 965 CE, the **Jelling Rune Stone**, commissioned by **Harald Bluetooth**, marked the unification of Denmark and the introduction of Christianity. At different points, Danish kings also ruled parts of England and Norway.

The Vikings were highly skilled **seafarers**, building advanced ships that allowed them to travel long distances for trade and exploration. They developed extensive trade networks, exchanging goods such as furs, ivory (including walrus tusks), and other valuable resources. While they were also known for raids and military campaigns, they established settlements and integrated into many of the regions they entered. During this period, **Christianity** gradually replaced the earlier Norse belief system.

Viking society was structured into clear social levels. Wealthy landowners and nobles formed the upper class, farmers made up the middle, and enslaved people occupied the lowest level. **Family lineage** and reputation were central to social identity, and individuals were expected to demonstrate courage, generosity, and honor. A strong reputation ensured that a person's name would be remembered after death.

Although Vikings are often portrayed as purely violent raiders, this image is largely a modern myth that developed in the 19th and 20th centuries. In reality, they were also traders, settlers, and skilled craftspeople. For example, there is no historical evidence that Vikings wore **horned helmets**, despite this being a common stereotype today.

Rune Stones

Rune stones (6.5.1) were an important method the Vikings used to record the names of people who lived and died, along with details about their achievements, travels, and fate. Some stones commemorated battles, listed those who participated, or even served as statements of honor and reputation. Because most written records about the Vikings come from other cultures they encountered, rune stones provide valuable insight into how Vikings represented themselves.

These large stones are primarily found in **Scandinavia**, rather than in the regions where Vikings traveled. The inscriptions almost always include a person's name and may describe their character or cause of death. Often, the carver signed their work and added a warning or curse against anyone who might damage the stone.

The Vikings used a **runic alphabet**, a non-standardized writing system derived from older Germanic languages that existed before the Latin alphabet. The letters were typically **angular**, lacking curved forms, which made them easier to carve into wood or stone without causing the material to split (6.5.2). While few written documents on paper survive, thousands of rune stones remain, preserving this unique form of communication and memory.

Figure \(\PageIndex{1}\): Rune stone (CC BY 2.5)

Figure \(\PageIndex{2}\): Detailed writing on rune stone (CC BY-NC 2.0)

The **rune stone of Gunnarr by Tóki** (6.5.3) was discovered near a cathedral wall, where it had been hidden beneath layers of plaster. The inscription begins near the bottom of the stone, emerging from the image of a serpent's head. A circular band winds around the surface of the stone, containing the carved text. Notably, the word "Viking" appears in the inscription, suggesting that Gunnarr likely participated in Viking expeditions.The inscription read, "Tóki, Tóki the Viking, raised the stone in memory of Gunnarr, Grímr's son. May God help his soul!"[1]

Figure \(\PageIndex{3}\): Runestone in memory of Gunnarr by Tóki (CC BY 3.0)

Ships

The movement and territorial expansion of the **Vikings** was made possible by their advanced shipbuilding skills. Their vessels were **clinker-built**, meaning the wooden planks of the hull overlapped each other, creating a strong yet flexible structure. Vikings constructed ships in a variety of sizes for different purposes, including the well-known **longship**. Longships (6.5.4) were designed for speed, agility, exploration, and warfare. They used both oars and sails for propulsion, allowing crews to harness wind power as well as human strength. With their narrow hulls and shallow draft, longships could travel quickly across open seas and also navigate shallow rivers and coastlines. Some longships carried crews of 65–70 warriors, making them highly effective for raids and military expeditions.

For trade, Vikings built larger and wider merchant ships with deeper drafts and fewer oars. These ships had more storage space for goods such as furs, timber, and other commodities. Heavier woods like pine were often used to construct these rounded cargo vessels, enabling them to carry substantial loads. Smaller boats, typically made from local oak, were used for short-distance travel and local trade.

Figure \(\PageIndex{4}\): Model of recreated ship (Public Domain)

Ships were essential to the **Vikings**, not only for travel and trade but also for burial practices. High-status individuals were sometimes buried in ships (6.5.5), reflecting their importance and connection to seafaring life. Viking ships were constructed primarily from wood, especially large, old-growth **oak trees**, which provided long, strong planks. These planks were carefully split—sometimes as thin as two inches—and used to build the **hull** with overlapping boards, a method known as **clinker construction**. The planks were fastened together with iron rivets, and any gaps were sealed with tarred wool or animal hair to make the ships watertight.

The planks were attached to the **keel**, the central structural beam running along the bottom of the ship (6.5.6), providing stability and strength. Additional layers of overlapping planks were added, and the seams were tightly caulked. Viking ships were often highly decorated, with carved heads of mythical animals—especially dragons—adorning the bow and stern. Long, continuous, symbolic carvings also decorated the sides of the vessels.

These ships were capable of long-distance travel, carrying Vikings westward to North America and eastward toward Asia Minor. Their flexible construction (6.5.7) and shallow design allowed them to be easily pulled onto beaches, making them ideal for both exploration and quick landings. The Vikings had exceptional knowledge of the oceans and navigation. "The Vikings' understanding of the sea is also reflected in the Old Norse language that has about 150 words for waves."[2]

What's so special about Viking ships?

Explore the history and technology of Viking longships, which helped the Scandinavians conquer trade routes and new territories. As the Roman Empire flourished, Scandinavians had small settlements and no central government. Yet by the 11th century, they had spread far from Scandinavia, gaining control of trade routes throughout Europe, conquering kingdoms as far as Africa, and building outposts in North America. What was the secret to their success? Jan Bill dives into the history of the formidable Viking longship.

Figure \(\PageIndex{5}\): The Oseberg (820 CE, oak) (CC BY 3.0)

Figure \(\PageIndex{6}\): Excavated ship (Public Domain)

Figure \(\PageIndex{7}\): Riveting and decoration (CC BY 2.0)

When prominent Viking men or women died, they were often honored with a **ship burial** (6.5.8). The deceased was dressed in fine clothing and placed inside a ship, symbolizing their status and connection to seafaring life. Personal belongings—such as weapons, jewelry, and tools—were included to accompany them into the afterlife. In some cases, animals like horses and dogs were also sacrificed and placed within the burial. Historical accounts suggest that, on occasion, an enslaved person may have been included in the ritual. Some ship burials involved placing the vessel on land and covering it with earth to form a burial mound, while others were described as being set out to sea. According to certain accounts, the ship may have been set on fire with burning arrows as part of the ritual, symbolizing the transition to the afterlife.

Documentation about the exact burial process is hard to find; however, one historian stated: "Whether such fiery funerals ever actually took place is impossible to know; but it is much more difficult to imagine that a king's body and accompanying treasures would have been simply pushed out to sea, where they would have been in danger of returning, or of falling into the hands of strangers or even enemies who might maltreat the one and plunder the other."[3]

Figure \(\PageIndex{8}\): Ship burial (CC BY 3.0)

The **Vikings** often used leftover shipbuilding materials to create small sculptural artworks, contributing to a highly developed tradition of **woodworking craftsmanship**. Wood was the primary material because it was abundant and easy to carve. However, Viking artists also worked with other materials, including metal, stone, bone, and ivory, to create decorative and functional objects.

Jewelry

Viking society was divided into three main classes: enslaved people, peasants, and the **aristocracy**. A person's social position influenced their clothing and jewelry, making status easily recognizable. The quality and quantity of wearable goods became important indicators of wealth and identity. Women of high status often wore heavy necklaces and ornate brooches featuring intricate **openwork** designs. Men displayed their status through rings worn on their arms and necks and used brooches with long pins (x.x) to fasten their clothing. Weapons were also elaborately decorated, with gilding and jewels adorning the **hilts** of swords and other arms. Even in death, individuals were dressed in fine clothing and jewelry, reflecting their social standing and beliefs about the afterlife.

"Women on the Scandinavian Island of Gotland wore box brooches to secure their shawls at the collarbone; the brooches doubled as a container to hold small objects. This example (6.5.9) is decorated with tiny beasts, which inhabit the interlace patterns on the top and sides. Viking art generally eschews figural decoration in favor of lively patterns based on stylized animals."[4]

Figure \(\PageIndex{9}\): Brooch pins (early 10th century, silver) (CC BY 3.0)

Figure \(\PageIndex{10}\): Rouns Box Brooch (1000-1100, copper alloy, silver foil, 6 x 2.5 cm) (Public Domain)

The **Vikings** were highly skilled craftspeople who worked with materials such as wood, metal, and stone. Many artifacts—especially metal jewelry and storage vessels—have been recovered from burial sites, providing insight into their artistic traditions. Although **woodworking** was a major specialty, relatively few wooden objects have survived due to natural decay. Design styles varied depending on region (6.5.11), and artists developed distinctive **motifs** based on local traditions. These designs often reflected mythology, religious beliefs, or social relationships. Viking decorative patterns appeared in wood carvings, ship ornamentation, jewelry, and other artworks. Common motifs included animals, plants, and mythical creatures, all rendered in highly stylized and symbolic forms.

Figure \(\PageIndex{11}\): Viking art styles (CC BY-SA 4.0)

The Vikings

In which John Green teaches you about Vikings! That's right, one of our most requested subjects, the Vikings, right here on Crash Course. So what's the deal with Vikings? Well, the stuff you've heard about them may not be true. The Vikings weren't just pagan raiders striking terror into the hearts of defenseless European Christendom. They were some of the greatest travelers

of their time, and they weren't always traveling to steal. In a lot of cases, they were traveling to trade. John will teach you about Viking trade goods, Norse Mythology, and yes, there will be blood, guts, and dragons. OK?

[1] Retrieved from https://app.raa.se/open/runor/search

[2] Retrieved from https://avaldsnes.info/en/viking/vikingskip/

[3] Thomas Nothcotte Toller (2003). *Textual and Material Culture in Anglo-Saxon England*. D.S. Brewer. p. 43.

[4] Retrieved from https://www.metmuseum.org/art/collec.../search/466090

6.6: Romanesque (1000 CE – 1150 CE)

Definition: Term

Romanesque period: An artistic and architectural style in Europe from about 1000–1150 CE, known for massive buildings, rounded arches, and religious themes.

Monasticism: A religious way of life in which individuals live in monasteries devoted to spiritual practice.

Relics: Sacred objects, often associated with saints, kept in churches for veneration.

Orthodox Church: The branch of Christianity that developed in Eastern Europe and the Byzantine Empire.

Catholic Church: The Western branch of Christianity centered in Rome.

Carolingian: Referring to the art and culture associated with the reign of Charlemagne and his successors.

Byzantine: Relating to the Eastern Roman Empire and its distinctive artistic and architectural style.

Church (Romanesque): A large Christian building designed for worship, pilgrimage, and housing relics during the Romanesque period.

Vault: An arched ceiling made of stone or masonry that supports the roof.

Basilica: A rectangular building plan with a central nave and side aisles, adapted from Roman architecture for Christian churches.

Nave: The central, main space of a church where the congregation gathers.

Apse: A semicircular area at the end of a church, often housing the altar.

Lateral aisles: Passageways running parallel to the nave on either side.

Side chapels: Smaller spaces within a church used for private prayer or housing relics.

Masonry: Building with stone or brick bound together with mortar.

Barrel vault: A long, tunnel-like ceiling formed by extending a rounded arch.

Romanesque period: An architectural style in Europe (c. 1000–1150 CE) known for massive structures and rounded arches.

Flying buttress: An external support structure used in later Gothic architecture to help hold up walls.

Transverse arch: An arch that crosses a barrel vault at intervals to strengthen it.

Masonry: Construction using stone or brick bonded with mortar.

Illuminated manuscript: A handwritten book decorated with colorful designs, images, and gold leaf.

Parchment: Writing material made from treated animal skin.

Illumination: Decorative elements in a manuscript, often using bright colors and gold.

Calligraphy: The art of decorative handwriting.

Gold leaf: Thin sheets of gold used to decorate and highlight parts of an artwork.

Halo: A circular glow around the head of a sacred figure, indicating holiness.

Apestry: A large textile artwork created by weaving or embroidering images and designs.

Bayeux Tapestry: A long embroidered cloth depicting the events leading up to and including the Norman conquest of England in 1066.

Battle of Hastings (1066): A pivotal battle in which William the Conqueror defeated King Harold II to become king of England.

Embroidery: The art of decorating fabric using needle and thread.

Textile: A type of fabric or cloth, especially one used for artistic or functional purposes.

The **Romanesque period** (c. 1000–1150 CE) emerged during a time of growing religious devotion, especially as **monasticism** expanded and more people pursued spiritual lives. As Europe's cultural landscape developed, art was no longer limited solely to rulers and church elites. Instead, religious life became more widespread, leading to an increase in church construction across the continent. Monasteries played a central role in both religious and artistic life within the **Orthodox** and **Catholic** traditions. At the same time, increasing numbers of priests, monks, and pilgrims traveled to venerate sacred **relics** housed in churches. These movements helped spread artistic ideas and styles across regions. **Romanesque art**, found throughout France, Italy, Britain, and the German lands, reflects a blend of earlier traditions, including **Roman**, **Carolingian**, and **Byzantine** influences. This fusion of styles helped shape a distinct visual language characterized by solid forms, symbolic imagery, and architectural innovation.

Architecture

Churches (6.6.1) were the center of architectural innovation and artistic expression during the **Romanesque period**. Romanesque architecture drew heavily from ancient Roman building traditions, especially the use of the arch and various types of **vaults**. These churches were based on the **basilica** plan, featuring key elements such as the **nave**, **apse**, and **lateral aisles**. As the number of pilgrims increased, churches were expanded to include **side chapels** and **galleries**, allowing people to move through the space more easily without disrupting services. Romanesque architecture blended earlier design traditions while adapting to new needs. With the growing number of pilgrims, monks, and clergy visiting to see sacred **relics**, churches had to accommodate larger crowds. One major structural advancement was the replacement of wooden roofs with durable **masonry vaulted ceilings**, which improved both fire resistance and structural stability.

Figure \(\PageIndex{1}\): Romanesque church (Public Domain)

Barrel vaults (6.6.1) were used in ancient civilizations such as Egypt, Greece, and Mesopotamia, but they were not widely used again until the **Romanesque period**. A barrel vault resembles a continuous arch extended lengthwise, forming a tunnel-like ceiling. In Romanesque churches, the barrel vault was a single, massive arched structure that supported the heavy stone roof and was often painted with religious scenes. To support this weight, church walls were built extremely thick and solid, making them largely self-

supporting and eliminating the need for **flying buttresses** (which would appear later in Gothic architecture). Because of the thickness of the walls, only a few small windows could be included, resulting in dimly lit interiors. In some cases, **transverse arches** were added across the barrel vault to provide additional reinforcement and help distribute the weight more evenly across the structure.

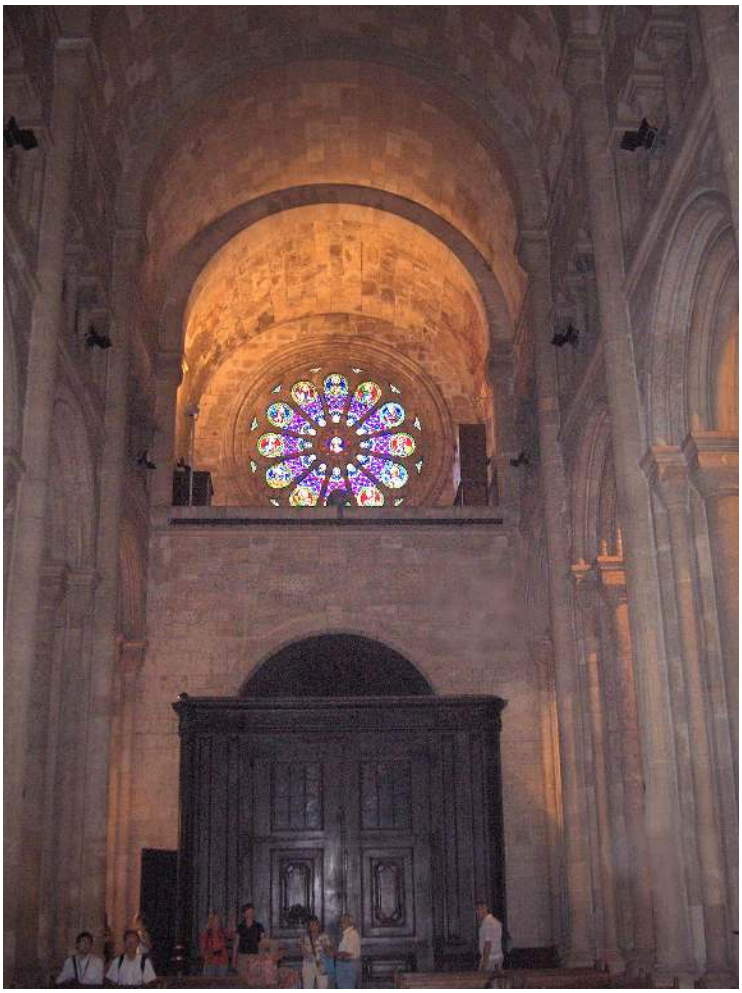


Figure \(\PageIndex{2}\): Barrel vault (CC BY 2.5)

Romanesque architecture explained

A conversation about the Romanesque architecture and how it is built.

Relief Sculptures

In **Romanesque art**, standalone statues in stone or bronze were rarely used. Instead, artists created detailed **relief sculptures** to illustrate biblical stories and history. These carvings were integrated into architectural elements such as columns, doors, altars, and walls. Many columns featured the **Corinthian style**, characterized by fluted shafts and capitals decorated with **acanthus leaves (**6.6.3). Carving these elements was labor-intensive, as masons worked with simple tools like chisels and mallets. Rather than aiming for natural realism, artists transformed figures and objects into more expressive, **stylized** forms with elongated proportions and abstract, linear designs.

Churches often displayed extensive visual storytelling programs, covering entire façades or areas behind the altar. In one relief (6.6.4), **King Herod** is shown meeting the smaller, standing figures of the Three Wise Men. The most important figure is typically emphasized—either placed at the center or made larger than the others. Decorative elements, such as large animal-like faces and leafy forms, often frame and surround the scene.

Figure \(\PageIndex{3}\): Carved columns (CC BY-SA 2.0)

Figure \(\PageIndex{4}\): King Herod sculpture (CC BY-SA 3.0)

The **Great Tympanum** (6.6.4) at the **Basilica of Saint Mary Magdalene** in **Vézelay** is a large **relief sculpture** located in the semicircular space above the church doorway. This type of sculptural decoration, known as a **tympanum**, was commonly used in Romanesque churches across Europe. At Vézelay, the sculpture depicts **Christ** with outstretched arms, symbolically welcoming all who enter the church. Built in the 12th century during a time of increased pilgrimage, the church was designed to accommodate large numbers of visitors and to convey themes of spiritual transformation. The composition places Christ at the center as the most important figure, surrounded by a wide range of people. Some figures appear larger and closer to Christ, while others are smaller and positioned in surrounding sections. This arrangement emphasizes the message that all people—regardless of status—are included within the Christian narrative.

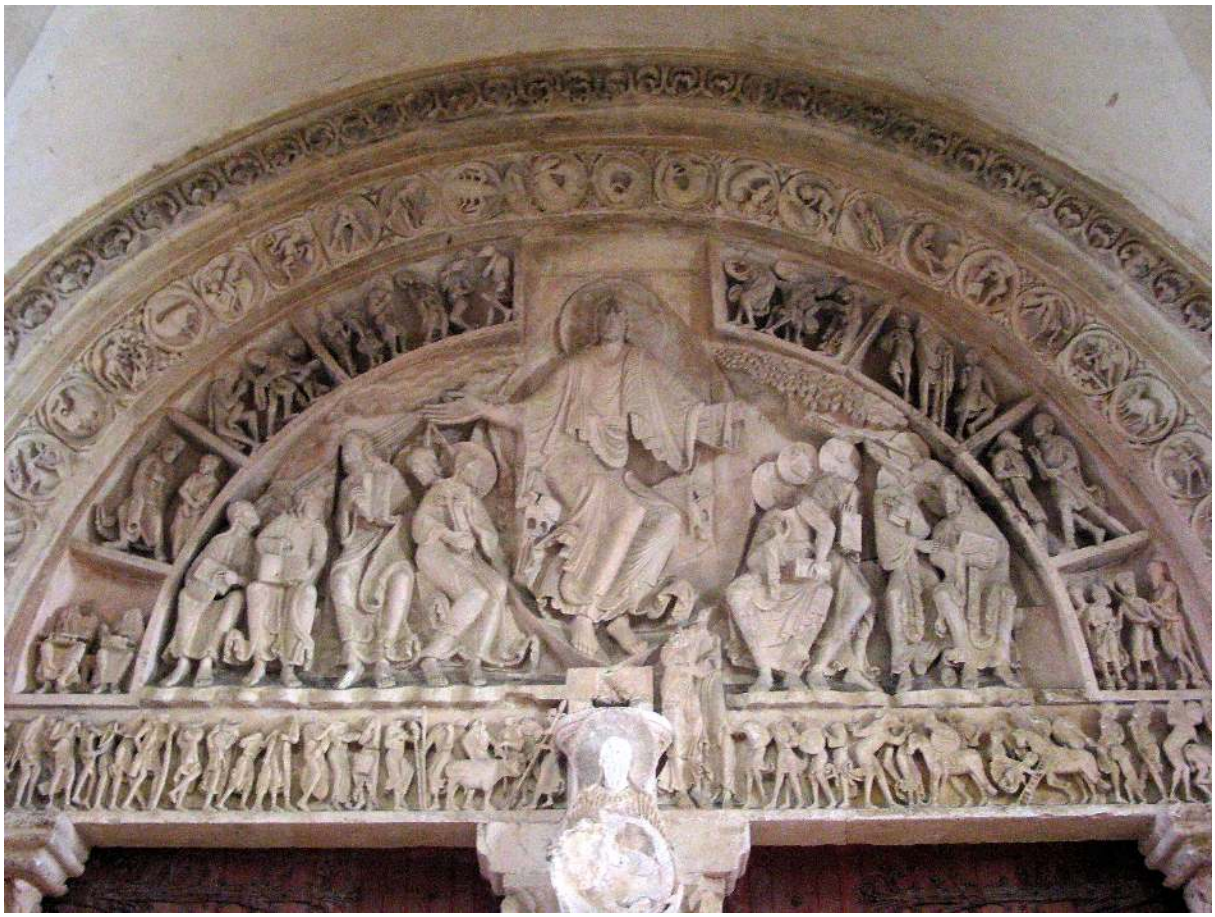


Figure \(\PageIndex{5}\): Basilica Mary Magdalene Great Tympanum (1140-1150 CE) (CC BY-SA 3.0)

Wall Painting

Wall paintings were a dominant feature of **Romanesque churches**, especially across the wide surfaces of **barrel vaults**and thick stone walls. These large, plain areas provided ideal spaces for murals illustrating religious and biblical stories. Because most people in medieval Europe were illiterate, these paintings served as a visual form of teaching, helping viewers understand religious narratives and beliefs.Murals appeared on ceilings, domes, walls, columns, and other available surfaces. Some were enhanced with **gold leaf**, which reflected candlelight and added a glowing, spiritual quality to the interior.

Many images depicted saints, biblical figures, and mythical creatures. **Saint Eldradus** (6.6.6), painted in the Novalesa Abbey where he lived as a monk, is often shown as a farmer, reflecting his role as the patron saint of farmers and monks. In this image, he walks along a path toward the abbey, surrounded by muted tones of green, red, brown, and orange. Decorative patterns frame the figure, adding movement and visual interest. Another major example is the **Apse of Sant Climent de Taüll** (6.6.7), considered a masterpiece of the Romanesque period. The mural fills the apse, with **Christ** as the central figure. Beneath him is a symbolic representation of the earth, while he holds a book in his left hand. Surrounding him are apostles and angels, each marked with white halos, emphasizing their sacred status.

Figure \(\PageIndex{6}\): Saint Eldradus wall painting (11^{th} century) (CC BY-SA 3.0)

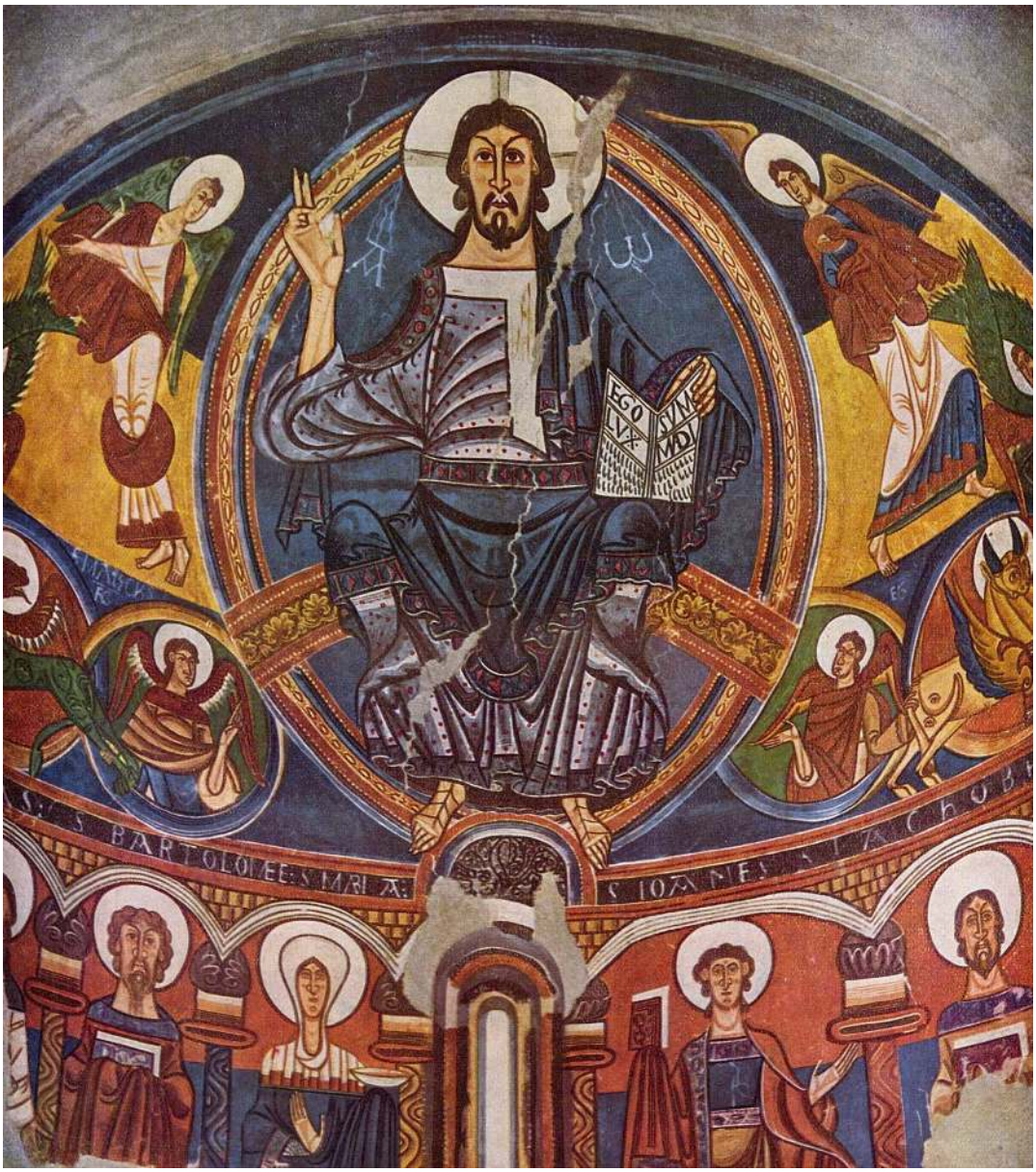


Figure \(\PageIndex{7}\): Apse of Sant Climent de Taull (ca. 1123) (Public Domain)

Manuscripts

During the **Romanesque period**, monasteries served as important centers of knowledge, preserving and producing written works. The creation of **illuminated manuscripts** became a major activity in the 11th century. Monks carefully copied religious texts, classical Greek and Latin writings, and even Islamic works on mathematics. These texts were written and illustrated by hand on **parchment (**6.6.8), made from animal skin such as sheep, goats, or calves. The pages were decorated with **illuminations**, featuring vibrant colors, intricate patterns, and stylized figures arranged to fit within the page's layout. Artists often used **gold leaf** to highlight important elements, creating a glowing effect in candlelight.

In the manuscript known as the **Bury Bible**, **calligraphy** plays a key role in the design. Large capital letters at the beginning of paragraphs are richly decorated with bright reds, blues, and greens. Gold leaf emphasizes specific parts of the lettering. In the page titled *Vision of Ezekiel* (6.6.9), unusual imagery includes a central figure with a **halo**, indicating holiness, surrounded by symbolic figures such as an angel, bird, griffon, saint, and lion. The bold background colors and gold detailing create contrast and depth, enhancing the visual impact of the scene.

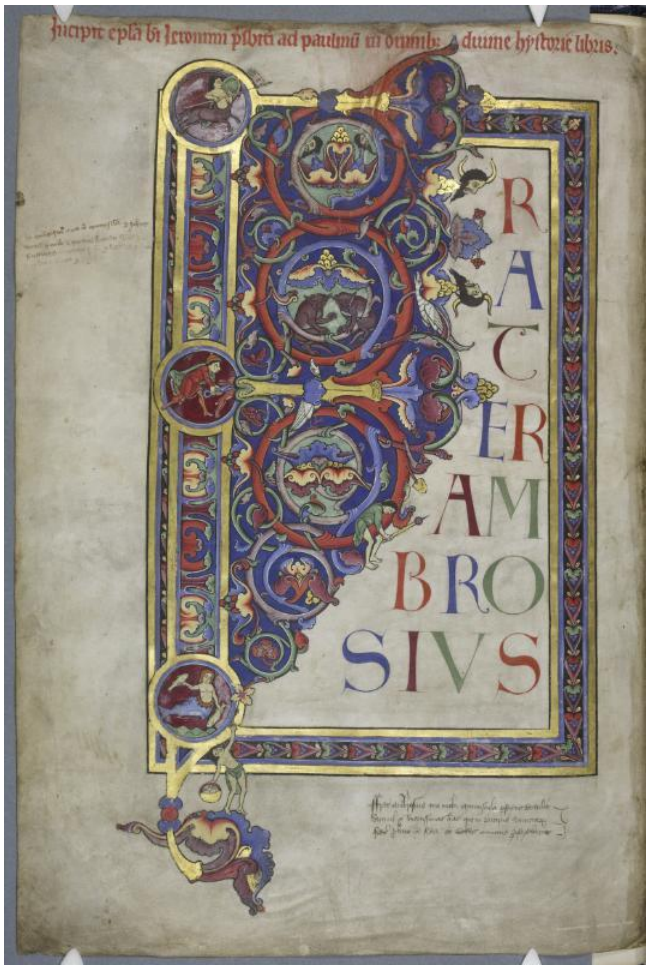


Figure \(\PageIndex{8}\): Illustrated manuscript (Public Domain)

Figure \(\PageIndex{9}\): Bury Bible (CC BY-SA 4.0)

Tapestry

Artists during the **Romanesque period** were skilled weavers who created detailed and delicate **tapestries**. A tapestry is a large textile artwork made by stitching or embroidering scenes with linen or wool thread. These works often depicted historical events, religious stories, or important cultural narratives. One of the most famous examples is the **Bayeux Tapestry** (6.6.10), which measures about 50 centimeters (20 inches) high and nearly 70 meters (230 feet) long. It illustrates over fifty scenes related to the conquest of England, including the **Battle of Hastings (1066)**, the appearance of **Halley's Comet**, and the crowning and victories of **William the Conqueror**. The tapestry functions as a visual narrative, telling the story of his rise to power. Remarkably, the Bayeux Tapestry has survived for almost 900 years in excellent condition. Most textiles from this period have deteriorated over time due to exposure to light, moisture, and environmental conditions, making surviving examples extremely rare.

Figure \(\PageIndex{10}\): Bayeux Tapestry (Public Domain)

The Bayeux Tapestry

The Bayeux Tapestry. The BBC's David Dimbleby describes the historical significance of the Bayeux Tapestry for his forthcoming BBC One Series, Seven Ages of Britain.

The **Tapestry of Creation** (6.6.11) was made using wool and linen with **couched needlework**, the same embroidery technique used in the **Bayeux Tapestry**. The surface is richly decorated with threads in red, yellow, blue, green, and white, with darker outlines in black that define the forms. Many of the patterns are **geometric**, possibly influenced by **Islamic textiles**. The imagery presents a range of **theological scenes**, organized into three main themes: the creation story from Genesis, cosmic or symbolic

representations of the universe, and narratives related to the **Holy Cross**. Surrounding the central imagery is a border of square panels illustrating the agricultural calendar, showing activities associated with different times of the year. Although the tapestry remains an important example of Romanesque textile art, historians are uncertain about its original function, and some portions of the work are missing, leaving gaps in its full narrative.

Figure \(\PageIndex{11}\): Tapestry of the Creation (11^{th}-12^{th} century, 365 x 470 cm) (CC BY-SA 3.0)

England became renowned for producing some of the finest embroidery in Europe between the 13th and 15th centuries. This highly prized work was known as **Opus Anglicanum**, meaning “English work.” These textiles were celebrated for their detailed craftsmanship, rich materials, and intricate imagery. One outstanding example is a **chasuble** (6.6.12), a sleeveless garment worn by a priest during Mass. The front of the chasuble features saints such as **Peter**, **Paul**, **Andrew**, and **James**, while the back depicts important religious scenes including the **Coronation of the Virgin**, the **Adoration of the Magi**, and the **Annunciation**, along with decorative inscriptions. In the 16th century, this chasuble was altered and trimmed to reflect changing fashion styles, but it remains one of the finest surviving examples of medieval English embroidery. As a result, the heads of Saints John the Evangelist and John the Baptist were, alas, cut away."[1] The depiction of the nativity scene emphasized flowers, animals, birds, and angels, all made with gold thread and pearls.

Figure \(\PageIndex{12}\): Chasuble (Opus Anglicanism) (1330-50, silver and silver-gilt, silks, pearls, 129.5 x 76.2 cm) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/art/collec.../search/466660

6.7: Gothic (12th C – end of 15th C)

Definition: Term

Gothic style: An artistic and architectural style (12th–16th centuries) known for height, light, and detailed decoration.

Stained glass: Colored glass arranged to form images, often used in church windows.

Panel painting: Paintings created on flat wooden panels, often used for religious imagery.

Bourgeois class: The middle class, often involved in trade or business, who supported the arts through patronage.

Guild: An organization of skilled workers or artists that regulated training and standards.

Abbey of Saint-Denis: A church near Paris considered the birthplace of Gothic architecture.

Cathedral: A large, important church that serves as the seat of a bishop.

Nave: The central space of a church, typically the tallest and most prominent area.

Flying buttress: An external support structure that transfers weight from the roof to outer supports.

Façade: The front exterior face of a building, often highly decorated.

Gothic architecture: A style known for height, light, pointed arches, and structural innovations.

Tympanum: A semicircular space above a doorway, often filled with sculptural decoration.

Jamb: The vertical sides of a doorway where sculpted figures are often placed.

Trefoil: A decorative design with three rounded lobes.

Quatrefoil: A decorative design with four rounded lobes.

Ivory carving: Small-scale sculptures made from animal tusks, often highly detailed and decorative.

Stained glass: Colored glass used to create decorative windows, often with religious imagery.

Silver stain: A technique using silver compounds to produce yellow or gold tones on glass when fired.

Kiln: A high-temperature oven used to fire and set materials like glass or ceramics.

Rose window: A large, circular stained-glass window, often found on the façades of Gothic cathedrals.

Lead cames: Strips of lead used to hold pieces of glass together in stained-glass windows.

The **Gothic style** first emerged in the 12th century in northern France and gradually spread across Europe. As it developed, major artistic forms included **panel painting**, **stained glass**, **sculpture**, **illuminated manuscripts**, and monumental **architecture**. Early Gothic art was closely tied to cathedral decoration, especially sculptural programs that illustrated biblical and religious narratives. The growth of cities, the rise of **universities**, and the expansion of the **bourgeois class** all contributed to increased support for the arts through commissions and patronage. This period also saw the development of **guilds**, which helped organize and train artists. For the first time, many artists began signing their work, establishing personal identity and artistic legacy. The **Abbey of Saint-Denis** near Paris is often considered the starting point of Gothic architecture and inspired a series of great cathedrals throughout France, including **Notre-Dame Cathedral** in Paris and **Chartres Cathedral**. As the Gothic style spread to England, major examples such as **Canterbury Cathedral** and **Westminster Abbey** adopted and adapted its architectural features.

Architecture

Gothic architecture in cathedrals led the development of **Gothic art**, which emerged in France in the 12th century following the **Romanesque period**. This new style reflected a major shift in how cathedrals were designed and constructed. Romanesque buildings were characterized by thick walls, small windows, and a heavy, solid appearance. In contrast, Gothic structures emphasized height, light, and openness, creating dramatic interiors filled with **stained glass**. Through experimentation—sometimes involving structural failures—builders developed new techniques that allowed cathedrals to reach unprecedented heights. These buildings appeared to rise upward toward the heavens, supported by slimmer structural elements and more advanced engineering methods.

Key features of Gothic architecture include **pointed arches**, **ribbed vaults**, and **flying buttresses**. Ribbed vaults used intersecting stone ribs to support ceilings, while flying buttresses extended from the exterior walls to redistribute weight, allowing walls to be thinner and filled with windows. Pointed arches enhanced both structural stability and visual height, contributing to the bright, vertical quality of Gothic interiors. These innovations shaped not only churches and cathedrals but also civic buildings such as town halls, palaces, castles, and early universities throughout Europe.

Figure \(\PageIndex{1}\): Milan Cathedral (CC BY-SA 3.0)

The **Milan Cathedral** (6.7.1), an important example of **Gothic architecture**, features soaring brick walls clad in white marble, creating a luminous and dramatic interior. The cathedral is surrounded by four aisles that frame the central **nave (**6.7.2), which rises to an impressive height of about 45 meters—one of the tallest vaults of any cathedral. Like other Gothic cathedrals, the structure relies on **flying buttresses** to support the immense weight of the stone ceiling. However, at Milan Cathedral, these supports are largely hidden from the front façade, allowing the entrance to appear unified, ornate, and visually grand without exposing the structural elements.

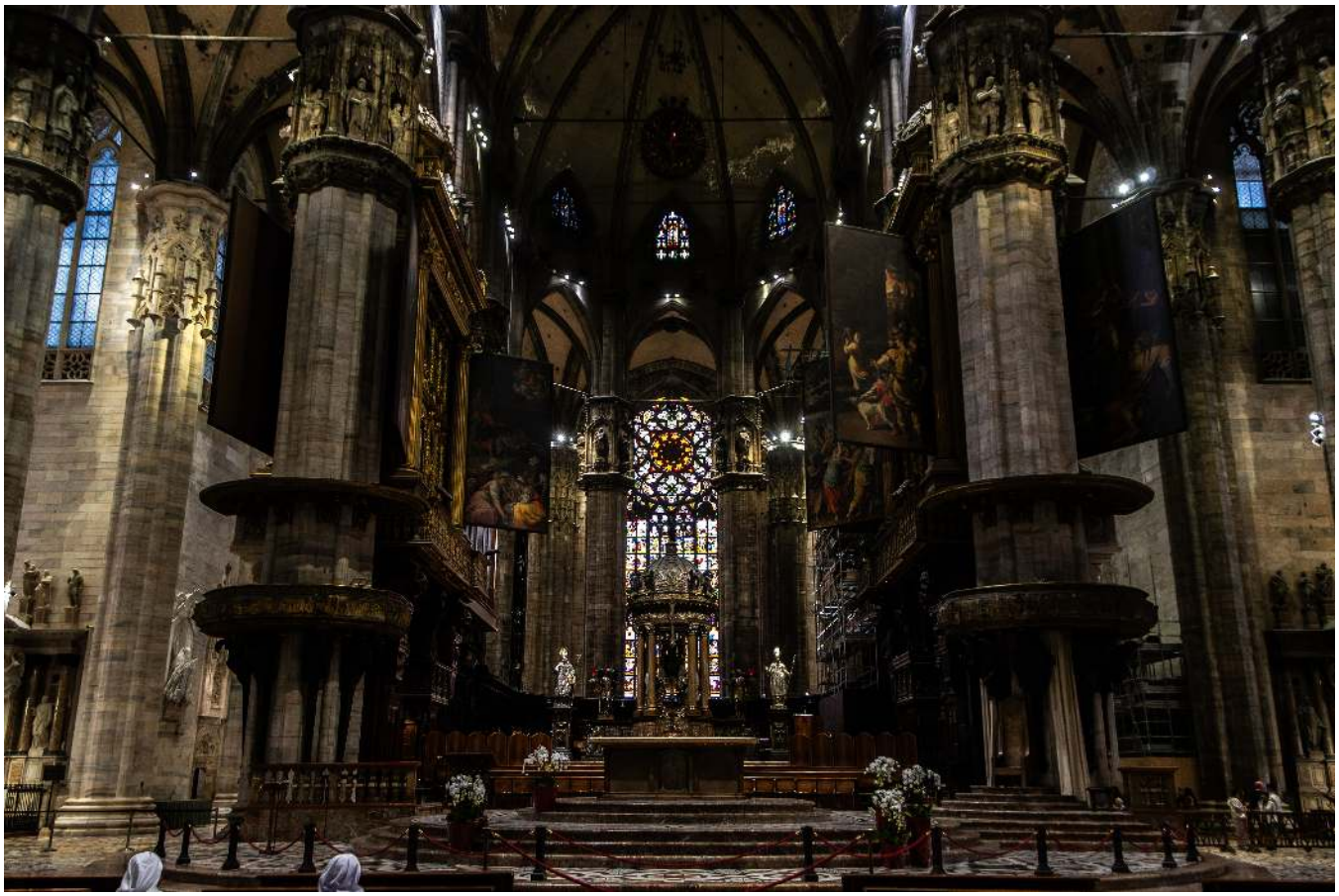


Figure \(\PageIndex{2}\): Interior of Milan Cathedral (CC0)

Gothic Architecture Explained

A conversation about Gothic Architecture in England, 1190–1420

Relief Sculptures

Monumental sculpture played a major role in **Gothic art and architecture**, decorating cathedral façades, altars, niches, columns, and tombs. These large-scale works often required teams of artists working over long periods of time. Gothic figures are characterized by elongated bodies, gentle curves, and a subtle, enigmatic smile. Their flowing drapery and naturalistic poses give the impression that they are emerging from the architecture itself. Compared to earlier periods, Gothic sculpture shows increased **naturalism**, with varied gestures and emotional expression that helped inspire religious devotion.

A common feature of Gothic churches is a sculptural scene centered on **Christ** above the main entrance, often located in the **tympanum** (6.7.3). Christ is surrounded by symbolic representations of the apostles—typically a winged man, lion, bull, and eagle. Around this central image are intricate geometric patterns, floral designs, and numerous figures. Along the doorway, figures placed in the **jambs** (6.7.4) stand beside columns, often representing men and women from the Old Testament. These life-sized statues appear animated, as if they might step forward from their architectural setting.

In addition to monumental works, smaller carvings became popular among everyday people. Artists crafted objects from ivory, wood, and bone, including religious figures, combs, and mirror cases. Wealthier individuals owned more elaborate and jeweled versions. Gothic design elements—such as pointed arches, **trefoils**, and **quatrefoils**—influenced not only religious art but also everyday objects and decorative arts throughout Europe for centuries. Gothic art was often referred to as “the beautiful style” and was widely appreciated in royal and noble courts.

Figure \(\PageIndex{3}\): Entry sculptures (Public Domain)

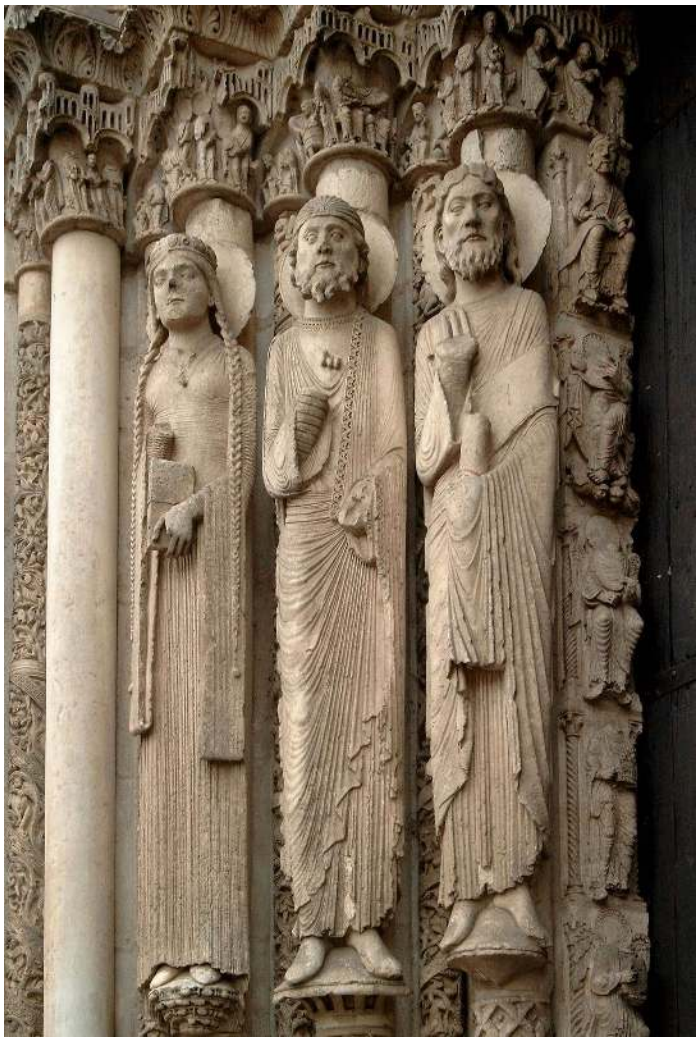


Figure \(\PageIndex{4}\): Pillar sculptures (CC BY-SA 2.5)

Stained Glass

The stained-glass window was one of the most important and prestigious art forms, which brought light and inspiration. Gothic churches had vast expanses of windows that worked well as space for exquisite, large stained-glass windows and the religious stories portrayed in the artistry. "Windows could be larger, and the stained glass brought light and color with detailed designs and images. "Scholar Abbot Suger pioneered the belief that Gothic styles should emphasize earthly light as the embodiment of divine light, lifting the human soul closer to God. He led the rebuilding of the Basilica of Saint-Denis near Paris in 1135, encouraging architects to emphasize soaring heights with pointed arches and vaulted ceilings that allowed room for the maximum amount of stained-glass windows."[1]

Early **stained glass** designs were created by painting black details onto clear or colored glass. By the 14th century, artists developed more advanced techniques, mixing silver compounds with pigments and a liquid binder—such as wine or urine—to create **silver stain**, which produced a wider range of colors and more subtle shading. The glass was then fired in a kiln, permanently fusing the paint to the surface. In the famous **rose window** (6.7.5) at **Chartres Cathedral**, artists assembled many small pieces of colored glass, held together by strips of **lead cames**. Lead was used because it is flexible and could accommodate the complex, curved designs of the window. A close-up view (6.7.6) reveals the incredible number of individual glass pieces and the rich variety of colors required to create these intricate images.

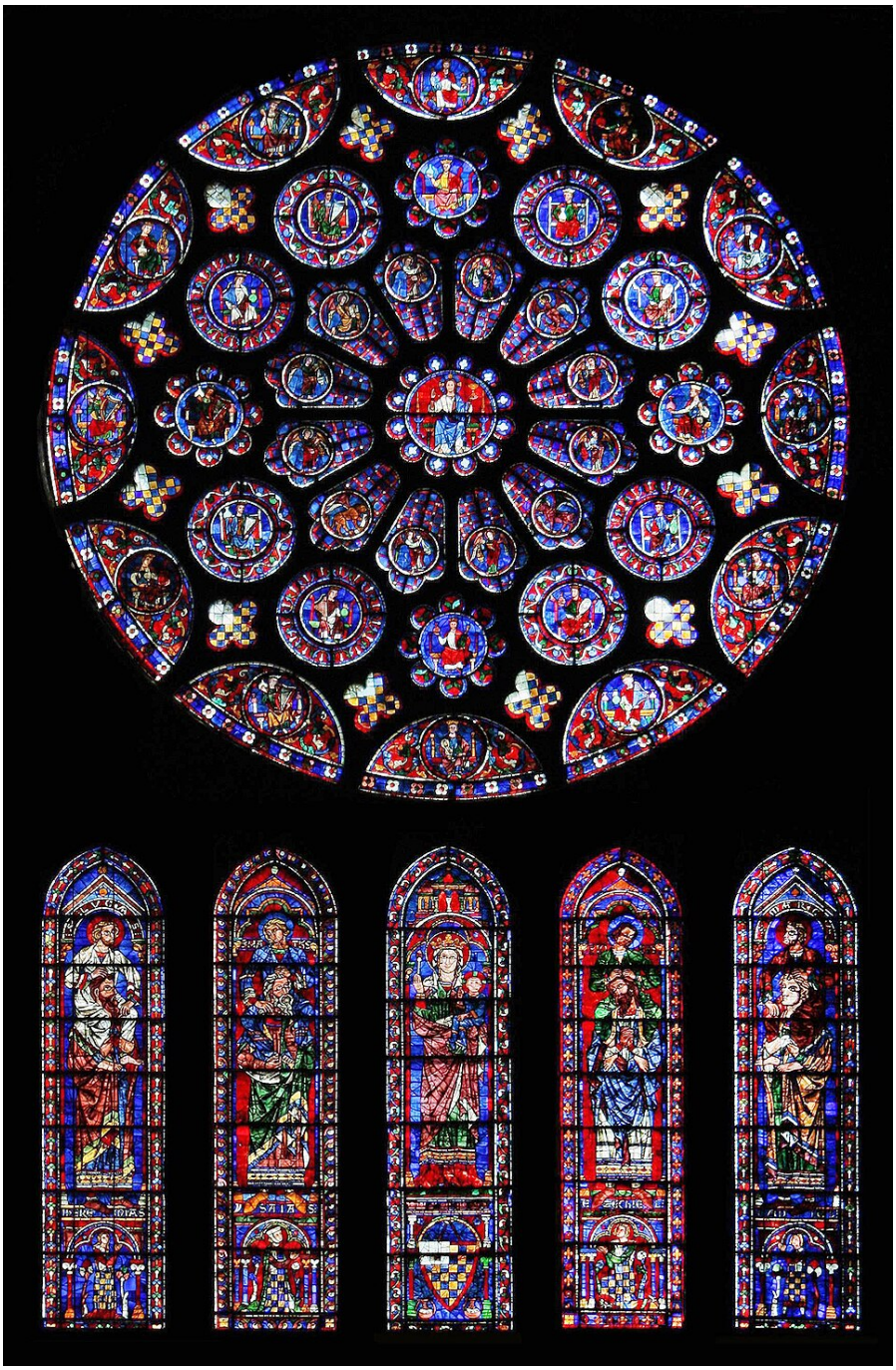


Figure \(\PageIndex{5}\): Chartres south window (CC BY-SA 3.0)

Figure \(\PageIndex{6}\): Blue Virgin window (CC BY-NC-SA 4)

Stained Glass Window

Watch as a medieval stained glass panel in our collection is reproduced using centuries-old techniques. The original ‘Entry into Jerusalem’ panel came from the choir windows in Erfurt Cathedral in eastern Germany, and was part of a scene dedicated to the Passion of Christ.

Painting

The **Gothic period** marked a transition from medieval traditions toward the early development of more **secular art**. While religious themes remained dominant, artists began to explore new subjects and more naturalistic styles that would later define the **Renaissance**. Many early Renaissance painters began their work during the final phase of the Gothic era.During this time, **panel painting** became increasingly popular, especially for use behind church altars. These painted panels provided a more flexible way to communicate religious stories compared to large-scale sculptural programs. As Gothic churches grew larger and more open, they also offered expanded wall space for displaying painted works, further encouraging the development of painting as a major artistic medium.

Fra Angelico (around 1395-1455) was a Dominican friar, and after his death, he was called the "Angelic Doctor". He was a significant influence in moving the Gothic and Medieval styles into the early Renaissance. "Fra Angelico pioneered many of the stylistic trends that distinguish the early Renaissance, including the rational treatment of pictorial space and the volumetric modeling of forms with light and shadow. At every stage of his career, in fact, Fra Angelico remained at the forefront of artistic innovation in Florence."[2]

The **San Marco Altarpiece** (6.7.7), painted by **Fra Angelico** and commissioned by **Cosimo de' Medici**, is one of the most important works bridging the late Gothic and early **Renaissance** periods. Created to replace an older altarpiece, the painting depicts the **Virgin and Child** surrounded by angels and saints. The composition introduces a more unified, horizontal arrangement, with some figures placed slightly behind the central throne, suggesting depth. Elements such as the patterned carpet and steps in the foreground help create a sense of space and dimension. Fra Angelico used traditional colors—especially red and blue—to establish visual balance and symmetry across the composition. The Virgin and Child are carefully positioned at the central intersection of the vertical and horizontal axes, reinforcing their importance.

Despite these advancements, the painting also reveals early challenges with **perspective**. One notable issue is the treatment of halos, sometimes referred to as "platter heads." The halos are depicted as flat, frontal circles, even when the figures turn their heads. This results in halos appearing incorrectly placed—for example, floating in front of a figure's face rather than behind the head—highlighting the developing understanding of spatial representation during this transitional period.

Figure \(\PageIndex{7}\): *San Marco Altarpiece* (1438-1443, tempera on panel, 220 x 227 cm) (Public Domain)

Jan van Eyck (ca. 1390–1441) was a leading Northern European painter known for his role in developing a highly detailed and realistic style rooted in late medieval traditions. He came from a family of artists and worked at a royal court, where he was highly respected. Unlike many artists of his time, van Eyck was literate and often **signed and dated** his paintings. He was especially known for his innovative use of **oil paint**, which allowed him to create remarkable realism, fine detail, and subtle effects of light on surfaces. One of his most famous works is **The Adoration of the Lamb** (6.7.8), also known as the **Ghent Altarpiece**. The project was begun by his brother **Hubert van Eyck** and completed by Jan after Hubert's death. This large altarpiece consists of twelve hinged panels that can be opened and closed, revealing a complex visual narrative of divine revelation.

The central lower panel depicts the **Adoration of the Mystic Lamb**, a symbolic image representing Christ and salvation. In the upper central panels, figures such as the **Virgin Mary**, **God the Father (or Christ)**, and **Saint John the Baptist**are shown interceding for humanity. On the outer panels, the nude figures of **Adam and Eve** are included, emphasizing themes of sin and redemption. The entire work is notable for its vibrant colors, intricate details, and strong sense of **naturalism**, making it a landmark of early Northern Renaissance art. The altarpiece contains some aspects of Byzantine art that van Eyck studied. "His genius was in the commingling of the timelessly iconic with the naturalistic play of light across the temporal textures of the world, transforming the material into the miraculous."[3]

Figure \(\PageIndex{8}\): *The Adoration of the Lamb* (Ghent Altarpiece) (1432, oil on oak panel, 3.4 x 5.2 m) (Public Domain)

Manuscripts

Illustrated manuscripts are handmade books or pamphlets in which written text is enhanced with images and decorative elements. These books were created using **parchment**, made from treated animal skins that were cut, prepared, and sewn into pages. Ink had to be specially made, and each page was carefully ruled before writing began. A **scribe** copied the text by hand, and an artist later added illustrations and decorative details. Pages were often adorned with figures, plants, and intricate patterns, making manuscript production an important artistic industry.

Monks in monasteries played a key role in producing and preserving these books, maintaining libraries that housed texts from various regions. By the 13th century, illustrated manuscripts became widely used for religious texts such as psalters, Bibles, and devotional works, especially for royalty. The rise of **universities** in Europe further increased the demand for books. One example is the **Paris Bible** (6.7.9), produced in a major manuscript center known for its university. These Bibles were used by students, clergy, and laypeople. The text is written in extremely small, precise lettering, demonstrating the skill of the scribe. The pages are decorated with **octofoils**, stylized floral designs with eight parts, often used as decorative or heraldic elements.

Another example comes from the writings of **Valerius Maximus** (6.7.10), a 1st-century Roman author whose works were later translated into French under **Charles V of France**. The manuscript imagery blends classical Roman themes with medieval Christian ideas, showing a mix of cultural influences. The illustrations feature muted colors, detailed repeating backgrounds, and decorative leaf patterns framing the page.

Figure \(\PageIndex{9}\): Bible (ca. 1250-75, tempera and gold on parchment; leather binding, 26.6 x 18.1 x 8.9 cm) (Public Domain)

Figure \(\PageIndex{10}\): Leaf from a manuscript of Valerius Maximus (ca. 1380-90, tempera, ink, and gold on parchment, 38.6 x 29.8 cm) (Public Domain)

Making Manuscripts

An illuminated manuscript is a book written and decorated completely by hand. Illuminated manuscripts were among the most precious objects produced in the Middle Ages and the early Renaissance, primarily in monasteries and courts. Society's rulers--emperors, kings, dukes, cardinals, and bishops--commissioned the most splendid manuscripts.

[1] Retrieved from https://www.nationalgalleries.org/ar...rms/gothic-art

[2] Retrieved from https://www.metmuseum.org/essays/fra...o-ca-1395-1455

[3] Retrieved from https://smarthistory.org/van-eyck-th...nt-altarpiece/

6.8: Igbo of Nigeria (10th C – 13th C)

Definition: Term

Igbo: An ethnic group in southeastern Nigeria with a rich cultural and artistic tradition.

Nigeria: A country in West Africa, home to many ethnic groups including the Igbo, Yoruba, and Hausa.

Autonomous villages: Independent communities that govern themselves rather than being controlled by a central authority.

Transatlantic slave trade: The forced transportation of Africans across the Atlantic Ocean to the Americas.

British colonial rule: The period when Britain controlled Nigeria, influencing its political and economic systems.

Latex casting (theory): A proposed casting method using latex instead of wax to create molds for metal objects.

Bronze alloy: A mixture of metals, primarily copper, often combined with other elements like tin or silver.

Riveting: A method of fastening materials together using metal pins.

Soldering: Joining metal parts by melting a filler metal between them.

Symbolism: The use of images or objects to represent ideas or concepts (e.g., the leopard representing power)

Carnelian beads: Beads made from a reddish-orange gemstone often used in jewelry.

Waist beads: Decorative strands worn around the waist, often used in ceremonies and as symbols of identity.

The **Igbo people** live in southeastern **Nigeria** and are believed to have originated near the confluence of the **Niger and Benue Rivers** before migrating to the Awka-Orlu plateau several thousand years ago. Traditionally, Igbo society was organized into **autonomous villages**, creating a diverse and decentralized cultural system. Rather than a single unified kingdom, each community operated independently, often led by local leaders, and practiced a religion based on a **pantheon** of deities.Today, the Igbo are one of the three largest ethnic groups in Nigeria. Their early origins are still being researched, as historians continue to piece together their history through archaeology and oral traditions. Over time, migration contributed to the diversity of Igbo communities, particularly during the 14th and 15th centuries.

European contact began in the mid-15th century, significantly impacting the region through the **transatlantic slave trade**. Later, **British colonial rule** brought major political and economic changes, including taxation and the extraction of natural resources. These external influences reshaped Igbo society in lasting ways. “The origins of the Igbo people have been the subject of much speculation, and it is only in the last fifty years that any real work has been carried out on this subject: like any group of people, they are anxious to discover their origin and reconstruct how they came to be how they are. ...their experiences under colonialism and since Nigeria’s Independence have emphasized for them the reality of their group identity which they want to anchor into authenticated history.”[1]

The **Igbo religion** was closely connected to the authority of the **Eze Nri**, the spiritual ruler of the **Kingdom of Nri**. The exact origins of the Eze Nri remain uncertain; however, scholars generally place the development of the Nri Kingdom around 900 CE. The Eze Nri was regarded as a sacred, mytho-historical figure whose role was to establish order, maintain spiritual balance, and guide religious practices. According to **oral traditions**, the Eze Nri was believed to have descended from the heavens, and his actions and teachings were passed down through generations. Many ceremonial practices associated with the Nri tradition continue in some Igbo communities today. The Nri system was unique in that it emphasized ritual authority and spiritual influence rather than military power.

Some groups within the Igbo population today still identify with Nri heritage. Archaeological evidence, including early **Igbo-Ukwu bronze objects**, suggests a sophisticated artistic tradition that may be connected to the broader cultural and religious systems of the Nri civilization. While some theories have proposed links between Igbo origins and ancient Egypt, these claims remain debated and are not widely accepted by scholars.

Bronze

The **Igbo people** produced a wide range of artistic works, with **bronze artifacts** among the most notable. Archaeological excavations have uncovered hundreds of ritual vessels and cast objects that demonstrate a high level of technical skill, showing that Igbo artists were highly knowledgeable in **metalsmithing**. They worked with copper and other metals using techniques such as

hammering, twisting, bending, and casting to create intricate forms. Many scholars believe that Igbo artists were part of broader networks of cultural exchange, where ideas and techniques were shared across regions. Some bronze works were created in multiple stages, with smaller components cast first and then assembled into more complex figures, such as the equestrian figure (6.7.1). Igbo artists produced a variety of objects, including pendants, breastplates, crowns, swords, and ornamental items. One example is a **pendant** (6.7.2) featuring finely incised lines on the face and an elaborate headdress. This type of object may represent an individual prepared for a ceremonial or important social occasion, highlighting both artistic skill and cultural significance.

Figure \(\PageIndex{1}\): Equestrian (Public Domain)

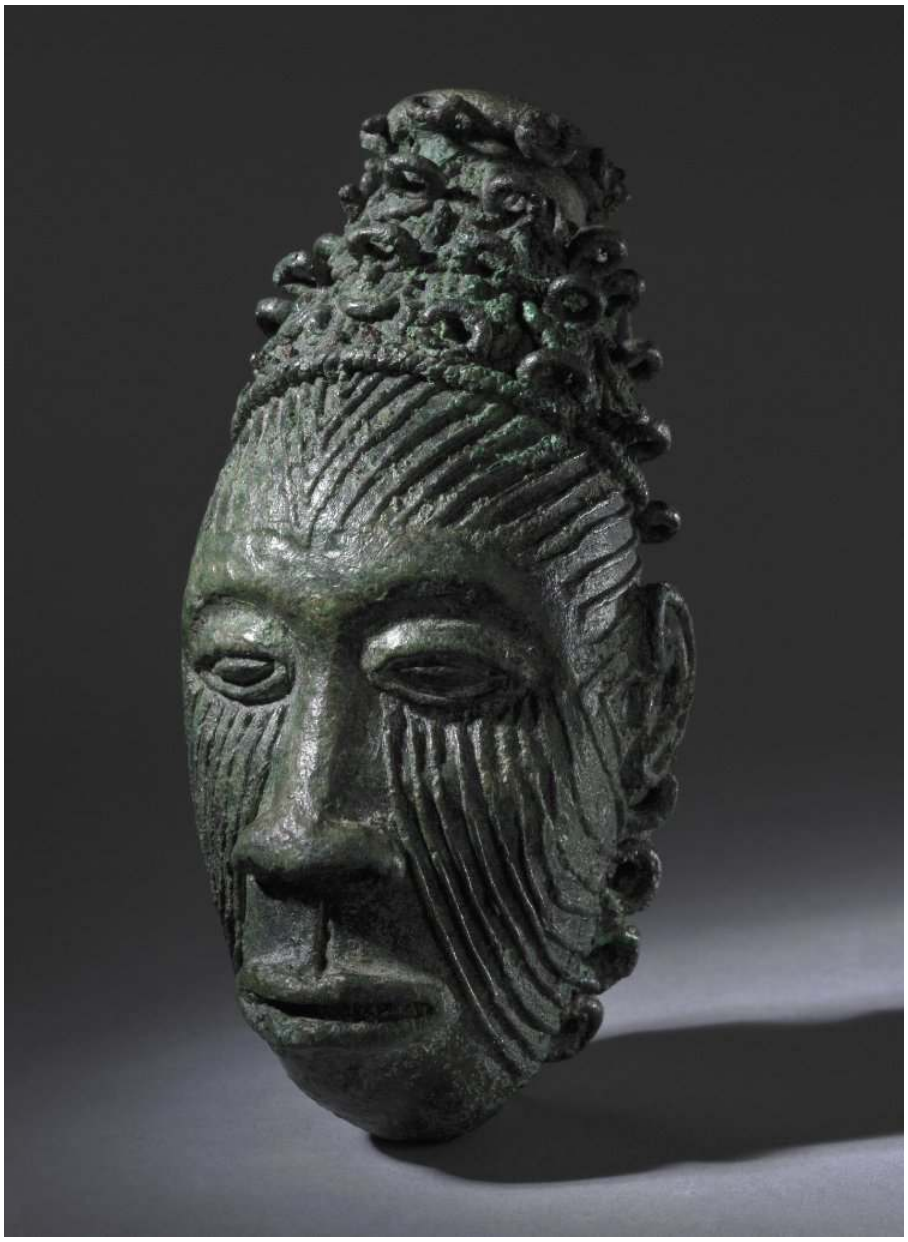


Figure \(\PageIndex{2}\): Igbo ukwu face pendant (CC BY-SA 4.0)

The **Igbo** developed unique metalworking techniques that differed from many other cultures. Instead of using standard methods such as wire attachment, riveting, or soldering, historians believe they may have used a form of **latex casting** rather than traditional beeswax in their casting process. This approach allowed them to achieve exceptionally fine surface detail in their bronze works.

Igbo **bronze alloys** often contained a higher proportion of silver than those found in other regions, giving their objects a distinctive appearance. An example is the vessel shaped like a **coiled shell with a leopard handle** (6.7.3), which demonstrates both technical precision and artistic creativity. The vessel closely resembles a natural marine shell, with an opening on the side, likely used in ritual practices for pouring liquids. The **leopard**, a symbol of power and authority in many African cultures, reinforces the ceremonial importance of the object. This combination of natural forms, symbolic imagery, and advanced craftsmanship highlights the sophistication of Igbo art.

Figure \(\PageIndex{3}\): Shell vessel with leopard (9^{th}-11^{th} century, bronze) (CC BY-SA 4.0)

“This pendant of a bird (6.7.4) perched atop two large eggs was excavated at the site of a shrine storehouse at Igbo Olokun. Its textured surface highlights the artistry and technological skill of the city’s bronze-casting workshops. The raised ropes and dots that embellish the pendant evoke the abundant number of beads found at Igbo Ukwu that circulated along local and long-distance trade routes. Many of the copper alloy objects found at the site were designed to be decorated with glass beads; this pendant of a bird and two eggs was found alongside yellow beads and copper wires attached through loops cast along the object’s side.”[2]

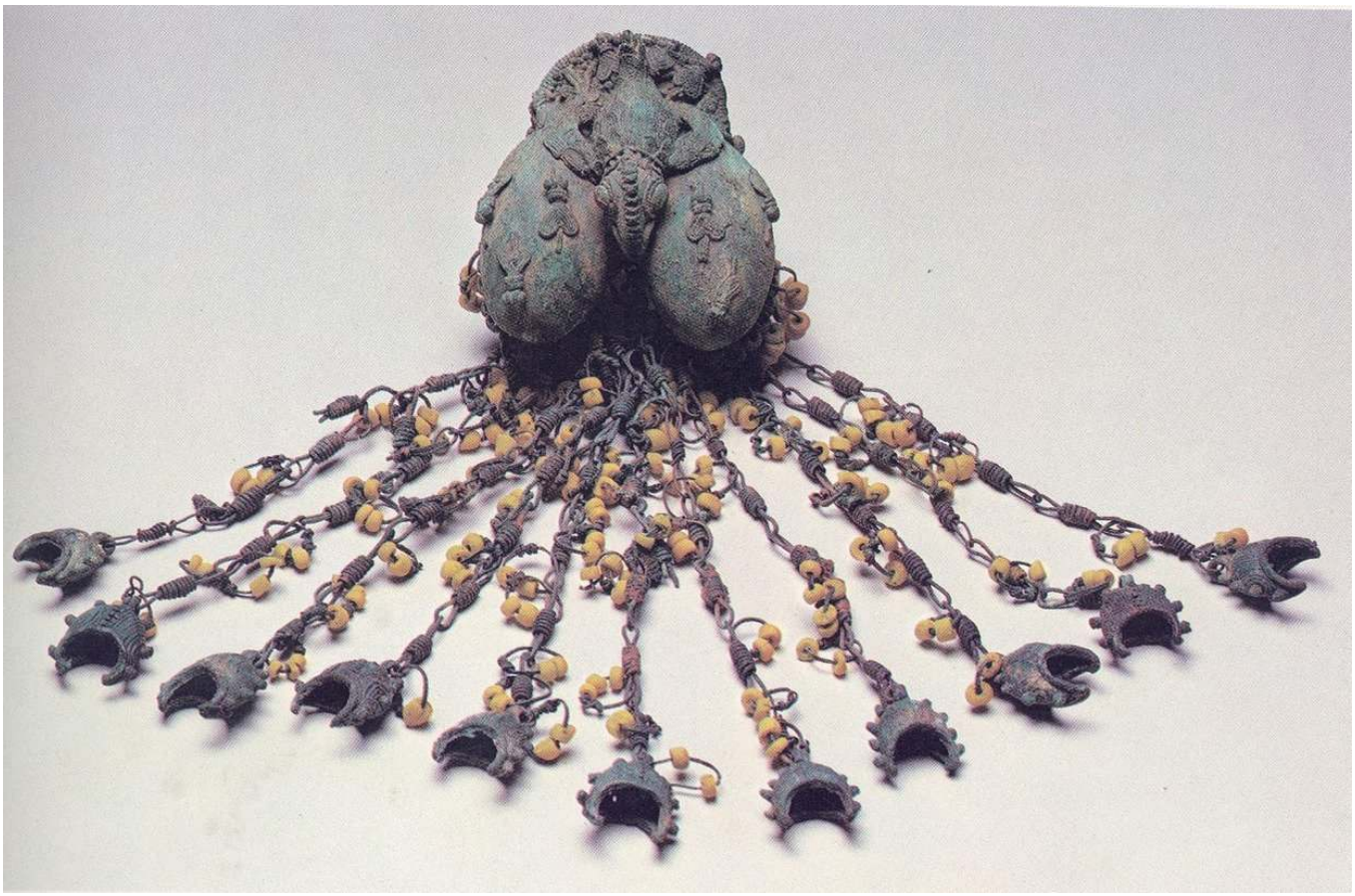
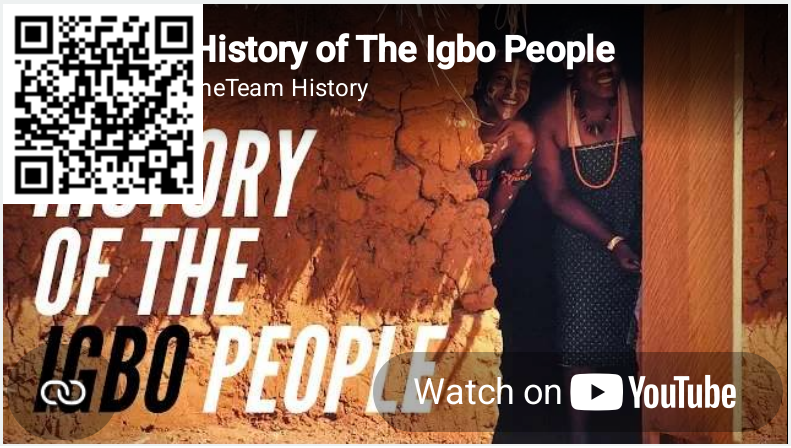


Figure \(\PageIndex{4}\): Double egg pendant (9^{th}-10^{th} century, leaded bronze) (CC BY-SA 4.0)

History of the Igbo People

A History of the Igbo People



Beads

Archaeologists have uncovered thousands of **glass and carnelian beads** (6.7.5) in a wide range of colors and styles, revealing the importance of beadwork in Igbo culture. Scientific analysis shows that many of these beads originated from distant regions along major trade routes, including areas such as **Mesopotamia** and **Iran**, indicating that the Igbo were actively engaged in long-distance trade during the 9th and 10th centuries. Beads were powerful symbols of identity and status. Men often wore strands of beads around their wrists and necks to indicate **nobility or rank**. Bead ornaments were also worn by both men and women during

important life events and ceremonies, including marriages and burials. Traditionally, brides wore multiple strands of beads around their waist. These **waist beads** moved rhythmically as they danced, emphasizing beauty, status, and cultural tradition.

Figure \(\PageIndex{5}\): Glass beads (9^{th} century) (CC BY-SA 4.0)

[1] Retrieved from https://faculty.ucr.edu/~legneref/igbo/igbo1.htm

[2] Retrieved from https://caravans.library.northwestern.edu/works/4

6.9: Djenne of Mali (9th C – 15th C)

Definition: Term

Djenné-Djenno: An ancient city in Mali and one of the earliest urban centers in sub-Saharan Africa.

Niger River: A major river in West Africa that supported trade, agriculture, and settlement.

Mali Empire: A powerful West African empire known for trade, wealth, and centers of learning.

Mud-brick (adobe): Building material made from earth and water, shaped and dried in the sun.

African rice: A domesticated crop grown in West Africa, important for sustaining populations and trade.

Oral tradition: The transmission of history and culture through spoken stories and songs.

Terracotta: A type of fired clay used to create sculptures and pottery.

Protrusion: A part that extends outward from a surface.

Mud plaster: A coating applied to walls to protect and smooth surfaces made of earth-based materials.

Toron (palm wood beams): Wooden beams that project from the walls, used for both structural support and scaffolding.

Sun-dried bricks: Bricks made from mud and dried in the sun rather than fired in a kiln.

Djenné-Djenno is one of the oldest known cities in sub-Saharan Africa, located along the **Niger River** in present-day Mali. The city was inhabited as early as 250 BCE and reached its peak between the 9th century and about 1250 CE. As part of the broader **Mali Empire**, Djenné became a major center of commerce and learning, with an estimated population of around 50,000 people by 800 CE.

Archaeological evidence shows that the city was made up of **mud-brick houses**, and its success was closely tied to agriculture. The surrounding floodplains and seasonal rains supported the cultivation of crops such as **African rice**, millet, and vegetables, which allowed the population to grow and thrive. Surplus rice became an important trade commodity, and Djenné's location made it a key hub in regional and long-distance trade networks.

Islam became the dominant religion in the region, and Djenné is home to the famous **Great Mosque of Djenné**, originally built between the 13th and 14th centuries using locally available clay. Much of Djenné's history is preserved through **oral traditions**, including poems and songs, rather than written records. Archaeology provides additional insight; however, the loss of artifacts due to illegal excavation has made it more difficult to fully understand the culture, as objects removed from their original context (**in situ**) lose important historical information about their use and meaning.

Mosque

The original **Great Mosque of Djenné** (6.9.1) is traditionally associated with **Mansa Musa**, the powerful ruler of the **Mali Empire**, who is known for his wealth and support of Islam. During his famous pilgrimage to Mecca, he distributed large amounts of gold along the way, increasing his reputation across the Islamic world. Under his influence, mosques were built throughout the region, and Djenné became an important religious and cultural center. The mosque was constructed using local materials such as **adobe** and mud, which were readily available but vulnerable to weathering. Because of seasonal rains and flooding, the structure required regular maintenance through replastering. Traditional homes in the region were also made of mud brick but were often built on raised ground for protection from floods.

The current **Great Mosque of Djenné**, rebuilt in the early 20th century, retains key features of earlier structures, including a large courtyard and a covered prayer hall. It is made from **sun-dried earth bricks** covered with mud plaster. The walls are reinforced and decorated with projecting **palm wood beams** (toron), which also function as built-in scaffolding for annual repairs. Historical photographs (6.9.2) show earlier versions of the mosque before deterioration led to reconstruction. Today, the smooth, sculpted appearance of the mosque reflects continuous care and community involvement, as the building is regularly replastered to maintain its structure and appearance.

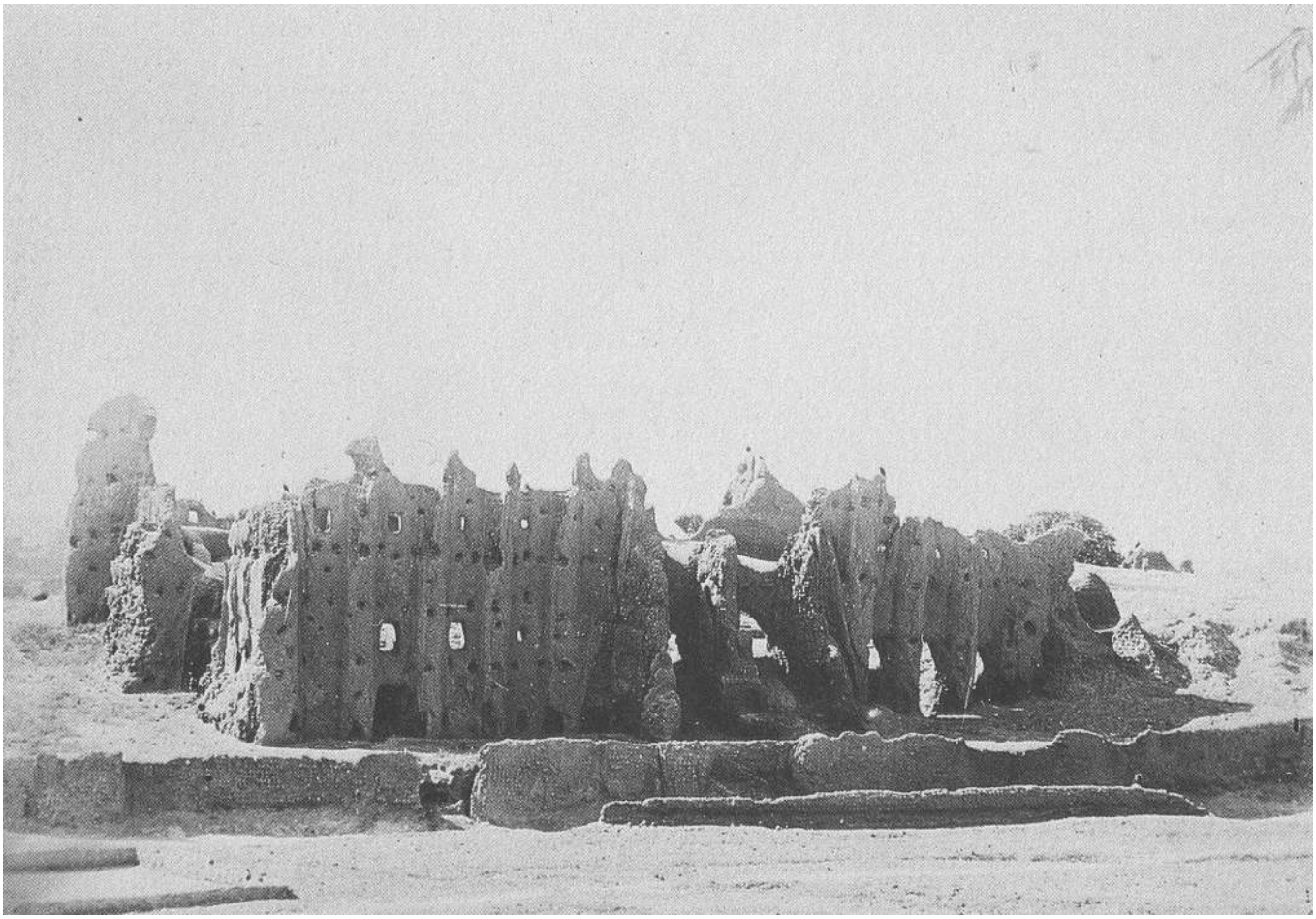


Figure \(\PageIndex{1}\): Ancient mosque (Public Domain)

Figure \(\PageIndex{2}\): Current mosque (CC BY-SA 3.0)

Sculpture

Clay vessels, cast brass, and forged iron artifacts have survived today, exhibiting a diverse and sophisticated society. Most relics of the communities' lives were found in archaeological digs, sadly subject to looting and theft. "All known examples in the permanent collections of museums outside of Africa are *hors context*, acquired from earlier looting."[1] Today, mail-order catalogs still advertise items found as 'beads coming from abandoned village sites.' Obtaining artifacts, no matter how small, for sale is illegal, and many places look like pockmarked battlefields from illicit excavations. Governmental laws do not stop the thefts and sales of ancient relics.

Terracotta figures from the Djenné region were carefully crafted with detailed features, including clothing, jewelry, and additional body ornaments that sometimes appear as raised or protruding elements. These figures often represent humans and animals in a variety of poses—such as riders on horseback (6.9.3), seated or kneeling individuals, and figures intertwined with serpents. One recurring subject is the **helmeted horseman**, found in multiple sculptures. Historians continue to debate its meaning, especially since there is little archaeological evidence of organized military structures or royal armies in the region. Some scholars suggest that the elaborate attire seen on these figures may relate more to **ceremonial or symbolic roles** rather than warfare.

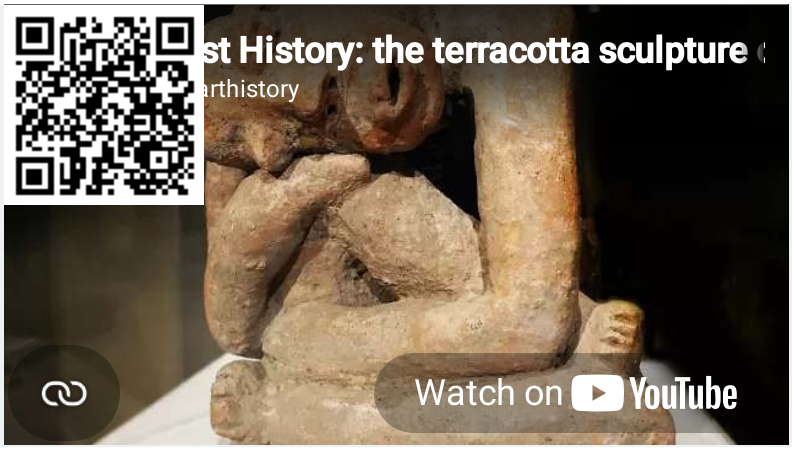
Another example is the **Djenné figure** (6.9.4), shown in a compact, crouched position with one knee crossed over the other and the head lowered. The meaning of this posture remains uncertain. Some researchers propose that the figure may represent illness, as small raised forms on the back have been interpreted as signs of disease. This terracotta sculpture is over 700 years old, highlighting the long-standing artistic traditions of the region.

Figure \(\PageIndex{3}\): Clay horseman (13th-15th century, terracotta) (Public Domain)

Figure \(\PageIndex{4}\): Terracotta figure (13th century, terracotta, 29.9 cm) (Public Domain)

Lost History: The Terracotta sculpture of Djenne

Seated figure, 13th century, Mali, Inland Niger Delta (Djenné peoples), terracotta, 25.4 x 29.9cm (The Metropolitan Museum of Art) ARCHES: At Risk Cultural Heritage Education Series



Metal

Terracotta figures from the Djenné region often display consistent styles of **jewelry**, suggesting shared cultural traditions and identity. The development of **copper metallurgy** was an important technological step that eventually supported the transition to ironworking. Jewelry in this culture was not merely decorative—it served as an important marker of a person's **rank**, profession, family ties, or village affiliation. Women, especially mothers, often wore specific ornaments that identified their social role.

One example is a **bracelet** (6.9.5) made from a copper alloy and decorated with incised circular patterns. Although its exact purpose is unknown, it likely held symbolic or social meaning. Another example is a **necklace** (6.9.6) made from copper alloy with small bells attached. These bells could be heard by both humans and spirits, suggesting a connection between the physical and spiritual worlds. Women often wore multiple bells, reinforcing ideas of harmony, communication, and community within Igbo culture.

Figure \(\PageIndex{5}\): Bracelet (11^{th}-16^{th} century, copper alloy, 12.4 cm) (Public Domain)

Figure \(\PageIndex{6}\): Necklace (14th century, copper alloy, cotton cord, 5.9 x 2.9 x 38.1 cm) (Public Domain)

[1] MacDonald, K. C. (1996). Djenne: A Thousand-Year-Old City in Mali. *The African Archaeological Review*, *13*(2), 147–152. http://www.jstor.org/stable/25130591

6.10: Gupta Period (320 CE – 550 CE)

Definition: Term

Gupta Empire: An ancient Indian empire (c. 320–550 CE) known for advances in art, science, and literature.

Sri Gupta: The founder of the Gupta Empire.

Chandragupta I: A Gupta ruler who established political stability and expansion.

Samudragupta: A Gupta emperor known for military conquests and patronage of the arts.

Kalidasa: A classical Sanskrit writer famous for plays and poetry.

Aryabhata: An Indian mathematician and astronomer who contributed to early scientific knowledge, including the concept of zero.

Kamasutra: A classical Indian text discussing love, relationships, and social behavior.

Hindu temple (Gupta period): Early architectural structures based on geometric planning and symbolic design.

Zero (mathematics): A numerical concept developed in ancient India, essential to modern mathematics.

Ajanta Caves: A group of rock-cut Buddhist temples in India known for paintings and sculptures.

Buddha: The founder of Buddhism, whose life and teachings are central to the religion.

Vihara: A monastery that includes living spaces for monks.

Stupa: A dome-shaped structure that holds sacred relics and is used for meditation.

Rock-cut architecture: Structures carved directly into natural rock formations.

Chaitya-griha: A Buddhist worship hall with a stupa at one end, used for prayer and ritual.

Nave: The central open space in a building, often used for gathering.

Stupa: A dome-shaped structure that holds sacred relics and serves as a focus for meditation.

Circumambulate: To walk around a sacred object or space as a form of worship.

Colonnade: A row of columns supporting a structure or forming a walkway.

Vihara: A monastery used as a residence and study space for monks.

Sri Gupta, regarded as the founder of the **Gupta Empire**, helped establish a period known for its strong support of the arts and intellectual life. Although the Gupta state was not defined by vast wealth or extensive trade networks, it fostered an environment where scholars and artists could flourish. Before the rise of the Gupta Empire, the Indian subcontinent was divided among competing kingdoms. With the leadership of **Chandragupta I**, stability was established, allowing his son **Samudragupta** to expand the empire significantly. Samudragupta was both a military leader and a patron of the arts and sciences, encouraging creativity and even compensating artists—an uncommon practice in the ancient world.

The **Gupta period** is often considered a golden age of learning. Literature thrived, producing drama, poetry, and scholarly works across subjects such as mathematics, medicine, and philosophy. The text *Kamasutra* explored social and cultural ideas about love and relationships. The playwright **Kalidasa** became famous for his works blending humor, romance, and heroism. The mathematician and astronomer **Aryabhata** made groundbreaking contributions, proposing that the Earth is spherical and rotates on its axis. He also calculated the length of the solar year with remarkable accuracy and helped formalize the concept of **zero**.

Architecturally, the Gupta period introduced innovations in **Hindu temple design (6.10.1)**, often based on a square plan, considered a symbol of perfection. These temples included early decorative elements such as arches and sculptural details. Some of these structures are among the earliest surviving **free-standing temples** in India, marking an important development in architectural history.

Figure \(\PageIndex{1}\): Arched temple (CC BY-SA 4.0)

Ajanta Caves

The **Ajanta Caves** are a series of rock-cut temples carved into a mountainside in a horseshoe-shaped formation above a river in India. A total of twenty-nine caves (**6.10.2**), varying in size and function, were created as sacred spaces dedicated to **Buddha**. Each cave contains a combination of sculpture and detailed wall and ceiling paintings. The caves served two main purposes: some were **viharas**, or monasteries with living quarters for monks, while others were **chaitya-grihas**, or worship halls centered around a **stupa**. The interiors are quite dark, with minimal natural light, and it is believed that oil lamps were used to illuminate the spaces. Many caves also included simple stone beds for travelers and monks.

At its height, the site housed over 200 monks and artisans who lived, studied, and created art within the caves. The vibrant paintings depict scenes from the life of Buddha, rendered with rich color and careful detail. Remarkably, much of this artwork has survived because the site was eventually abandoned and remained largely undisturbed until its rediscovery and excavation in the 19th and 20th centuries.

Figure \(\PageIndex{2}\): Ajanta Caves (CC BY-SA 3.0)

The **chaitya-griha** (**6.10.3**) served as the main worship hall, featuring a high, arched ceiling carved directly into the rock. The interior was organized into a central **nave** with narrow side aisles separated by rows of pillars. At the far end of the hall stood a **stupa**, a domed structure that served as the spiritual focal point. The side aisles allowed visitors to **circumambulate**—or walk around—the stupa as part of devotional practice. Some chaitya halls included window openings to bring in limited natural light, and many featured a **colonnaded porch** at the entrance. The **vihara** (**6.10.4**), or monastery hall, was designed for daily life and study. These spaces were more simple and functional, with columns leading to hallways and small individual rooms where monks lived. Each room typically contained a carved stone platform used for sleeping.

Figure \(\PageIndex{3}\): Chaitya-griha (the house of stupa) (CC BY 2.0)

Figure \(\PageIndex{4}\): Vihara hall (CC BY 2.0)

Ajanta Caves

The first Buddhist cave monuments at Ajanta date from the 2nd and 1st centuries B.C. During the Gupta period (5th and 6th centuries A.D.), many more richly decorated caves were added to the original group. The paintings and sculptures of Ajanta, considered masterpieces of Buddhist religious art, have had a considerable artistic influence

Elephanta Caves

The **Elephanta Caves**, located on an island near Mumbai, reflect both **Hindu** and earlier **Buddhist** influences. Beginning in the 6th century, the site became primarily dedicated to the Hindu god **Shiva**, whose many forms are represented throughout the caves. Hinduism embraces a wide **pantheon** of deities, and the artwork depicts numerous mythological narratives and divine manifestations, including the **Shiva linga**, a symbolic representation of Shiva's presence and power. The caves are carved directly

from solid **basalt rock**, with both the architectural spaces and sculptural reliefs created from the same material. Most of the imagery illustrates Hindu legends, though many of the sculptures have been damaged over time. The largest and most important space is **Cave 1**, also known as the Great Cave. The complex includes five caves on the western hill and additional Buddhist structures on the eastern hill.

Each cave typically features a central chamber with side rooms, shrines, and open courtyards. The Great Cave has multiple entrances (**6.10.5**), supported by rows of stone **columns** (**6.10.6**) that help carry the weight of the rock above. These columns often have fluted shafts and cushion-shaped capitals. The interior of the Great Cave measures nearly forty by forty meters, with natural light entering through three main openings, illuminating the carved interior.

Figure \(\PageIndex{5}\): Cave 1 entrance (CC BY-SA 3.0)

Figure \(\PageIndex{6}\): Shiva Linga shrine complex (CC BY-SA 3.0)

"The shrine (**6.10.7**) near the far west end of the cave is carefully subtracted from the hill to appear free-standing. But the shrine and the Shiva *linga* within it are part and parcel of the hill. A short set of stairs on all four sides of the shrine leads to four open doorways, and there is enough space within the shrine to allow the devotee room to Circumambulate the linga. When devotees pray to the linga, they are praying to an aniconic representation of Shiva and acknowledging the sacred generative aspect of the universe. Each of the shrine's four entrances is flanked by majestic guardian figures as tall as the shrine. Some of these figures are accompanied by smaller attendants and a hierarchic scale is employed to indicate the relative importance of the larger figures."[1]

Figure \(\PageIndex{7}\): Shiva Linga shrine (Public Domain)

Sculptures

Most surviving sculptures from the **Gupta period** were religious in nature and crafted from materials such as stone, wood, bronze, and terracotta. Multiple religions coexisted during this time, and their **icons**, deities, and sacred figures were widely represented in sculpture. Unlike earlier empires, artists focused less on rulers and more on spiritual subjects. The Gupta period reached its height around 550 CE and declined by the 7th century. Two major artistic centers emerged: the **Mathura school** and the **Sarnath school**. The Mathura school primarily produced **Buddhist sculptures**, though some Hindu works were also created. Sculptures from this school often used mottled red sandstone, as seen in a statue of **Buddha** (**6.10.8**), which features finely carved drapery and stylized details such as an ornate **halo** and distinctive, shell-like curls of hair. The **Sarnath school** developed a more refined and idealized style. In a seated Buddha (**6.10.9**), the figure is shown in the **lotus position**, teaching, with a calm and balanced expression. This sculpture, made from smooth yellowish sandstone, emphasizes simplicity and spiritual clarity. The halo behind the head is large and elaborately decorated, highlighting the divine nature of the figure.

Figure \(\PageIndex{8}\): Rashtrapati Bhavan Buddha (red stone) (Public Domain)

Figure \(\PageIndex{9}\): Dharmachakra Pravartana Buddha (CC BY-SA 3.0)

[1] Retrieved from https://www.khanacademy.org/humaniti...a-at-elephanta

6.11: Khmer Empire (802 CE – 1431 CE)

Definition: Term

Khmer Empire: A powerful Southeast Asian empire (802–1431 CE) centered in Cambodia.

Angkor: The capital city of the Khmer Empire and one of the largest premodern urban centers.

Mekong River: A major river in Southeast Asia that supported agriculture and trade.

Hinduism: A major religion originating in India with many gods and spiritual practices.

Buddhism: A religion based on the teachings of the Buddha, emphasizing enlightenment and compassion.

Mongols: A nomadic empire known for widespread conquests across Asia in the 13th century.

Water management system: An engineered system of canals, reservoirs, and irrigation used to control water for agriculture.

In the round: A fully three-dimensional sculpture that can be viewed from all sides.

Sandstone: A soft, workable stone commonly used in Khmer sculpture.

Vishnu: A major Hindu deity associated with preservation and protection.

Brahma: A Hindu god associated with creation, often depicted with four heads.

Mitre (crown): A tall, ceremonial headdress symbolizing authority or divinity.

Discus (chakra): A circular weapon associated with Vishnu, symbolizing power.

Textiles: Woven or manufactured fabrics used for clothing, trade, or decoration.

Raw silk: Silk fiber produced by silkworms before being woven into fabric.

Ikat: A resist-dyeing technique where threads are bound and dyed before weaving to create patterns.

Resist dyeing: A process where parts of a material are protected from dye to form patterns.

Warp: The vertical threads on a loom.

Weft: The horizontal threads woven across the warp.

Silk Road: A network of trade routes connecting Asia, the Middle East, and Europe.

At its height, the **Khmer Empire** controlled much of Southeast Asia, including present-day Cambodia, Laos, southern Vietnam, and parts of Thailand along the **Mekong River**, one of the world's longest rivers. The Khmer civilization existed from 802 CE to 1431 CE and practiced both **Hinduism** and **Buddhism**. Its capital, **Angkor**, was one of the largest cities in the world during the 13th century, with an estimated population of 700,000 to 900,000 people. The empire was organized into numerous provinces and governed through a sophisticated administrative system. Many people worked in temples or served the state as artisans, teachers, or religious figures, while most of the population were rice farmers. Angkor also functioned as a political and military center, from which rulers expanded their influence and maintained control over surrounding regions.

The decline of the Khmer Empire began due to a combination of internal and external pressures. Neighboring regions, particularly in present-day Thailand, began to assert independence and form competing kingdoms. At the same time, broader regional instability, including pressures from **Mongol** expansions, contributed to weakening the empire. Environmental challenges also played a critical role—deforestation for rice farming caused the sophisticated **water management system** to become clogged with silt, reducing its effectiveness in controlling floods and supporting agriculture. By 1431, forces from a Thai kingdom captured Angkor, marking the end of the Khmer Empire's dominance.

Architecture

The **Khmer** were master builders who constructed vast temple complexes, reservoirs, canals, and road systems across their empire, including large bridges spanning rivers. One of their greatest achievements is **Angkor Wat** (6.11.1), a monumental religious complex (x.x) built by **Suryavarman II** around 1122 CE. Angkor Wat was dedicated to **Vishnu**, one of the principal deities in the **Hindu pantheon**. Khmer temples were considered the earthly homes of the gods rather than places for large public gatherings. By constructing such grand temples, kings reinforced their authority, demonstrating that divine power resided within their rule. The

construction of Angkor Wat took more than thirty years and required an estimated 300,000 workers, though it was never fully completed. Built primarily from stone, the temple is covered with extensive decorative carvings, including approximately 1,200 square meters of intricate **bas-relief** sculptures depicting religious stories and historical scenes.

Jayavarman VII was considered one of the greatest kings and built the **Angkor Thom** (6.11.2) complex along with an extensive network of roads connecting all of the towns, adding 121 houses for travelers and traders to stay when they moved about the empire and developed 102 hospitals throughout the empire. Angkor Thom was not just a temple but an entire city, as the name meant "Great Kingdom." Angkor Thom became the capital of the empire and royal city. The city was designed as a *mandala* (sacred diagram of the universe) and divided into five spaces of north, south, east, west, and center, the Buddhist universe. The city was made with laterite, a red-colored soil high in iron oxide and aluminum hydroxide. Angkor Thom was surrounded by a wall and a moat to symbolize the continents and oceans in a *mandala*.[2]

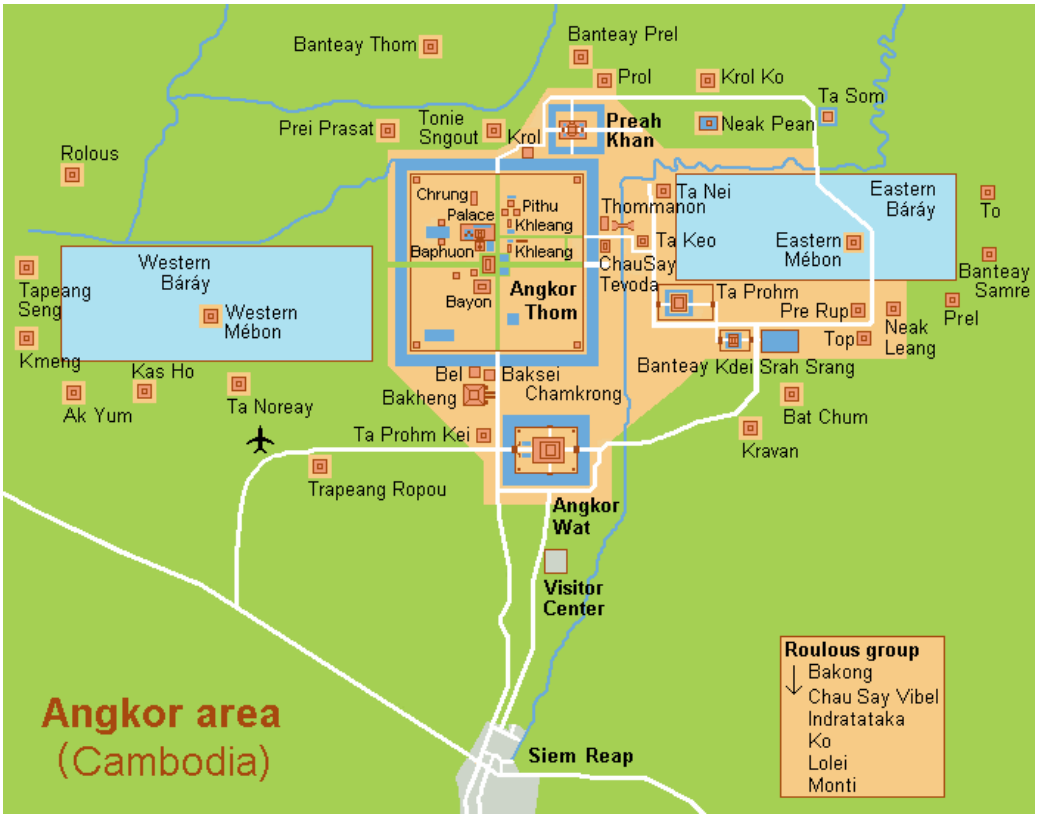


Figure \(\PageIndex{1}\): Angkor Wat layout (Public Domain)

Figure \(\PageIndex{2}\): Angkor Wat (CC BY-SA 4.0)

The **Khmer Empire** (6.11.3) built numerous temples and monuments that reinforced the divine authority of their kings. These temples were considered the earthly homes of the **Hindu gods** and were often designed as **stepped pyramids**, symbolizing the

sacred mountain (Mount Meru) believed to be the center of the universe in Hindu cosmology. Extensive **bas-relief carvings** (6.11.4) covered the temple walls, illustrating a wide range of scenes—from royal ceremonies and military victories to everyday life, such as market activities and fishing. These detailed carvings not only conveyed religious stories but also provided insight into the social and cultural life of the Khmer people.

Figure \(\PageIndex{3}\): Angkor Thom (CC BY 2.0)

Figure \(\PageIndex{4}\): Bas Relief (CC BY 3.0)

Angkor Temple Mountains

Explores the ancient kingdom of Angkor, which was one of the most powerful states in Southeast Asia from the 800s to the 1300s. A succession of kings built huge temples that remain in Cambodia today as some of the world's greatest religious monuments.

Sculptures

By the 7th century, **Khmer sculpture** began to shift from earlier Indian-influenced Hindu styles toward increasing **Buddhist** imagery. By the 10th century, Khmer artists had developed a distinctive regional style. Sculptures were often carved **in the round**, meaning they were fully three-dimensional and not attached to a background. Although this allowed for more dynamic forms, projecting elements like arms and legs were fragile and frequently damaged over time.

Many sculptures depicted royal or courtly figures represented as gods or goddesses, reinforcing the connection between kingship and divine authority. An early example is a statue of **Vishnu** (6.11.5), carved from sandstone in a formal, idealized style. These figures often feature almond-shaped eyes and wear a **mitre-like crown**, a symbol of status and divinity. Vishnu is typically shown holding symbolic objects such as a **discus**, **conch**, or **club**. Another example is a statue of **Brahma** (6.11.6), shown seated with four heads, symbolizing his omnipresence and omniscience. Like many Khmer sculptures, it is made from sandstone, and its broken arms reflect the vulnerability of freestanding stone figures over time.

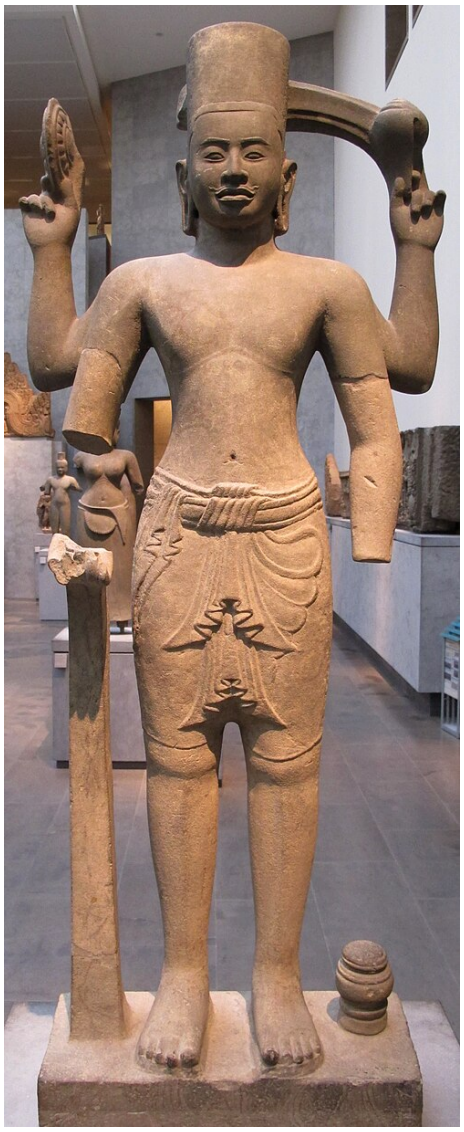


Figure \(\PageIndex{5}\): Vishnu (ca. 9th century, sandstone) (CC BY 3.0)

Figure \(\PageIndex{6}\): Brahma (10th century, sandstone, 147 x 97 cm) (Public Domain)

The Looting of Cambodian Antiquities

The looting of ancient Cambodian antiquities from Prasat Chen, the 10th century the Khmer capital at Koh Ker

Textiles

Textiles were central to the Khmer economy and were widely traded with other civilizations. At **Angkor Wat** and throughout Southeast Asia, **raw silk** was a major commodity. Mulberry trees were cultivated to feed silkworms, and skilled weavers used wooden looms to transform silk into fabric for trade along regional and long-distance networks, including routes connected to the **Silk Road**. One important technique used by weavers was **ikat** (6.11.7), a method of creating patterned fabric through a resist-dyeing process. The term "ikat" means "to bind," referring to the way threads are tightly wrapped before dyeing to control where color is applied. For designs with multiple colors, the yarns were repeatedly tied, dyed, and retied. Once the dyeing process was complete, the threads were woven into cloth. Both the **warp** (vertical threads) and **weft** (horizontal threads) could be dyed in patterns before weaving. Because of the complexity of aligning the dyed threads, finished ikat textiles often have a slightly blurred or soft-edged appearance, which is a distinctive characteristic of the technique.

Ikat Dyeing and Weaving

Ikat fabrics are hand dyed and hand woven textiles. Kufri Life presents the Ikat process.

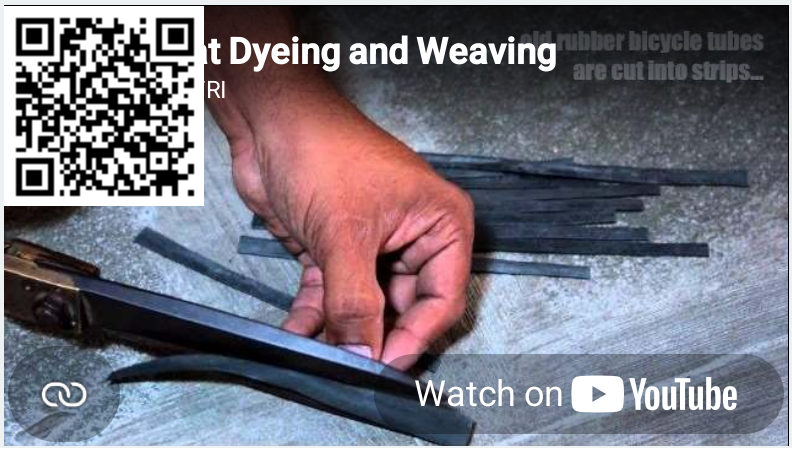


Figure \(\PageIndex{7}\): Ikat Weaving (Public Domain)

Pottery

Cambodian pottery has a long history and was primarily produced for **domestic use** rather than large-scale trade. Potters shaped vessels either on a wheel or by hand using simple tools, then fired them in high-temperature kilns to strengthen the clay. Common finishes included green and brown **glazes**, though some vessels were left unglazed. A more ornate jar (6.11.8), likely used for storing water, features detailed **incised** designs with foliate swirls and boomerang-like patterns wrapping around the surface. The handle is also decorated, and the jar has an **ovoid** (egg-shaped) body with a raised, bead-like band. A traditional brown **slip** was applied to give the vessel its color. In contrast, a simpler jar (6.11.9) was likely used for everyday purposes. It has minimal decoration, a plain brown glaze, and an unglazed upper section, reflecting its more practical function.

Figure \(\PageIndex{8}\): Water jar (12^{th}-13^{th} century, ceramic) (Public Domain)

Figure \(\PageIndex{9}\): Jar in the shape of a fruit (12th century, ceramic, 15.2 x 24 cm) (Public Domain)

[1] Retrieved from https://news.uoregon.edu/content/new...20its%20height.

[2] Retrieved from https://smarthistory.org/angkor-thom/

6.12: Song Dynasty (960 CE – 1276 CE)

Definition: Term

Song Dynasty: A Chinese dynasty (960–1279 CE) known for innovation, economic growth, and cultural development.

Northern Song: The earlier phase of the Song Dynasty controlling northern and central China.

Southern Song: The later phase after losing northern territories, centered in southern China.

Irrigation systems: Engineered waterways used to supply water to crops.

Movable type: A printing method using reusable characters to produce text.

Astronomical clock tower: A mechanical device that tracks time and celestial movements.

Gunpowder: An explosive mixture first developed in China, later used in weapons.

Trebuchet: A type of siege engine used to launch projectiles

Ink and wash painting: A technique using ink with subtle tonal variations, sometimes combined with light color.

Taoism: A philosophy emphasizing harmony with nature and the essence of existence.

Calligraphy: The art of expressive and decorative writing.

Zither: A stringed musical instrument used in traditional Chinese music.

Composition: The arrangement of elements within a work of art.

Painting Academy: An imperial institution that trained and supported court artists.

Asymmetrical composition: A design where elements are unevenly balanced to create visual interest.

Seal (stamp): A red mark used in Chinese art to signify authorship or ownership.

Ru ware: A rare type of Northern Song pottery known for its pale blue-green glaze and crackle pattern.

Crackle glaze: A decorative effect where fine cracks form in the glaze surface.

Celadon: A type of ceramic with a smooth, greenish glaze, often used for functional and decorative objects.

Incised: Decorated by carving or cutting lines into the surface.

Porcelain: A fine, high-fired ceramic that is strong, smooth, and often translucent.

Jingdezhen: A major Chinese center for porcelain production, especially during the Song Dynasty and later periods.

The **Song Dynasty** was divided into two periods: the **Northern Song** (960–1127 CE), which controlled much of central China, and the **Southern Song** (1127–1279 CE), which ruled the southern regions after the loss of northern territories. During this time, China experienced rapid growth, with the population expanding to over 100 million people. Agriculture played a major role in this expansion. The government supported farming by building extensive **irrigation systems** and waterways to improve rice cultivation. Land was granted to peasants, increasing food production and contributing to economic prosperity across society.

The Song Dynasty was one of the most innovative periods in Chinese history. It introduced the **movable type printing press**—centuries before it appeared in Europe—and developed advanced engineering systems such as canal locks to help boats travel upstream. Scholars made important contributions to **mathematics**, including the use of negative numbers, and to **astronomy**, charting stars and constructing complex devices like the **astronomical clock tower**. The period also saw major technological advancements, including the development of **gunpowder** and improvements in military technology such as the **trebuchet**. These innovations made the Song Dynasty a leader in science, engineering, and intellectual achievement in Asia.

Prosperity in Song China

Overview of innovation and causes of prosperity and stability during the Song Dynasty (both Northern and Southern Song Dynasties). First movable type block printing, government-sanctioned paper money, gunpowder, etc.

Architecture

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The **Iron Pagoda of Kaifeng** (6.12.1) is a Buddhist pagoda located in **Kaifeng, Henan Province, China**. It was built during the **Northern Song dynasty** in **1049 CE**. Although it is called “Iron,” it is not made of iron; the name comes from the dark, iron-like color of its **glazed brick exterior** (6.12.2). The pagoda has an **octagonal plan**, rises about **13 stories** (6.12.3), and is decorated with thousands of carved and glazed brick tiles. These include images of **Buddhas, monks, dancers, flowers, dragons, lions, and other symbolic figures**. Its layered eaves, vertical height, and detailed surface decoration make it one of the great surviving examples of **Song dynasty Buddhist architecture**. The Iron Pagoda replaced an earlier wooden pagoda that burned after being struck by lightning in 1044. The later brick-and-stone construction helped it survive floods, earthquakes, and warfare for nearly a thousand years. Its endurance makes it both a religious monument and a symbol of architectural strength.

Figure \(\PageIndex{1}\): Iron Pagoda of Kaifeng (1049, brick, 56.8 m) (CC BY-SA 4.0)

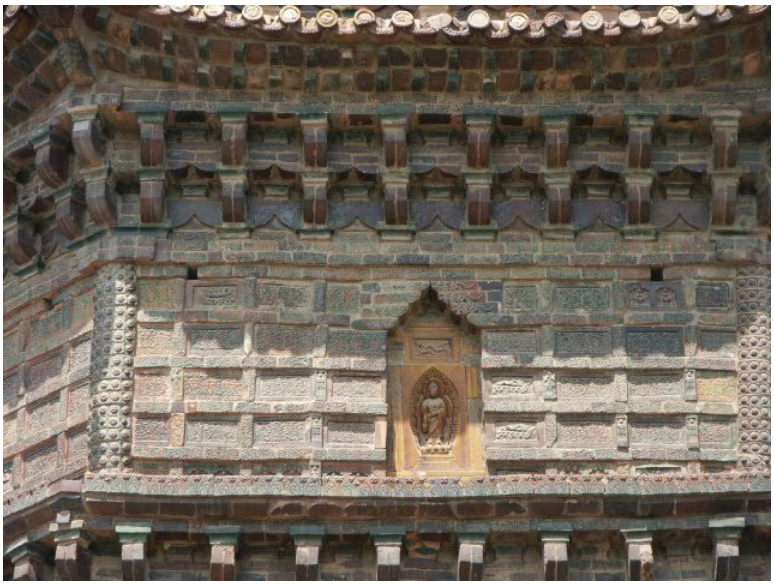


Figure \(\PageIndex{2}\): Detailed part of the exterior (Public Domain)

Figure \(\PageIndex{3}\): Lingxiao Pagoda (1045, brick, wood, 42 m) (CC BY-SA 3.0)

Painting

During the **Song Dynasty**, the arts and sciences flourished, and even emperors practiced **ink and wash painting**. Art was no longer limited to the ruling elite—growing prosperity allowed more people to collect art and support artists. The most valued art forms included painting, **calligraphy**, lacquerware, and jade carving. One of the defining achievements of the Northern Song period was the development of refined **landscape painting**, often inspired by the natural beauty of mountains and wilderness.

A major style of Chinese landscape painting is **shan shui** ("mountain-water"), which uses brush and ink to represent nature. Common subjects include mountains, rivers, and waterfalls. These landscapes were not meant to be realistic depictions but rather expressions of the artist's ideas and feelings about nature. Mountains, in particular, were seen as sacred spaces connected to immortality and influenced by **Taoist** philosophy.

Zhang Zeduan

One of the most famous Song artists was **Zhang Zeduan** (1085–1145). His celebrated handscroll, ***Along the River During the Qingming Festival*** (6.12.4), presents a detailed and lively panorama of life in the Northern Song capital just before its fall in 1126. The painting captures the festive atmosphere of the Qingming Festival and shows a wide range of people—from wealthy elites to ordinary workers—engaged in daily activities.

This **handscroll** painting, made on silk, measures about 35.6 cm in height and over 1,150 cm in length. It is divided into several sections, beginning with peaceful rural landscapes and progressing into increasingly busy urban scenes. Key moments include the bustling **Rainbow Bridge** marketplace, activity near the city gates, and scenes along the river filled with boats, merchants, and travelers. The final section depicts **Jinming Lake**, completing a sweeping visual narrative of Song Dynasty life, economy, and culture.

The arts and sciences flourished under the Song Dynasty, and even the emperors honed their skills in ink and wash painting. Art was not just the purview of the ruling class, and as the broader population became wealthier, people collected art and supported artists. Painting and calligraphy were the most valued art forms, along with lacquerware and jade carving. The famous art of the Northern Song was the beautiful and delicate landscape painting. During the previous repressive dynasty, artists fled to the

mountains where the majestic mountains inspired artists to paint nature, and the theme of high mountains became a focal point for landscape paintings.

Figure \(\PageIndex{4}\): *Along the River During the Qingming Festival* (12th century, ink, color on silk, 35.6 x 1,152.8 cm) (Public Domain)

Ma Yuan

Ma Yuan (c. 1195–1224) was a court painter during the **Southern Song Dynasty**, known for his distinctive compositional style. He earned the nickname "**One-Corner Ma**" because he often concentrated the main subject of his paintings in a single corner, leaving the rest of the space open. His work combines **ink and wash painting** with subtle color, creating atmospheric and nuanced effects. Influenced by **Taoist philosophy**, Ma Yuan focused on capturing the essence of nature rather than creating exact visual realism. His paintings often include landscapes, figures, and animals, emphasizing tranquility and harmony.

In *Walking on a Mountain Path in Spring* (6.12.5), Ma Yuan presents a serene natural setting filled with delicate details. Wildflowers line the path, while a **golden oriole** in flight introduces movement into the composition. The gentle sway of willow branches echoes the bird's motion, guiding the viewer's eye across the scene. At the center, a thoughtful scholar pauses mid-walk, accompanied by a young attendant carrying a wrapped **zither**, a traditional musical instrument. The scholar appears contemplative, as if inspired to compose poetry. The viewer's gaze is directed toward the upper corner, where an imperial inscription by **Emperor Ningzong** describes the interaction between the scholar and nature. The **calligraphy** is refined and understated, complementing the painting's quiet mood. Ma Yuan's signature appears in the lower corner, balancing the composition. The work exemplifies a harmonious blend of stillness and motion, capturing both the physical and spiritual beauty of the natural world.

Figure \(\PageIndex{5}\): Walking on a Mountain Path in Spring (1190, ink on silk, 27.4 x 43.1 cm) (Public Domain)

Emperor Huizong

Emperor Huizong (1082–1135), the last ruler of the **Northern Song Dynasty**, governed from 1101 to 1125 before being captured and exiled. He was a highly accomplished **calligrapher** and painter, best known for his detailed depictions of birds and floral subjects. Deeply devoted to the arts, Huizong established and supported an imperial **Painting Academy**, surrounding himself with skilled court artists and actively overseeing their work.

While his artistic achievements were widely admired, historians often view his reign as politically weak. His focus on artistic pursuits and reliance on advisors contributed to instability and the eventual decline of the Northern Song. Huizong was also a committed follower of **Taoism** and is noted for restricting the practice of **Buddhism**, a controversial decision in Chinese history.

In *Pigeon on a Peach Branch* (6.12.16), Huizong demonstrates his refined artistic style through an elegant **ink and wash painting**. The composition is **asymmetrical**, with a branch extending from one side as a pigeon delicately lands upon it. The soft white peach blossoms symbolize the arrival of spring, while the bird is rendered with careful realism using subtle washes of color, including blues, greens, reds, and blacks. On the opposite side, **calligraphy** and a red imperial seal balance the composition, creating a harmonious and visually engaging design.

Figure \(\PageIndex{6}\): Pigeon on a Peach Branch (1107, color on silk, 28.6 x 26 cm) (Public Domain)

Calligraphy (6.12.7), one of the most highly respected art forms in the **Song Dynasty**, was widely practiced across society. Educated men and women were expected to master this skill, as it reflected both cultural refinement and social status. The quality and purity of each brushstroke were essential, with emphasis placed on the rhythm and control of movement as ink was applied to paper or silk. Artists used paper made from materials such as rice, mulberry, bamboo, or hemp. The practice of calligraphy relied on four essential tools, often called the **"Four Treasures of the Study"**: the brush, ink, paper, and **inkstone**. Ink was traditionally made from soot mixed with binders, then ground and blended with water on the inkstone before being applied with a brush. This careful preparation and execution made calligraphy both a technical skill and a deeply expressive art form.

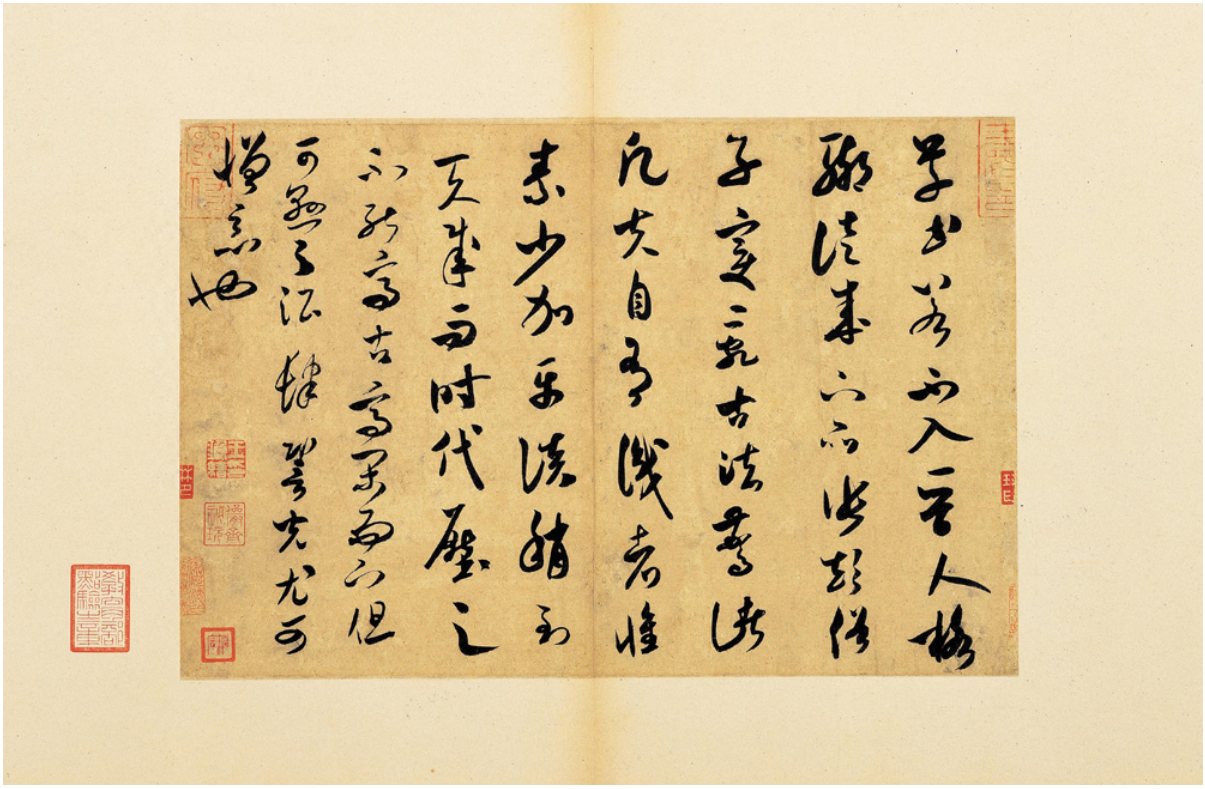


Figure \(\PageIndex{7}\): Calligraphy (Public Domain)

The invention of **movable type printing** around 990 CE had a lasting impact on the **Song Dynasty** and future societies. Before this innovation, **woodblock printing** was widely used in China, requiring entire pages to be carved into blocks for each print. Movable type allowed individual characters to be rearranged and reused, making the printing process much faster and more efficient. This advancement enabled authors and artists to produce thousands of texts and images far more quickly than before. As a result, education expanded significantly, and more people—including students—gained access to books and written materials. The spread of printed knowledge contributed to higher literacy and intellectual growth across society. The printing revolution also led to another major innovation: the Song Dynasty became the first civilization to issue **paper money**, demonstrating how printing technology could transform both culture and the economy.

Pottery

Song Dynasty pottery reached an exceptional level of refinement, showcasing advanced techniques and a wide variety of ceramic styles. One of the most prized types was **Ru ware** (6.12.8), developed in the Northern Song period. Ru ware is known for its soft blue-gray or green glaze and its distinctive **crackle effect**, where fine lines appear evenly across the surface. These pieces were rare, produced in limited quantities in northern kilns, and often reserved for the imperial court.

Other important ceramic traditions included **celadon**, black-glazed wares from Fujian, and the famous white porcelains of **Jingdezhen**. The **celadon pot** (6.12.9) is a classic example of this style, featuring thin walls, elegant shapes, and delicately **incised** designs. Celadon was widely used for everyday purposes such as serving food and tea. Its glaze, made from a mixture of wood ash and clay, was fired at high temperatures, producing subtle tones of gray, olive, or brown. **Jingdezhen ware** (6,12,10) represents another major innovation, known for its fine **porcelain** and translucent quality. The glaze often produced a soft blue-white tint, and delicate designs were sometimes added to the interior surfaces. Jingdezhen became one of the most important ceramic production centers in China, influencing pottery traditions for centuries.

Figure \(\PageIndex{8}\): Ru ware cup and stand (Public Domain)

Figure \(\PageIndex{9}\): Tripod vessel (btw 960-1125, celadon) (Public Domain)

Figure \(\PageIndex{10}\): Jingdezhen white-ware (1271 to 1368) (CC BY-SA 3.0)

6.13: Asuka, Nara and Heian Periods (538 CE – 1185 CE)

Definition: Term

Asuka period: A Japanese historical era (538–710 CE) marked by the introduction of Buddhism and cultural exchange with China and Korea.

Buddhism: A religion based on the teachings of the Buddha, emphasizing enlightenment and spiritual understanding.

Pagoda: A multi-tiered tower associated with Buddhist architecture, often used to house relics.

Hōryū-ji Temple: One of Japan's oldest temples and home to some of the earliest surviving wooden buildings.

Japanese cypress: A durable wood commonly used in traditional Japanese architecture.

Central pillar: A structural support running through a building to provide stability.

Five elements: Earth, water, fire, wind, and space—concepts in Buddhist and Asian philosophy representing the nature of the universe.

Tōdai-ji: A major Buddhist temple in Nara, Japan, known for housing the Great Buddha.

Buddhism (state religion): The official religion supported by the government during the Nara period.

Nara period: A Japanese era (710–794 CE) marked by strong Buddhist influence and centralized rule,

Daibutsu (Great Buddha): A large-scale statue of Buddha, especially the one at Tōdai-ji in Nara.

Bronze: A metal alloy used for casting large sculptures.

Gilding: The application of a thin layer of gold to a surface.

Lotus pedestal: A base shaped like a lotus flower, symbolizing purity and enlightenment in Buddhism.

Bodhisattva: A being who seeks enlightenment and helps others achieve it.

Casting: The process of pouring molten metal into a mold to form a sculpture.

Heian-kyō (Kyoto): The imperial capital of Japan during the Heian period.

Samurai: The warrior class that rose to power during the later Heian period.

Shogun: A military leader who held political power in Japan.

Byōdō-in: A famous Heian-period temple known for its Phoenix Hall design.

Amida Buddha: A central figure in Pure Land Buddhism associated with salvation and rebirth.

Asuka Period

The **Asuka period** (538–710 CE) was a time of major social and artistic transformation in Japan, largely influenced by the introduction of **Buddhism** from Korea. During this period, Japan transitioned from rule by separate clans to the early formation of an imperial system. The government organized society into occupational groups—such as farmers, weavers, potters, fishers, and artisans—and implemented systems like the "five cities, seven roads" to improve administration and trade. The Japanese also adopted aspects of Chinese culture, including the calendar, road systems, and the practice of sending students to study in China.

One of the most important architectural achievements of this period is the **five-storied pagoda** (6.13.1) at **Hōryū-ji Temple**, one of the oldest surviving wooden structures in the world. Construction began in 607 CE and was completed in the early 8th century. Built from **Japanese cypress**, the pagoda stands about 32.5 meters tall. A central pillar runs through all five levels, connected by flexible wooden joints that allow the structure to withstand earthquakes. At the base of the pagoda are clay figures arranged in narrative scenes illustrating key moments from the life of **Buddha**. The five levels of the pagoda symbolize the five elements—earth, water, fire, wind, and space—reflecting Buddhist cosmological ideas.

Figure \(\PageIndex{1}\): Gojunoto pagoda (700-710 CE) (Public Domain)

During the **Asuka period**, most buildings—including homes and temples—were constructed from wood. Because wood deteriorates over time, very few of these early structures have survived. In contrast, many surviving artworks are **sculptures of Buddha** (6.13.2), reflecting the strong influence of **Buddhism** during this period. A distinctive sculptural style known as the **Tori style**, associated with the artist **Kuratsukuri Tori**, became prominent. Highly **symmetrical** compositions and stylized features characterize this style. Figures typically wear garments with evenly patterned, folded drapery, and have **almond-shaped eyes**, elongated heads, and tightly curled hair arranged in a regular pattern. The right hand is often raised in a gesture of reassurance, while the left rests on the leg. Many figures display a subtle, serene expression known as the **"archaic smile."** These features reflect both artistic conventions and spiritual ideals, emphasizing calmness, balance, and divine presence rather than naturalistic realism.

Figure \(\PageIndex{2}\): Tori style Buddha (CC BY-SA 3.0)

During the later **Asuka period**, Japanese society underwent major reforms influenced by Chinese models of government. Power became more centralized, strengthening the authority of the imperial court. At the same time, **Buddhism** continued to spread throughout Japan, shaping religious and artistic practices. Sculptures of the **Shitennō** (6.13.3), or Four Heavenly Kings, became common in Buddhist temples. These guardian figures were believed to protect the teachings of Buddha and were often placed

around sacred images. They are typically depicted as powerful warriors with fierce expressions, symbolizing their role as defenders against evil. Each of the four kings is associated with a direction, season, color, and symbolic object. For example, **Tamonten**, the guardian of the North, is linked to winter and often associated with black and white colors. He is commonly shown holding a small **pagoda**, symbolizing protection and divine authority. Together, the Shitennō represent order, balance, and protection within the Buddhist universe.

Figure \(\PageIndex{3}\): Shitenno (late 7th century, painted wood, 133.5 cm each) (Public Domain)

Asuka & Nara Period

The Impact of China and Buddhism on Japanese art during the Asuka and Nara Period.

Nara Period

The **Nara period** (710–794 CE) was a relatively brief but important era in Japanese history. During this time, the capital was established at Nara, and the government became more centralized, modeled after Chinese political systems. The emperor adopted the idea of being the **"Son of Heaven,"** ruling with a divine mandate. The economy grew through the minting of coins and expanding markets, while most people continued to live in small farming villages. Agricultural land, especially rice fields, was organized into grid systems managed by local communities rather than older clan structures.

The Nara court also played a key role in recording and preserving Japan's early history, literature, and poetry. As writing became more widespread, the poetic form known as **waka** developed. Although **haiku** is more familiar today, waka predates it by over a thousand years and remains an important traditional form. Waka poetry follows a structured pattern of five lines with a 5/7/5/7/7

syllable arrangement, divided into an upper verse (first three lines) and a lower verse (last two lines). When the format was initially used, the poem's subject matter was restricted. The poems were used to celebrate special occasions and are still essential to today's celebrations.[1]

Figure \(\PageIndex{4}\): *Daibutsuden* (The Great Buddha Hall) (743, rebuilt c. 1700) (CC BY-NC-SA 2.0)

During the **Nara period**, **Buddhism** became the state religion, leading to the construction of major temples across Japan. One of the most significant is the **Great Buddha Hall at Tōdai-ji** (6.13.4), originally constructed in 728 CE to house the monumental **Great Buddha (Daibutsu)** (6.13.5). The temple has been rebuilt multiple times due to earthquakes, fires, and natural deterioration. Historical records indicate that the emperor called on the entire population to contribute to its construction. It is said that over 2.6 million people participated, either through labor or donations, reflecting the temple's importance as both a religious and national project. The Great Buddha itself represents the cosmic Buddha and symbolizes unity, protection, and spiritual authority, reinforcing the role of Buddhism in shaping the cultural and political life of Nara Japan. In the eighth century, to support the expansion of Buddhism, Japan constructed 600 to 850 temples and used three million cubic meters of wood, exhausting the forests.[2]

The **Great Buddha (Daibutsu)** at **Tōdai-ji** is an enormous seated sculpture made of **bronze** and originally covered with gold **gilding**. Even in a seated position, the statue stands about fifteen meters tall, nearly filling the interior of the temple. The face alone measures about five meters, while the broad shoulders span approximately twenty-eight meters. The head is covered with nearly one thousand tightly arranged curls, adding to its monumental presence. The statue was created through a complex process involving multiple castings—eight separate stages over three years. Over time, some sections have been repaired or recast due to damage from natural disasters. The Buddha sits on a large bronze **lotus pedestal**, which is engraved with images of **Bodhisattvas**, reinforcing its spiritual significance. Modern analysis has revealed additional details, including decorative elements such as pearls, mirrors, and swords placed near the Buddha's knee, highlighting both the artistic complexity and symbolic richness of the sculpture.

Figure \(\PageIndex{5}\): Buddha (Daibutsu) (Public Domain)

Heian Period

The **Heian period** (794–1185 CE) marks the final phase of classical Japanese history and is often considered a golden age of cultural achievement, harmony, and refinement. During this time, **Buddhism** continued to spread and deeply influence Japanese art, literature, and daily life. At the same time, the foundations of **feudal Japan** began to emerge, with the rise of the **samurai class** and increasing political power held by military leaders, or **shoguns**. The imperial capital was moved from Nara to **Heian-kyō** (modern-day Kyoto), which became the center of court life and artistic development. One of the most famous architectural

examples from this period is the **Byōdō-in** (6.13.6), originally built as a villa and later transformed into a Buddhist temple. The main hall, often called the Phoenix Hall, is designed to resemble a bird with outstretched wings, symbolizing rebirth and the Buddhist paradise. Decorative elements include small wooden figures of celestial beings playing musical instruments along the walls. Inside the hall sits a 2.4-meter-high statue of **Amida Buddha**, representing salvation and the promise of rebirth in the Pure Land.

Figure \(\PageIndex{6}\): Byodo-in (Phoenix Hall) (1153) (CC BY-SA 4.0)

A smaller representation of **Amida Buddha** (6.13.7) shows the figure seated on a **lotus pedestal**, with hands positioned in a **meditation mudra**, symbolizing calm and spiritual focus. Amida is associated with the **Pure Land**, a paradise where believers are welcomed after death. His gentle downward gaze toward the viewer conveys compassion and reassurance. Images of Amida Buddha became widely incorporated into temples across Japan, reflecting the growing popularity of **Pure Land Buddhism** during the Heian period. These sculptures were often crafted using materials such as lacquer, **gold leaf**, and pigments, creating richly decorated and luminous surfaces that enhanced their spiritual presence.

Figure \(\PageIndex{7}\): Amida, the Buddha of Limitless Light (ca. 1250, wood, lacquer, gold leaf, and color, 87.9 x 73 x 57.8 cm) (Public Domain)

Despite periods of political unrest, the **Heian period** was marked by remarkable artistic and cultural growth, especially in **poetry** and **literature**, continuing traditions from the Nara period. One of the most important developments was the creation of two Japanese writing systems: **katakana**, a simplified script derived from Chinese characters, and **hiragana**, a flowing, cursive script unique to Japan. Women of the imperial court played a central role in this cultural flourishing. They became skilled writers and artists, producing beautifully illustrated works that documented court life (6.13.8). Both elite men and women were expected to be highly educated and trained in the arts, including writing, painting, music, and performance, reflecting the refined aesthetic values of Heian society.

Figure \(\PageIndex{8}\): Bamboo River (Public Domain)

During the **Heian period**, beauty was closely tied to ideas of character, refinement, and social status. Members of the **aristocracy** followed strict aesthetic ideals that reflected cultural values of elegance and sophistication. Men were considered attractive if they had a faint mustache and a thin goatee, emphasizing subtle refinement. Women followed highly stylized beauty practices: they powdered their faces with white cosmetics, painted their lips a bright red, and practiced **ohaguro**—the blackening of teeth, which was considered a sign of beauty and maturity. Women also shaved their natural eyebrows and painted new ones higher on the forehead, creating a distinctive facial appearance.

Long, straight black hair was especially prized, often worn flowing down the back. Women dressed in elaborate layered garments known as the **jūnihitoe**, consisting of multiple robes arranged in carefully selected color combinations that reflected seasonal and aesthetic sensibilities. These practices highlight how beauty in the Heian court was deeply connected to cultural ideals of harmony, refinement, and identity.

Early Heian Period

Art History of the Capital of Peace and Tranquility: Japan's Heian Period.

[1] Retrieved from https://afe.easia.columbia.edu/speci...600ce_waka.htm

[2] Retrieved from https://smarthistory.org/todai-ji/

6.14: Rapa Nui Island (7th CE est. – ongoing)

Definition: Term

Rapa Nui (Easter Island): A remote Pacific island known for its monumental stone statues.

Polynesian: Referring to the people of the Pacific islands who were skilled navigators and settlers.

Moai: Large carved stone statues created by the Rapa Nui people.

Tuff: A soft volcanic rock formed from compressed ash, commonly used to carve moai.

Scoria: A porous volcanic rock, often reddish in color.

Basalt: A hard volcanic rock used for more durable carvings.

Moai: Large stone statues created by the Rapa Nui people to represent ancestors.

Monolithic: Made from a single piece of stone.

Low relief: A sculptural technique where figures project slightly from the background.

Rano Raraku: The volcanic quarry where most moai were carved.

Quarry: A place where stone is cut from the earth for building or sculpture.

Rapa Nui (commonly known as Easter Island) is one of the most remote inhabited places on Earth, located over 2,000 miles from any other island or mainland in the Pacific Ocean. The island was first settled by **Polynesian** voyagers, likely between the 7th and 13th centuries, who navigated vast ocean distances using canoes and advanced seafaring knowledge. When settlers arrived, the island was heavily forested and supported agriculture, including the cultivation of sweet potatoes in its fertile volcanic soil. Over time, however, environmental changes—partly linked to deforestation and the introduction of the **Polynesian rat**—contributed to ecological decline. By the time Europeans arrived in 1722, the population had dropped significantly, and further losses occurred due to disease and slave raids, reducing the population to fewer than 200 people by 1877. Today, Rapa Nui is a territory of **Chile**.

The Rapa Nui people are best known for the **moai** (6.14.1), large stone statues carved from volcanic rock. Most moai were made from **tuff**, a relatively soft stone formed from compacted volcanic ash, which made carving easier. Some statues were also created from **red scoria**, a porous reddish stone, and a few from harder materials like basalt. These monumental sculptures reflect the island's unique cultural and artistic achievements.

Figure \(\PageIndex{1}\): Moai head (Public Domain)

The **Rapa Nui** people created monumental **moai**, large stone figures representing honored ancestors. These sculptures are carved in a simplified, **monolithic** style, meaning each statue is made from a single block of stone. The tallest moai reaches about ten meters (over 30 feet) and weighs more than 80 tons. Across the island, approximately 887 statues have been identified. The figures are characterized by distinctive features, including oversized heads, heavy brows, long noses, strong chins, and thin lips. The bodies are more simplified, with arms carved in low relief along the sides. Most moai were carved on the slopes of the **Rano Raraku** volcano, where the main quarry (6.14.2) is located. Many unfinished statues remain there, still attached to the rock. After carving, clans transported the moai—sometimes over distances of more than eight kilometers—to ceremonial platforms near the coast. These statues (6.14.3) were arranged in rows, often facing inland toward their communities rather than out to sea, suggesting a protective or ancestral presence watching over the people.

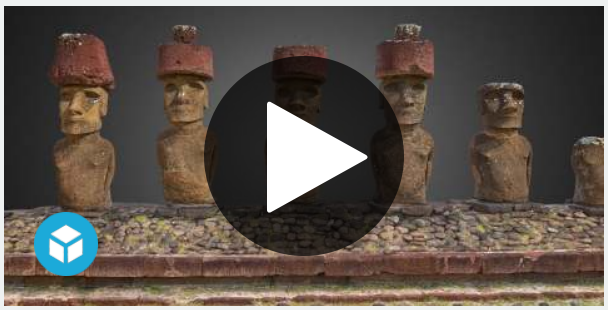
Figure \(\PageIndex{2}\): Moais quarry with uncompleted statues (CC BY-SA 3.0)

Figure \(\PageIndex{3}\): Line of Moai (CC BY 2.5)

There are different theories of how they moved the moai. As we have seen in other civilizations who had to move large stones, the two top theories are entirely different. The first theory believes the moai were laid on their back and rolled on logs down the hills to their final resting spot. Although this theory works, the island's deforestation limits the wood available to move the moai. The second theory hinges on "walking the moai," a story passed down through generations and provides clues for the current scientists to investigate. A theory was proposed that the moai were upright and tied to ropes. Three teams of people guided the statue and walked the moai to its new position by pulling on the ropes from side to side.

Ahu Nau Nau, Rapi Nui 3-D Model

Click and control the 3-D Model to look at the Moai



Ahu Nau Nau, Rapa Nui by **CyArk** on **Sketchfab**

In certain areas of **Rapa Nui**, the **moai** were placed on large ceremonial stone platforms called **ahu**, which served as important ritual and burial sites for the community. Over time, especially during periods of internal conflict and social upheaval, many of these statues were intentionally toppled, likely as part of intergroup rivalries or shifts in religious practices. Today, some of these moai have been restored, including a group of fifteen statues (6.14.4) that stand once again on their original platforms. These restored figures are carefully aligned, facing outward toward the sea and oriented toward the setting sun during the **winter solstice**. This positioning suggests that the moai may have had not only ancestral significance but also **astronomical and ceremonial meaning**, possibly connected to seasonal cycles and ritual observances. One of the statues in this group is among the largest ever completed, weighing approximately eighty-six tonnes. The scale of these sculptures, along with their precise placement, demonstrates the remarkable engineering skill, organization, and cultural importance of the moai within Rapa Nui society.

Figure \(\PageIndex{4}\): All the fifteen standing moai of Ahu Tongariki (CC BY-SA 3.0)

Voyage to the moai of Rapa Nui

Voyage to the Moai of Rapa Nui (Easter Island)

yage to the moai of Rapa Nui (East
arthistory
Watch on YouTube

6.15: Ancestral Puebloans (700 CE – 1300 CE)

Definition: Term

Ancestral Puebloans: Indigenous people of the American Southwest known for cliff dwellings and pottery.

Four Corners: The region where four U.S. states meet (New Mexico, Arizona, Colorado, Utah).

Mesa Verde: A region in Colorado known for its cliff dwellings and archaeological sites.

Sedimentary rock: Rock formed by layers of sediment compressed over time.

Erosion: The process by which wind or water wears away land and rock.

Defensible position: A location that provides protection and strategic advantage against attack.

Sandstone: A type of sedimentary rock commonly used for building in the Southwest.

Mortar: A mixture (such as mud and water) used to hold building materials together.

Kiva: A circular, ceremonial room used by Ancestral Puebloans, often partially underground.

Clan: A group of families connected by shared ancestry or social ties.

Courtyard: An open space surrounded by buildings, used for gatherings.

Great Gallery: A large rock art panel in Horseshoe Canyon, Utah, known for its life-sized figures.

Pictograph: An image painted onto a rock surface.

Petroglyph: An image carved or etched into a rock surface.

Horseshoe Canyon: A canyon in Utah known for significant prehistoric rock art.

Carbon dating: A scientific method used to determine the age of organic materials.

Holy Ghost figures: Large, stylized human-like figures in the Great Gallery, often interpreted as spiritual or ceremonial beings.

The **Ancestral Puebloans** lived in the **Four Corners** region of the United States—where present-day New Mexico, Arizona, Colorado, and Utah meet—from about 700 CE to 1300 CE. They were highly skilled artisans, especially known for their **pottery**, which evolved from simple designs to more complex vessels decorated with black geometric patterns on white surfaces. The landscape of **Mesa Verde** (6.15.1) provided both opportunities and challenges. This region is made up of **sedimentary rock** formations and supported vegetation such as juniper, piñon, and ponderosa pine. However, the environment was harsh, with exposure to drought, floods, and erosion caused by wind and water. Over time, erosion created deep canyons and large cliff overhangs. These natural formations became ideal locations for building communities. The Ancestral Puebloans constructed dwellings within these cliffs, offering protection from the elements and providing **defensible positions** against potential threats.

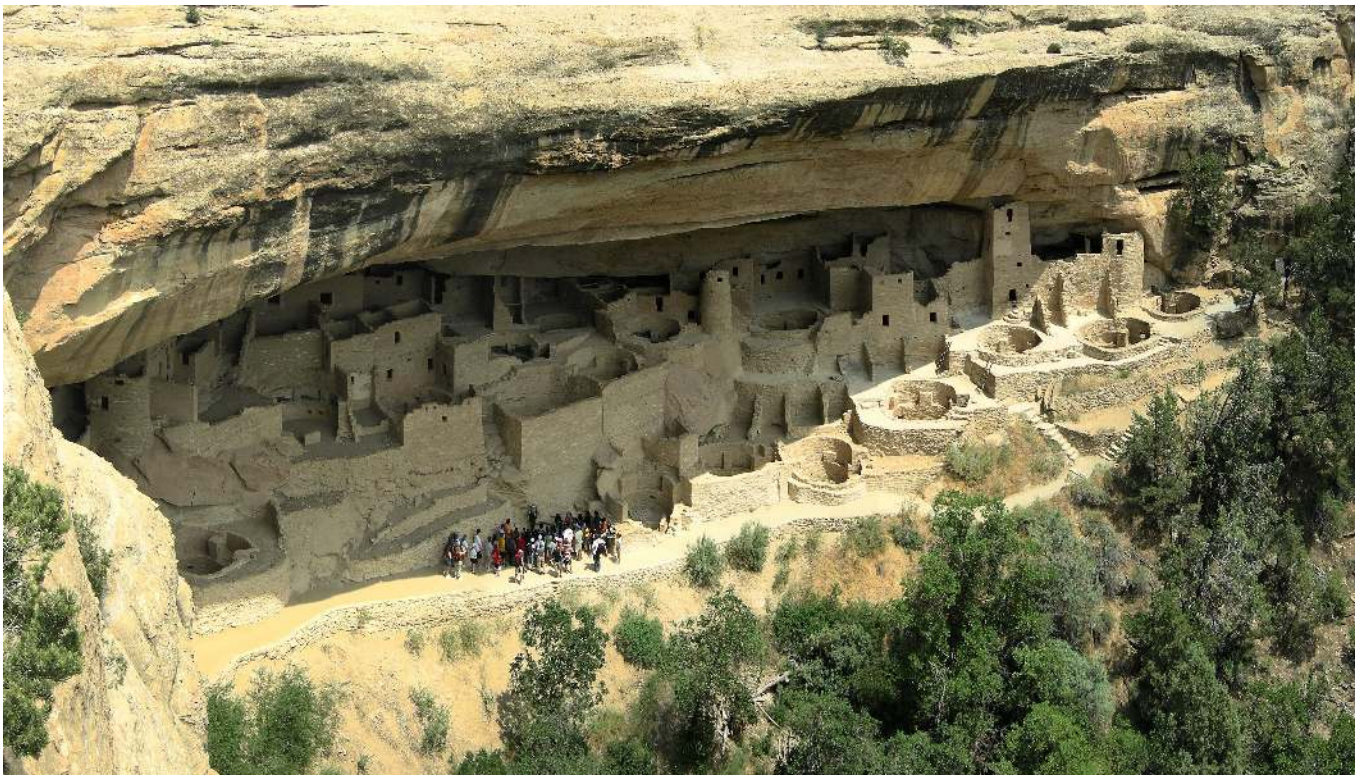


Figure \(\PageIndex{1}\): Mesa Verde (C BY-SA 4.0)

Mesa Verde

Balcony House at Mesa Verde National Park. Click on the link, and it opens up an interactive box.

Balcony House at Mesa Verde National Park by **CyArk** on **Sketchfab**

Architecture

Using locally available **sandstone**, the **Ancestral Puebloans** shaped blocks and built their homes into cliff faces, using a mixture of mud and water as a type of mortar. These structures formed compact communities within protected cliff overhangs. The individual rooms were typically small and served specific purposes, such as sleeping, storing crops, or working. Family groups often lived in clusters of five or six rooms, expanding their living space over time by adding new rooms as needed. An important feature of these communities was the **kiva**, a circular, partially underground space located near the living areas. Kivas were used for ceremonial and social activities and were often associated with specific family groups or clans. The flat roofs of the kivas sometimes functioned as open courtyards, providing shared gathering spaces for the community.

Mesa Verde and the preservation of Ancestral Puebloan heritage

Explore the architectural marvel and complex histories of the Ancestral Puebloan cliff dwellings.

For reasons that are still not fully understood, the **Ancestral Puebloans** eventually abandoned their settlements at **Mesa Verde** and other sites. Over time, these once-thriving communities were left empty, with only architectural remains and artifacts providing clues about their way of life. Because they left few written records, historians rely on archaeology to interpret their culture. One of the most important features of these communities is the **kiva**, which scholars believe served as a space for rituals, ceremonies, and communal gatherings. The earliest known kivas date to around 600 CE in **Chaco Canyon**. These structures were typically **subterranean** or partially underground (6.15.2) and were entered through an opening in the roof using a ladder (6.15.3).

Kivas were commonly found alongside residential structures, and larger villages often had multiple kivas to serve the population. Inside, they included several key architectural elements: a central **fire pit**, **ventilation shafts** to circulate air, built-in benches, wall niches for storage or ceremonial objects, and a **sipapu**—a small hole in the floor symbolizing the place where humans emerged from the underworld in Puebloan belief systems. *Kiva comes from a Hopi word that translates to "world below."*

Figure \(\PageIndex{2}\): Small kiva (Public Domain)

Figure \(\PageIndex{3}\): Small kiva interior (CC BY-SA 3.0)

The **Great Kivas** (6.15.4) were large ceremonial structures built by the **Ancestral Puebloans**, designed to accommodate entire communities for gatherings, rituals, and important events. While they were constructed using similar techniques as smaller, family-based kivas, Great Kivas were significantly larger—typically two to three times the size, with diameters ranging from about 13.7 to 21.3 meters. Unlike smaller kivas, which were mostly underground, the walls of Great Kivas often extended above ground to help support the roof. These structures were usually built apart from residential areas, possibly to maintain privacy or emphasize their ceremonial importance.

The construction of Great Kivas required advanced planning and resources. Thick masonry walls formed a large circular space, and massive wooden beams—often transported from distant forests—were used to support the roof. These large timbers were essential; without them, the roof would not have been structurally stable. Inside, features such as benches lined the curved walls. While these may have provided seating, they likely also served a structural purpose by reinforcing the walls. Overall, Great Kivas highlight the social organization, engineering skill, and ceremonial life of Ancestral Puebloan communities.

Figure \(\PageIndex{4}\): Great kiva (Public Domain)

The **Great Kivas** often included large, vault-like stone structures built into the center of the floor, which were likely used in important **ceremonial practices**. These central features may have held ritual objects or played a role in community gatherings and spiritual activities. Along the interior walls, small **niches** or openings were constructed. These spaces may have been used to hold items such as beads, pendants, or other objects with symbolic or ritual significance. Although historians have not identified a clearly defined religious hierarchy among the **Ancestral Puebloans**, it is believed that their ceremonies were closely connected to natural cycles. Rituals may have been timed to important **astronomical events** such as the **solstice**, **equinox**, or lunar phases, reflecting a deep awareness of and connection to the natural world.

Pottery

The **Ancestral Puebloans** created **middens**, or refuse piles, where everyday waste such as broken pottery and bones was discarded. These materials were often thrown down cliffs, forming large deposits at the base. Over time, the middens were covered by dirt and preserved, allowing archaeologists to study them and reconstruct aspects of Puebloan life. One of the most important types of artifacts found in these sites is **pottery**. Everyday pottery was typically simple and unpainted, with either smooth or textured surfaces used for cooking and storage. These vessels were made using the **coil-and-scrape method**, in which long coils of clay were stacked and then smoothed using tools like wood pieces or gourds. The surface was often polished with smooth stones to finish the piece.

More elaborate pottery, known as **black-on-white ware**, was used for formal or ceremonial purposes. The white surface came from the natural clay, while the black paint was created by boiling plant materials and mixing them with iron-rich minerals. Brushes were made from **yucca fibers**, allowing artists to paint detailed geometric designs. Decorated pottery varied by village and function. Narrow-necked jars were used for storing liquids, while larger vessels were often reserved for ceremonial use. A **water jar** (6.15.5), for example, was hand-built and coated with slip before being painted with bold geometric patterns. The **Cibola**

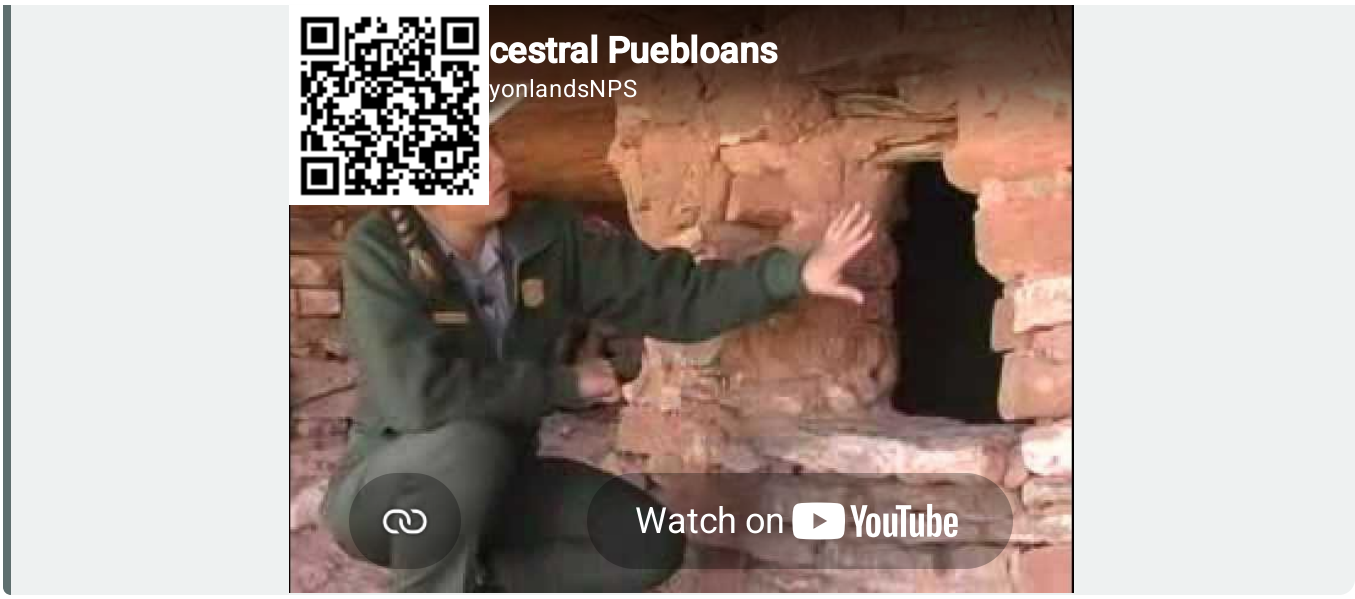
whiteware pitcher (6.15.6) features sweeping, swirling designs created with contrasting slip, reflecting regional styles and artistic identity.

Figure \(\PageIndex{5}\): Water jar (olla) (13^{th}-14^{th} century, clay, 32.4 x 38.7 x 35.7 cm) (Public Domain)

Figure \(\PageIndex{6}\): Pitcher (12^{th} -13^{th} century, clay, 16.2 x 21.3 x 21.7 cm) (Public Domain)

Ancestral Puebloans

The ancestral Puebloans were some of the first farmers in the American Southwest. Join ranger Karen Henker for a brief look at their lifestyle, as well as the art and architecture they left behind.



Rock Art

The **Great Gallery** (6.15.7), located in **Horseshoe Canyon, Utah**, is one of the most important and best-preserved examples of rock art in North America. The panel stretches about 61 meters long and 4.6 meters high, featuring around twenty life-sized human-like figures. Some of the tallest figures reach over 2.1 meters in height. A section often called the **"Holy Ghost" panel** is believed to date between 400 CE and 1100 CE, though some parts may be even older. On the far left, a grouping known as the **"Holy Ghost family"** (6.15.8) appears to depict related figures. The artwork includes both **pictographs** (painted images) and **petroglyphs** (carved or etched designs). Many of the figures are elongated and lack clearly defined arms and legs, yet they feature intricate internal designs, including images of animals, birds, snakes, and plants. Dating the artwork precisely is challenging. Archaeologists often rely on visual clues within the images. For example, the presence of a horse indicates that part of the panel was created after Spanish contact in the region. Scientific dating methods like **carbon dating** are difficult to apply because taking samples from the painted surfaces would damage the artwork.

Figure \(\PageIndex{7}\): Great Gallery (CC BY-SA 3.0)

Figure \(\PageIndex{8}\): Holy Ghost Panel in Great Gallery (CC BY 2.0)

6.16: Mayan Classic Period (250 CE – 1539 CE)

Definition: Term

Maya civilization: An ancient Mesoamerican culture known for cities, writing, and art.

Classic period (Maya): The peak era of Maya cultural and political development (c. 250–900 CE).

City-state: An independent city that governs itself and surrounding territory.

Trade networks: Systems connecting regions for the exchange of goods.

Obsidian: A volcanic glass used for tools and decorative objects.

Cacao: A plant used to make chocolate, highly valued in Mesoamerica.

Chichén Itzá: A major Maya city in the northern Yucatán.

Teotihuacan: A powerful Mesoamerican city that influenced surrounding cultures.

Hieroglyphic script: A system of writing using symbols or images to represent words and sounds.

Stela (plural: stelae): An upright carved stone slab used to record historical or religious information.

Limestone: A soft sedimentary rock commonly used for carving in Maya architecture.

Pyramid temple: A stepped structure with a shrine at the top used for religious purposes.

Ball court: A ceremonial playing field used for ritual ball games in Mesoamerican cultures.

Astronomical observation: The study of stars, planets, and celestial events.

Ceramics: Objects made from clay that are hardened by heat.

Coiling: A pottery technique using rolled strips of clay stacked to build a form.

Hieroglyphs: A system of writing using symbols or images.

Slip: A liquid clay mixture used to decorate pottery before firing.

Firing: Heating clay in a kiln or fire to harden it.

Ritual garments: Special clothing worn for ceremonies or religious practices.

The **Maya civilization** reached its height during the **Classic period** (c. 250–900 CE), when major cities across the **Yucatán Peninsula** and surrounding regions flourished. The Maya inhabited areas of present-day southeastern Mexico, Guatemala, Belize, Honduras, and El Salvador. Their society was organized into independent **city-states**, connected through extensive **trade networks**. Key trade goods included **jade**, **obsidian**, **ceramics**, **feathers**, **salt**, and **cacao**, all of which were highly valued across different Maya regions (6.16.1). Cultural and political influences shifted over time, with major centers such as **Teotihuacan** influencing early Maya development and later cities like **Chichén Itzá** becoming prominent in the north. The Maya developed sophisticated art forms, including monumental temples, carved stone sculptures, woodwork, and finely crafted ceramics.

The decline of Maya civilization was gradual and complex. Environmental challenges such as drought, along with **resource depletion**, warfare between city-states, and population pressures, led to the abandonment of many cities. By the time of **Spanish contact** in the early 16th century, many major centers had already declined, and continued conflict and colonization further contributed to the collapse of Maya political systems.

Figure \(\PageIndex{1}\): Mayan art (CC BY-SA 3.0)

Architecture

Maya cities developed organically, without strict urban planning, yet they shared common features such as palaces, **ball courts**, pyramid temples, and structures used for **astronomical observation**. Many of these monumental buildings were covered with **hieroglyphic inscriptions**, providing a rich historical record of Maya life, politics, and religion. Another important feature of Maya cities was the **stela**—upright stone monuments carved from **limestone**. These stelae often recorded rulers, events, and religious beliefs. Limestone was ideal for carving because it was relatively soft when quarried but hardened over time when exposed to the environment.

The pyramid at **Zaculeu** (6.16.2) is an example of Maya architecture, standing about twelve meters high with eight stepped levels. At the top sits a shrine with three doorways, accessed by stairways leading upward. The site originally included multiple plazas, with pyramids, palace-like structures, residential areas, and administrative buildings. A key feature of most Maya cities was the **ball court** (6.16.3), typically designed in an I-shape with sloping walls along the sides of a narrow playing field. The court at Zaculeu measured about forty-eight meters long. While the exact rules of the game are not fully known, it is believed to have had strong ritual significance, and in some cases, the outcome of the game may have been tied to **sacrifice** as part of religious ceremonies.

Figure \(\PageIndex{2}\): Zacuelu main pyramid (CC BY 3.0)

Figure \(\PageIndex{3}\): Ballcourt at Zaculeu (CC BY 3.0)

Calakmul was one of the most powerful cities of the **Maya civilization**, located in southeastern Mexico. At its height, the city had an estimated population of around 50,000 people and served as a major political and cultural center. One of its most impressive structures is **Structure 2** (6.16.4), the largest pyramid at the site and one of the tallest in the Maya world, rising over forty-five meters high. This massive **pyramid temple** dominated the city skyline and likely served important religious and ceremonial functions. The central core of Calakmul covered approximately two square kilometers and contained around 1,000 structures. These ranged from small residential buildings to large monumental constructions, reflecting the city's complexity and organization. Calakmul's scale and architectural achievements demonstrate the power and sophistication of Maya urban life.

Figure \(\PageIndex{4}\): Calakmul Structure 2 (CC BY 2.0)

At **Chichén Itzá**, one of the most important Maya cities, the **Temple of the Warriors** (6.16.5) stands as a massive stepped pyramid about 22.8 meters high. Surrounding the temple are rows of carved columns, each depicting **warriors** in detailed relief. Some figures wear jaguar pelts and carry shields and spears, emphasizing military strength and authority. The temple served both **religious** and **political ceremonial** purposes, and the repeated warrior imagery reinforced the power of the rulers and the dominance of the state. Chichén Itzá also featured thirteen **ball courts**, including the impressive **Great Ball Court** (6.16.6), the largest and most significant at the site. The court measures approximately 168 meters by 70 meters, with a central playing field about 95 meters long. The walls are decorated with carvings of **feathered serpents** and scenes of ball players, while sculpted benches line the sides. These elements highlight the ritual importance of the game and its connection to religion, power, and possibly sacrifice.

Figure \(\PageIndex{5}\): Chichén Itzá Temple of the Warriors (CC BY-SA 2.5)

Figure \(\PageIndex{6}\): Chichén Itzá Great Ball Court (CC BY 3.0)

What was the purpose of the Mayan Pyramids?

Join us as we uncover the fascinating world of the Mayan people, who flourished in Mesoamerica from 2000 BCE to 1500 CE. These advanced architects and astronomers left behind a remarkable legacy of pyramids that still astound and intrigue us today.

Masks

The **Calakmul Mask** (6.16.7), discovered in the Maya city of **Calakmul**, is a remarkable example of elite craftsmanship and ritual art. Historians believe the mask was used for **ceremonial** or **funerary** purposes, likely adorning a ruler or a person of high status. The mask is constructed from fifty-seven carefully fitted **jade** tiles, along with two pieces of **obsidian** and a shell element, demonstrating both technical skill and access to valuable materials. It was found near the remains of a king, along with several other masks, suggesting its importance in burial practices and beliefs about the afterlife. For the Maya, jade was one of the most sacred materials, symbolizing **life, fertility, and renewal**. Its use in the mask emphasizes the spiritual significance of the object and its connection to power, status, and the continuation of life beyond death. The jade was found by the **Motagua River** in Guatemala and possesses the color of nature. The ear flares in the mask are formed into the shape of a flower with four petals, four representing the idea of the cosmos. "According to the Mayas, at the start of time, the world was demarcated by four corners, four sides, and a center."[1]

Maya art was closely tied to the **royal court** and reflected strong beliefs about ancestry and the afterlife. Colors such as **green** and **blue-green** were especially valued because they symbolized life, fertility, and renewal. These colors were often seen in important artworks made for rulers and elite individuals. One of the most striking examples is the **Mask of Pakal** (6.16.8), a **funerary mask** created for a Maya king. The mask is made from more than 346 pieces of **jade**, carefully assembled into a mosaic. The eyes are crafted from shell, with small pieces of **obsidian** forming the pupils, creating a lifelike and expressive appearance. When the king's tomb was discovered, he was buried wearing the mask along with jade jewelry such as bracelets and necklaces. In Maya culture, jade was associated with **life, power, and rebirth**, and its use in royal burials emphasized the belief that rulers would continue their existence in the afterlife.

Figure \(\PageIndex{7}\): Jade funerary mask (600-900 CE, jade, paint) (CC BY 4.0)

Figure \(\PageIndex{8}\): Funerary mask of a king (683, jade, 25.6 x 18.8 cm) (CC BY 3.0)

Sculpture

Stone sculpture was a central art form in **Maya civilization**, most often carved from **limestone**. Artists created a wide range of sculptural works, including **stelae**, panels, altars, **zoomorphs**, monumental stairways, thrones, and fully three-dimensional figures. These works frequently conveyed political authority, religious beliefs, and historical events. An example is *Presentation of Captives to a Maya Ruler* (6.16.9), a **stela** designed to display the power and dominance of a ruler over defeated enemies. Another important work is **Piedras Negras Throne 1** (6.16.10), a large stone seat intricately carved with human figures and decorative patterns. The back of the throne features **openwork carving**, allowing space between the figures, and the entire surface is covered with finely **incised** designs. When excavated, the throne was found in fragments and later carefully reassembled. Traces of bright red pigment remained, showing that many Maya sculptures were originally painted. A special set of stairs led directly to the throne, allowing the ruler to ascend privately, reinforcing the separation between the ruler and the public and emphasizing royal authority.

Figure \(\PageIndex{9}\): Presentation of Captives to a Maya Ruler (785, stone, 115.3 x 88.9 cm) (Public Domain)

Figure \(\PageIndex{10}\): Piedras Negras throne 1 (CC BY-SA 2.5)

The **Maya** produced a wide variety of **ceramics** without using a potter's wheel. Instead, vessels were formed using **coiled and rolled clay strips**, which were then shaped and smoothed by hand. These ceramics were often richly decorated with **hieroglyphs** and painted imagery that conveyed stories, status, and religious meaning. Although Maya pottery was typically not glazed, artists used a liquid clay coating called **slip**, made from minerals and colored clays. After firing, the painted designs became more vivid and durable. Many vessels feature intricate scenes and patterns that reflect Maya beliefs and daily life. In addition to vessels, some communities created small sculptural figures, such as the **warrior figure** (6.16.11). These detailed objects provide valuable insight into clothing, adornment, and **ritual garments**, helping researchers better understand Maya culture and social identity.

Figure \(\PageIndex{11}\): Ceramic warrior (Public Domain)

Bone, **shells**, **metal**, **gold**, **silver**, and **copper** were used to create and sculpt smaller items. Artists hammered metal into **bells** or **disks** and later used the **lost-wax casting method** to produce detailed metal objects. **Graffiti** was commonly found on **stucco** walls, floors, and furniture in many types of buildings. Some inscriptions overlapped earlier drawings, and the images ranged from crude sketches to highly artistic renderings. The **Maya** developed an advanced **hieroglyphic writing system** and extensively

recorded historical, religious, and ceremonial information. Their writing combined **phonetic symbols** and **logograms** and was written on paper made from **tree fibers**. When the Spanish conquered the Maya, they destroyed nearly all of the books, leaving only three surviving **codices** (6.16.12). Fortunately, many examples of Maya writing survived on **stone monuments** and painted **ceramics**. The Maya also created a highly sophisticated **calendar system** and developed a **mathematical system** that included one of the earliest known uses of the concept of **zero**, which helped them engineer and organize their empire.

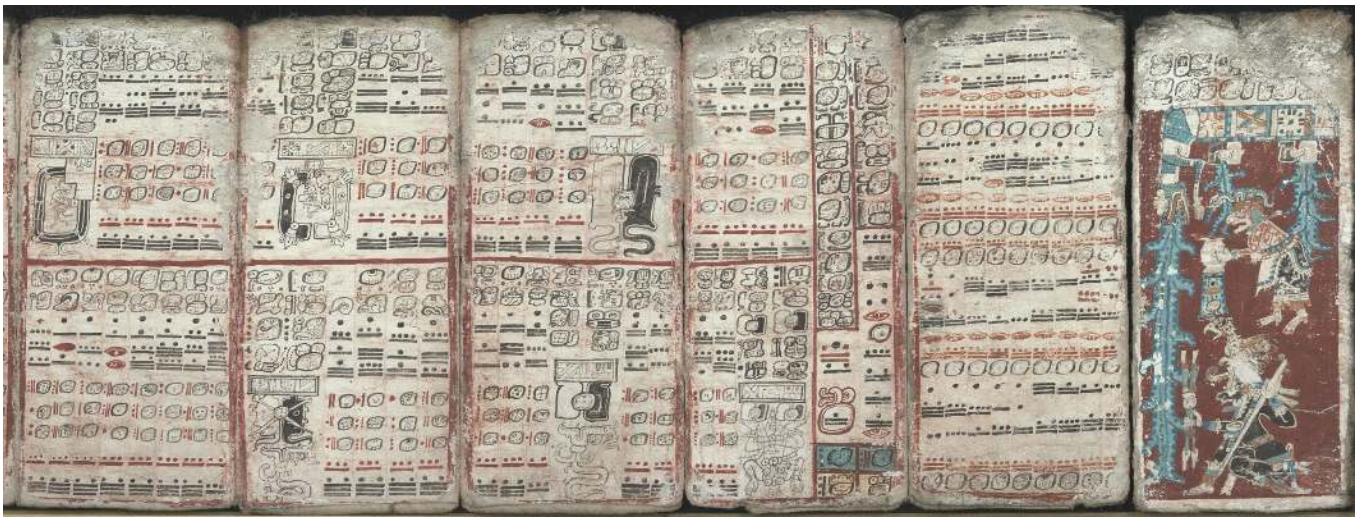


Figure \(\PageIndex{12}\): Six sheets of the Dresden Codex (pp. 55-59, 74) depicting eclipses, multiplication tables and the flood (Public Domain)

[1] Retrieved from https://www.mascaracalakmul.inah.gob...pc.php?len=ing

6.17: Incan Empire (Early 12th C – 1572)

Definition: Term

- **Pre-Columbian**: Refers to the cultures and civilizations of the Americas before the arrival of Christopher Columbus in 1492.
- **Inca Empire**: A powerful civilization centered in the Andes Mountains of South America that ruled much of western South America before the Spanish conquest.
- **Andes Mountains**: The longest mountain range in the world, stretching along the western edge of South America.
- **Terracing**: A farming technique in which flat steps are cut into hillsides or mountains to create land for agriculture and reduce erosion.
- **Monumental Architecture**: Large-scale buildings or structures created to demonstrate power, religious importance, or engineering skill.
- **Road System**: A connected network of roads used for transportation, communication, and trade throughout an empire.
- **Bronze Tools**: Tools made from bronze, a metal alloy of copper and tin, used before the widespread use of iron.
- **Spanish Conquest**: The invasion and takeover of Indigenous American civilizations by Spain during the 16th century.
- **Cuzco (Cusco)**: The capital city of the Inca Empire and the political, religious, and cultural center of Incan society.
- **Sacsayhuamán**: A massive Inca fortress and ceremonial complex located above Cuzco, known for its enormous precisely fitted stone walls.
- **Muyuqmarca**: A circular Inca structure within Sacsayhuamán believed to have served ceremonial or defensive purposes.

In pre-Columbian America, the **Inca Empire** was established in present-day Peru during the early 12th century and lasted until the Spanish conquest in 1532 CE. At its height, the empire extended across parts of modern-day **Peru, Ecuador, Bolivia, Argentina, and Chile**, following the Andes Mountain range. The Incas adapted to a harsh and diverse environment that included mountains, deserts, plains, and jungles, where travel and communication were often difficult. To unite their vast territory, they constructed monumental stone architecture, extensive road systems, and terraced hillsides that transformed steep mountain slopes into productive farmland.

Historians continue to study how the Incas created such a highly organized and stable society despite lacking many technologies commonly associated with large civilizations. The Incas did not use wheeled vehicles, draft animals for plowing or transportation, or iron tools, and they had no traditional written language. Instead, they developed sophisticated engineering, agricultural, and administrative systems suited to their isolated environment. Their civilization flourished for centuries until the arrival of the Spanish, whose conquest, warfare, and introduction of disease devastated the Incan population and brought an end to the empire.

Architecture

Kings ruled the Inca Empire from **Cuzco**, the capital city and political center of the empire. A noble class lived under the protection of the massive citadel of **Sacsayhuamán** (6.17.1), while much of the population worked the land through organized agricultural systems. The Inca economy functioned through the exchange of goods and labor rather than through markets or currency. Instead of paying monetary taxes, citizens contributed labor to the state in a system often called **mit'a**, and in return they received food, clothing, protection, and other resources.

Sacsayhuamán served as a major fortress and ceremonial center and later became the site of important battles between the Incas and the Spanish. The fortress was constructed from enormous stone blocks fitted together with remarkable precision. Archaeologists continue to study how the Incas quarried, transported, and assembled these massive stones, some of which are as large as medium-sized trucks. Because the Inca lacked wheeled vehicles and large draft animals, the movement of such stones demonstrates their extraordinary engineering and organizational abilities.

Inside the fortified walls of Sacsayhuamán stood **Muyuqmarca** (6.17.2), an unusual circular structure built around a central courtyard and fountain. The building featured three concentric circular walls connected by radial walls, creating a highly organized geometric pattern. Originally rising four stories high, each level gradually decreased in size, producing a cone-shaped form. The structure once stood approximately twenty meters tall before it was destroyed during the Spanish conquest.

Figure \(\PageIndex{1}\): Sacsayhuaman (CC BY-SA 4.0)

Figure \(\PageIndex{2}\): Muyuqmarca (CC BY-SA 3.0)

The most famous settlement was **Machu Picchu** (6.17.3), which was constructed high in the mountains. The structures were built without mortar; the stones were cut precisely and wedged together. Machu Picchu is located in a seismically unstable country, and "when an earthquake occurs, the stones in an Inca building are said to "dance;" that is, they bounce through the tremors and then fall back into place. Without this building method, many of the best-known buildings at Machu Picchu would have collapsed long ago."[1] Historians believe the site's location and orientation were important as buildings were placed where the sun rose or set behind significant peaks and other astrological events, especially marking special days for the Incan calendar.

The **Inca** people constructed remarkable architectural sites despite lacking draft animals, iron tools, and wheeled vehicles. Builders carefully carved the site between two mountain peaks, engineering sophisticated drainage systems by crushing rock and using layers of stone to stabilize the ground. Much of the construction was completed with precisely cut stones fitted together without mortar. Several residential structures (6.17.4) still remain standing today, although most of their roofs have disappeared over time. Despite appearing delicately balanced, these stone buildings have survived numerous earthquakes because of the Incas' advanced engineering techniques and tightly fitted masonry.

One of the most significant structures at the site is the **Temple of the Condor** (6.17.5), which was designed using three enormous stones arranged to resemble the form of an **Andean condor** with outstretched wings. The wingspan of the sculpted condor measures approximately 3.30 meters, while the structure stands about 1.42 meters high. In Andean belief systems, the condor was considered a sacred animal capable of soaring above 5,000 meters and serving as a messenger between the earthly world and the heavens. The temple also included an altar used for ceremonial and religious activities, including ritual sacrifices.

Figure \(\PageIndex{3}\): Machu Picchu (CC BY-SA 4.0)

Figure \(\PageIndex{4}\): Machu Picchu residential area (CC BY-SA 3.0)

Figure \(\PageIndex{5}\): x.x Temple of the Condor (CC BY-SA 2.5 ES)

Machu Picchu

Machu Picchu is a testament to the power and ingenuity of the Inca empire. Built without the use of mortar, metal tools, or the wheel, Machu Picchu stands as an archaeological wonder of the ancient world. But why was it built—and deserted?

Textiles

Textiles played an essential role in Inca society and were highly valued throughout the empire. Many textile designs featured recognizable geometric motifs, including the distinctive checkerboard patterns commonly found in clothing and ceremonial garments. Ordinary people typically wore textiles woven from cotton, llama wool, and alpaca wool, while the exceptionally soft and rare **vicuña wool** was reserved exclusively for the ruling elite and nobility. Natural dyes were created by boiling plants,

minerals, and other organic materials to produce a wide range of colors. Each color often carried specific symbolic meanings connected to status, religion, or cultural identity. In addition to providing clothing and warmth, textiles served as important symbols of wealth, power, and social rank within Inca society. Weavers making textiles were women specifically chosen or full-time professional weavers who probably worked for the rulers. “The finest cloth, known as *cumbi*, could have as many as three hundred finely spun and dyed weft yarns per inch densely packed over equally fine three-ply warps. One of the mind-blowing facts of Andean weaving is that such seemingly delicate yarns have the tensile strength and abrasion resistance to be transformed into dense weft-face cloth.”[2]

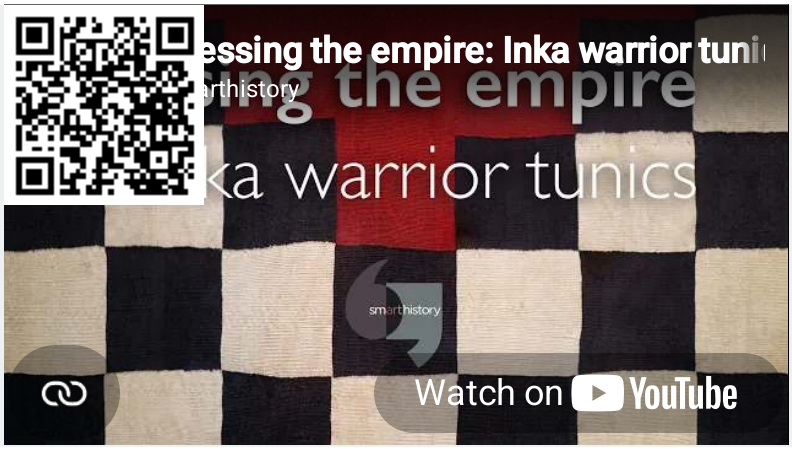
Inca tunics, known as **unku**, were traditionally woven so that they were longer than they were wide. The fabric was woven sideways, folded over at the shoulders, and sewn together along the sides, leaving openings for the arms near the top. Clothing production and ownership were carefully regulated by the Inca government, and finely woven tunics were often awarded as rewards for military service or loyalty to the emperor. One tunic (6.17.6) displays a checkerboard design with repeating geometric patterns. The grid alternates with eight-pointed stars and stylized images resembling fish or birds, creating a dynamic and visually vibrant composition through contrasting colors. Another, more restrained tunic (6.17.7) features a diamond pattern, one of the standardized motifs commonly accepted within Inca textile traditions. The white yarn used in the textile came from a rare white camelid, an animal that was uncommon in the Andes and therefore highly valued.

Figure \(\PageIndex{6}\): Tunic (1460-1540, camelid hair, cotton, 75.6 x 94 cm) (Public Domain)

Figure \(\PageIndex{7}\): Tunic with Diamond Band (1460-1540, camelid hair, cotton, 73.7 x 88.9 cm) (Public Domain)

Dressing the Empire: Inka Warriors' Tunics

Checkerboard tunics, Inka, camelid fiber, first tunic: c. 1400–1540, 88.3 x 80 cm (Dallas Museum of Art), second tunic: 16th century, 87 x 76.5 cm (The Metropolitan Museum of Art), both in the Golden Kingdoms exhibition at The Metropolitan Museum of Art



Pottery

The Inca state carefully controlled the production and distribution of ceramics throughout the empire. Pottery styles often reflected the region where they were made, resulting in distinctive shapes, decorative motifs, and artistic traditions. One common ceramic form was the **urpu** (6.17.8), a container with a rounded body and long neck used to carry and serve **chicha**, a fermented corn beer important in social and ceremonial life. Ropes could be threaded through the handles so the vessels could be carried on a person's back. Urpus typically featured cream-colored surfaces decorated with black and red slip-painted designs. Their pointed bases allowed them to be secured upright by placing the tip into the ground. Sharing and toasting with chicha played an important role in Inca rituals and community gatherings, making the urpu an essential ceremonial object.

The Inca also produced carved wooden drinking vessels known as **keros** (6.17.9), which were used during ceremonies and rituals involving chicha. These wooden beakers were often decorated with incised geometric patterns and chevron designs. Keros were used in ceremonial toasts honoring ancestors and reinforcing social and political relationships. Remarkably, keros continue to be produced and used in some Andean communities today. Another ceremonial vessel (6.17.10) takes the form of a shallow bowl featuring the head and neck of a llama and a bird, both functioning as pouring spouts. A feline figure drapes across the side of the bowl, while the surface is painted in black and red over a buff-colored background. The imagery of animals associated with fertility, agriculture, and the natural world suggests the vessel was likely used in rituals intended to promote abundant harvests and prosperity through the ceremonial pouring of chicha.

Figure \(\PageIndex{8}\): Urpu (jar) (1400-1535, ceramic, slip, 29.2 x 23.5 x 19.1 cm) (Public Domain)

Figure \(\PageIndex{9}\): Kero (beaker) (1400-1535, wood, 11.7 x 10.2 cm) (Public Domain)

Figure \(\PageIndex{10}\): Double bowl (1400-1535, ceramic, slip, 9.2 x 13.3 x 18.1 cm) (Public Domain)

Quipus

The Inca did not develop a traditional written language system; however, they created a sophisticated method for recording information and managing their empire. Land and resources were carefully organized into sections designated for the gods, the rulers, and the general population. To keep track of goods, labor, taxes, and other transactions, the Inca used **quipus** (6.17.11), a system of knotted cords that functioned as a counting and recording device.

Quipus used a **base-10 numerical system (**6.17.12), with different types of knots and string positions representing specific numerical values. Groups of colored strings were attached to a central cord, allowing officials to record large amounts of information in a portable format. A single quipu could record numbers up to 10,000, and additional strings could be added for larger calculations. Historians and archaeologists also believe that quipus may have been used to preserve historical records, census information, and important events, making them an essential administrative tool within the Inca Empire.

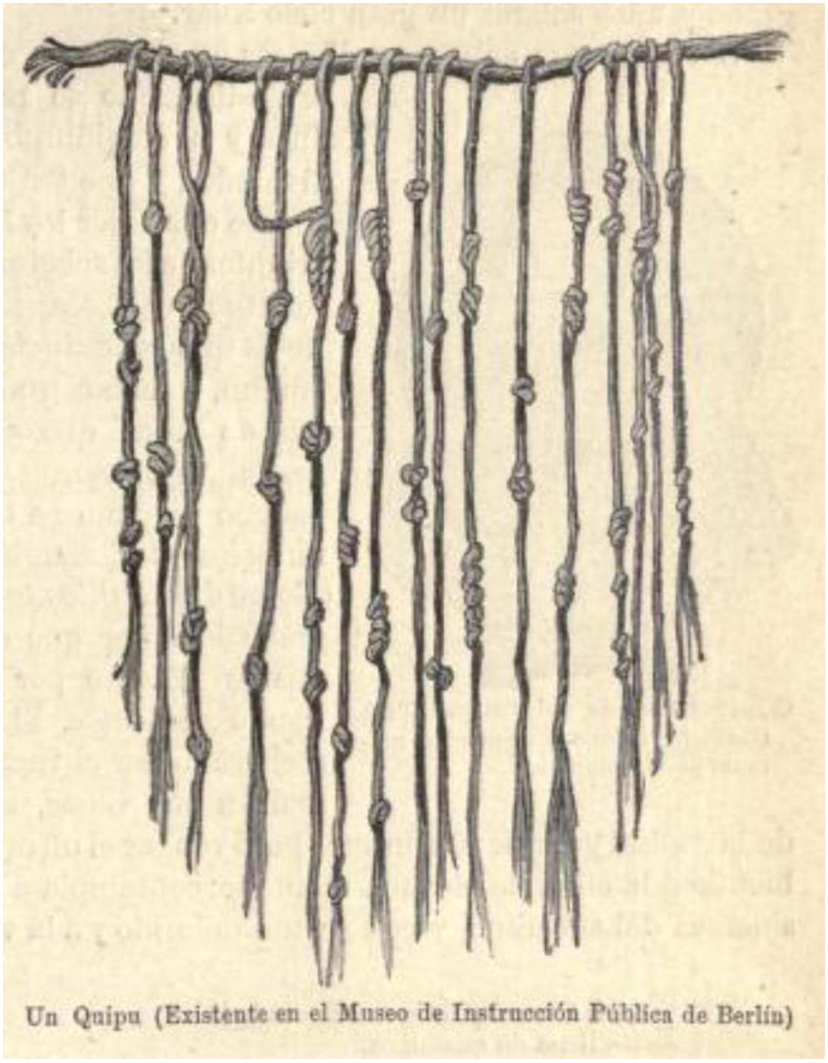


Figure \(\PageIndex{11}\): Quipus example (CC BY 2.0)

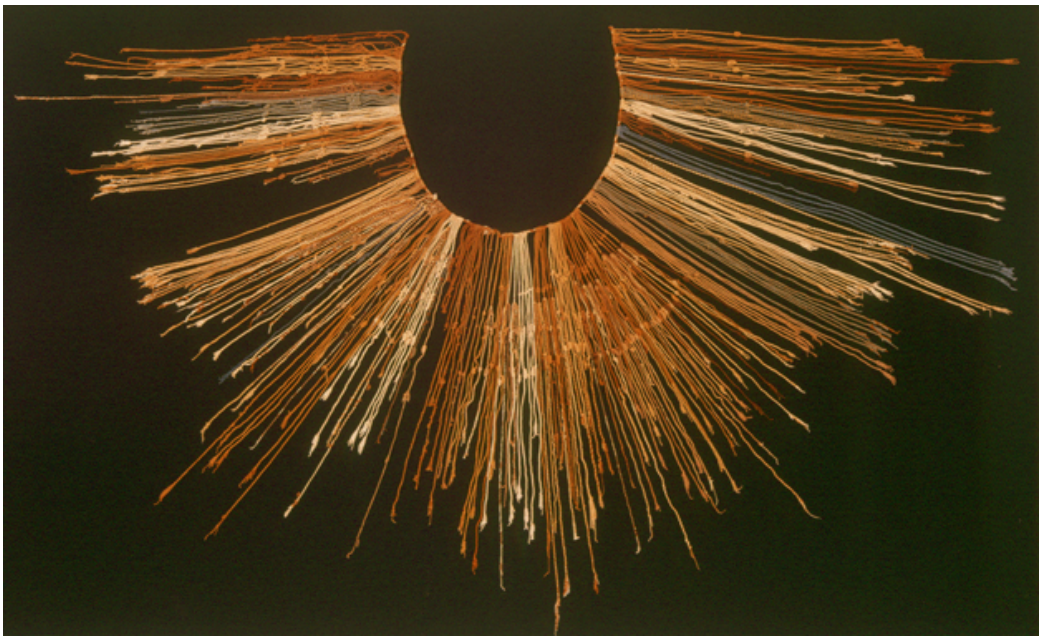


Figure \(\PageIndex{12}\): Quipus (CC BY-SA 3.0)

[1] Retrieved from https://www.nationalgeographic.com/t...picchu-secrets

[2] Retrieved from https://www.metmuseum.org/art/collec.../search/314528

6.18: Aztecs (14th – 16th)

Definition: Term

- **Aztec Empire**: A powerful civilization in central Mexico that flourished from the 14th to the 16th centuries before the Spanish conquest.
- **Tenochtitlan**: The capital city of the Aztec Empire, built on islands in Lake Texcoco where modern-day Mexico City now stands.
- **City-state**: An independent city and the surrounding territory governed as its own political unit.
- **Nobility**: The upper social class made up of rulers, priests, military leaders, and wealthy families.
- **Commoners**: Ordinary people in society, including farmers, laborers, and craftspeople.
- **Artisans**: Skilled workers who create handmade objects such as pottery, jewelry, textiles, and sculptures.
- **Warriors**: Soldiers trained to fight and defend the empire or expand its territory.
- **Temple Pyramid**: A stepped pyramid structure used for religious ceremonies and worship.
- **Tezcatlipoca**: An important Aztec god associated with the night sky, power, fate, and conflict.
- **Tlaloc**: The Aztec god of rain, water, and agriculture.
- **Quetzalcoatl**: The feathered serpent god associated with knowledge, creation, wind, and learning.
- **Agriculture**: The cultivation of crops and raising of animals to provide food and resources.
- **Ceremonial Practices**: Religious rituals and activities performed to honor gods or mark important events.
- **Swampy Land**: Wet, marsh-like land that is often difficult to build on or cultivate.

The **Aztec Empire** dominated central Mexico from the 14th through the 16th centuries, centered in the capital city of **Tenochtitlan** and its allied city-states. At its height, the Aztec civilization developed a rich and highly organized cultural environment in what is now modern-day Mexico. Built on swampy land in the Valley of Mexico, Tenochtitlan was transformed into a remarkable urban center featuring canals, causeways, markets, and monumental temple complexes. Among its most important structures were pyramid temples that reflected the grandeur and religious significance of ancient ceremonial architecture.

Aztec society was highly structured and divided into social classes that included nobility, commoners, artisans, traders, and warriors. Religion played a central role in daily life, and the Aztecs worshipped many gods, including Tezcatlipoca, Tlaloc, and Quetzalcoatl. Temples, priests, and ceremonial practices supported the worship of these deities and reinforced the power of the state. Approximately 20 percent of the population worked in agriculture, cultivating crops that sustained the empire, while the remaining population included traders, skilled artisans, and warriors. Artistic production became an important source of wealth and prestige, with artisans creating elaborate works in stone, feathers, ceramics, gold, and textiles that were highly valued throughout the empire.

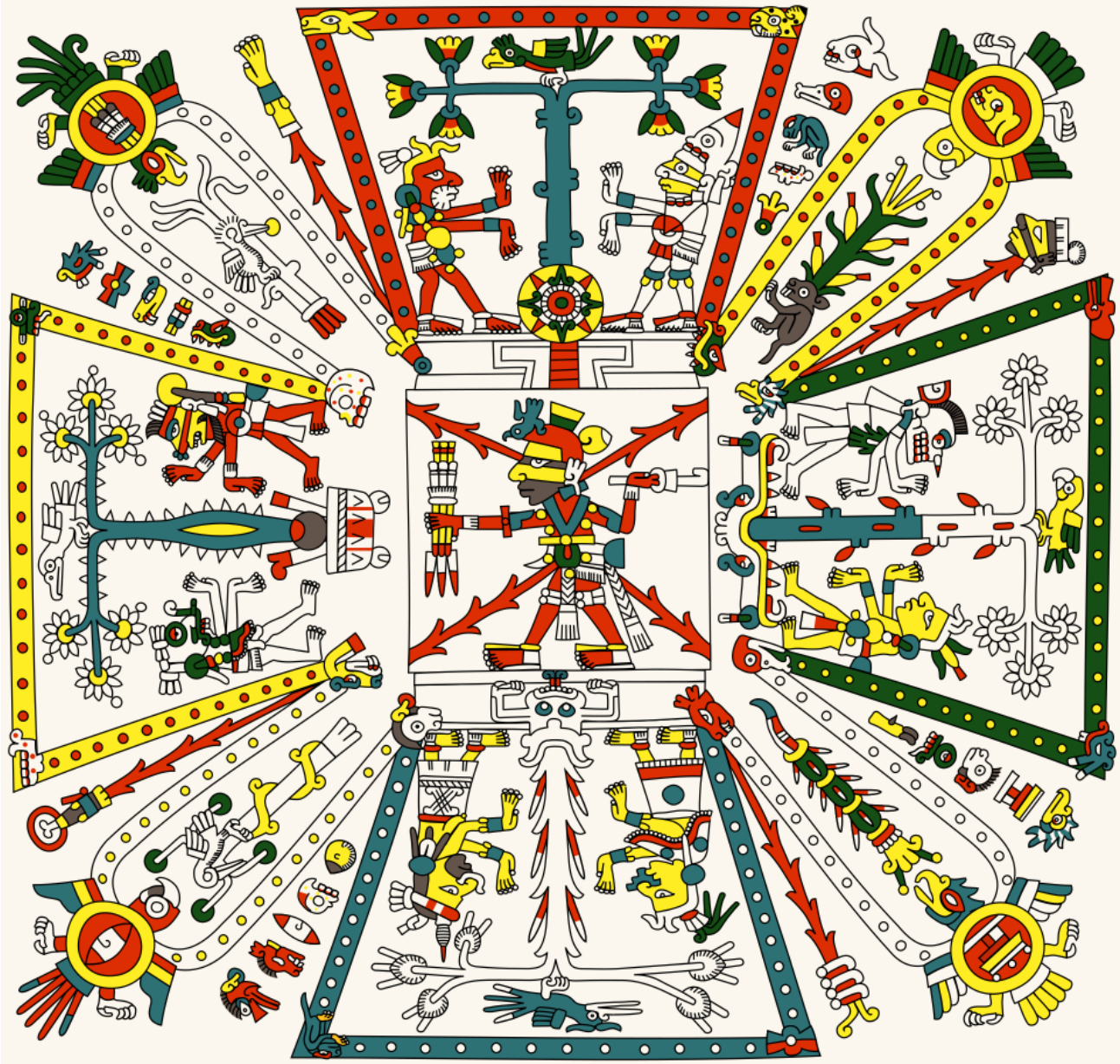


Figure \(\PageIndex{1}\): Cosmological drawing (CC BY-SA 4.0)

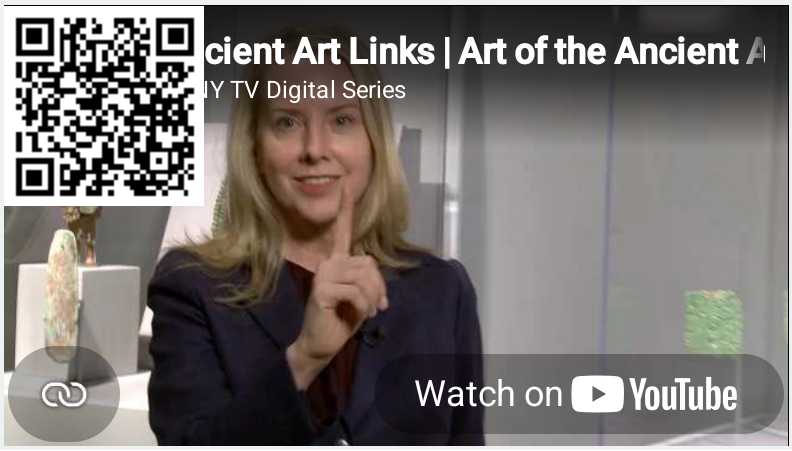
Tenochtitlan, located on the site of present-day Mexico City, was carefully planned with a symmetrical layout that divided the city into four main sections surrounding the **Great Pyramid** at its center. Most ordinary houses were constructed from wood, clay, and woven reeds used for roofing, while temples, palaces, and important civic buildings were built from stone. The Aztecs engineered an extensive canal system that rivaled that of Venice, using waterways both for transportation and for irrigating agricultural lands. In swampy regions, they created raised farming plots separated by canals. Elevated causeways connected the central island city to the mainland, allowing travel by foot across the marshy environment. These causeways were constructed by driving pylons into the soft ground and covering them with layers of stone and rock.

The arts were highly valued in Aztec society, and songs, music, poetry, and theatrical performances played an important role in cultural and religious life. The empire sponsored contests and public performances featuring actors, acrobats, dancers, and musicians. Aztec poetry often contained layered meanings connected to warfare, religion, nature, and sacred symbolism, frequently using imagery such as flowers to represent deeper spiritual concepts. Many of these poems survive today, providing insight into Aztec thought and beliefs. Although the Aztecs did not develop a fully phonetic writing system, they used **logograms**, or symbols representing words and ideas. In one drawing (6.18.1), the lord of fire stands at the center while logograms representing the cosmos surround the figure. At its height, the Aztec Empire may have supported a population of nearly 15 million people. However, the

empire eventually weakened as political control and cultural dominance declined. Environmental pressures, warfare, internal instability, and the Spanish invasion led by Hernán Cortés in 1521 contributed to the collapse of the Aztec civilization.

Ancient Art Links: Art of the Ancient Americas

CUNY TV presents "Ancient Art Links", featuring "The Golden Kingdoms: Luxury and Legacy in the Ancient Americas" a landmark exhibition at The Metropolitan Museum of Art, New York. This exhibition follows the Golden Road, from the ancient Andes in Peru 3000 years ago, and up north to the Aztec Empire in Mexico in the 16th Century. It features 300 pieces of Pre-Columbian art from 52 lenders in 12 different countries, along with new archaeological findings. These exquisite objects cast new light on the ancient Americas civilizations, exposing the destruction of the Conquistadors, restoring their glorious history to Native American descendants.



Architecture

The **Teopanzolco ruins** (6.18.2), located in Cuernavaca, are believed to have been the ceremonial center of an ancient Aztec city. The site features a distinctive double pyramid design with twin staircases leading to two temples at the summit, a common architectural form in Aztec sacred structures. The pyramid base stood approximately twenty meters high and covered an area measuring about fifty by thirty-two meters, although evidence suggests the structure was never fully completed. Excavations at the site uncovered carved stone animal heads used as architectural decorations, as well as a mass burial site containing mutilated human remains and ritual objects believed to be associated with ceremonial sacrifice practices.

The **Pyramid of Acatitlán** (6.18.3) suffered extensive destruction during the Spanish conquest. Much of the stone from the pyramid and its sculptures was removed and reused to construct Spanish houses, churches, and other buildings, including a nearby church. Over time, the remaining structure became buried beneath mud and debris and was largely forgotten until its rediscovery in 1923. Archaeologists later partially reconstructed the pyramid, revealing an important ceremonial center dedicated to the gods Tlaloc and Huitzilopochtli, the god associated with war, the sun, and human sacrifice. The temple complex features a monumental staircase leading upward to the ceremonial platform. At the top, imagery associated with skull racks symbolized sacrificial rituals and religious devotion. Archaeologists also uncovered sculptures of eagles and jaguars, animals that represented elite Aztec warrior societies known for their military skill and religious importance.

Figure \(\PageIndex{2}\): Teopanzolco (CC BY-SA 3.0)

Figure \(\PageIndex{3}\): Pyramid of Acatitlán (Public Domain)

Sculpture

Many Aztec stone sculptures survived the Spanish conquest and represent the numerous gods and deities worshipped throughout the empire. These sculptures depicted figures seated, standing, or posed in ceremonial positions, reflecting their religious significance. Some larger sculptures contained hollowed spaces carved into the chest area, believed to have held the hearts of sacrificial victims during ritual ceremonies. Originally, many of these sculptures were painted in vivid colors, although most of the pigment has faded over time due to weathering and age.

Smaller sculptures often represented local and agricultural deities connected to fertility, crops, and trade. One small sculpture (6.18.4), carved from volcanic stone, depicts a man carrying a cacao pod. The figure wears a loincloth and an elaborate headdress, and traces of red pigment remain visible on parts of the sculpture. In Aztec society, cacao beans were highly valuable and functioned both as a luxury good and as a form of trade currency. The sculpture may represent a merchant involved in transporting cacao along the extensive trade networks that connected different regions of the Aztec Empire.

Figure \(\PageIndex{4}\): Man Carrying a Cacao Pod (1440-1521, volcanic stone, red pigment, 36.2 x 17.8 x 19.1 cm) (CC BY-SA 3.0)

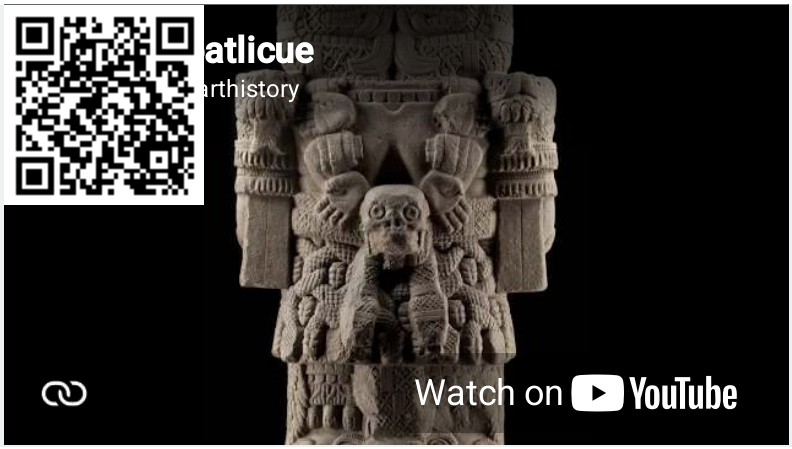
Standing approximately 2.7 meters high, the basalt sculpture of Coatlicue, often called the "**Serpent Skirt**" (6.18.5), is widely considered one of the greatest masterpieces of Aztec sculpture. The monumental statue depicts the goddess with two serpent heads facing one another, a skirt formed from intertwined snakes, and a necklace composed of severed hands, hearts, and skulls. She also possesses clawed hands and feet, emphasizing her association with both creation and destruction. In Aztec belief, Coatlicue was the powerful earth-mother goddess connected to fertility, life, death, and rebirth, making her both revered and feared.

The sculpture's dramatic imagery reflects the Aztec understanding of the cyclical relationship between life and sacrifice. Although the figure appears decapitated, the two snakes emerging from the neck symbolize streams of blood transformed into serpents, a common symbolic device in Aztec art rather than evidence of damage to the original design. Following the Spanish conquest, the sculpture was buried to hide what the Spanish considered a pagan idol. It remained concealed until its rediscovery in 1790, when it became one of the most important surviving examples of Aztec religious art.

Figure \(\PageIndex{5}\): *Coatlicue* (CC BY-SA 3.0)

Coatlicue

Coatlicue, c. 1500, Mexica (Aztec), found on the SE edge of the Plaza mayor/Zocalo in Mexico City, basalt, 257 cm high (National Museum of Anthropology, Mexico City)



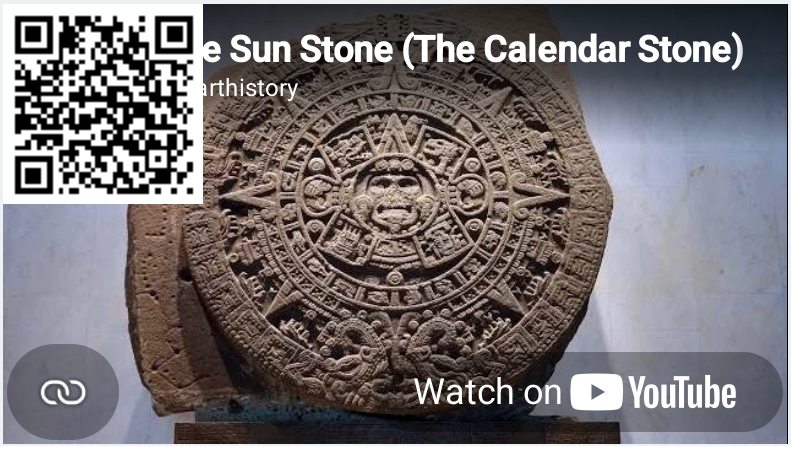
The **Sun Stone** (6.18.6), often referred to as the Aztec Calendar Stone, is one of the most recognizable works of Aztec art. Carved from basalt, the massive circular stone measures nearly four meters in diameter and approximately one meter thick. The monument illustrates Aztec beliefs about the universe and the mythological history of the five successive worlds, or “suns,” that existed before the present age. At the center of the stone is a relief carving commonly identified as the sun god Tonatiuh or the night sun, Yohualtonatiuh. Surrounding the central figure are rings of symbolic imagery representing cosmic cycles, calendar signs, celestial forces, and the passage of time. The stone reflects the Aztec understanding of time as cyclical rather than linear, emphasizing the continual destruction and rebirth of the cosmos.

Agriculture and survival depended heavily on the power of the sun, making solar worship central to Aztec religion and daily life. The Aztecs believed the sun required nourishment in the form of human sacrifice to continue its journey across the sky and maintain balance in the universe. Because of this belief, ritual sacrifices were closely connected to ceremonies associated with the Sun Stone and other sacred monuments. "The Aztecs sacrificed a prisoner on the calendar stone on the date 4 Olin, the day they believed the world would end. The day repeats every 260 days in their calendar cycle. With succession of the cycle, another prisoner was sacrificed, and the sun rose again the following day. Tonatiuh lived on."[1] The sculpture was buried when the Spanish conquerors came and was not recovered until 1790.

Figure \(\PageIndex{6}\): *Sun Stone* (1502-20, basalt, 3.6 x 98 cm) (CC BY-SA 3.0)

The Sun Stone

The Sun Stone (or The Calendar Stone), Aztec, reign of Moctezuma II (1502-20), discovered in 1790 at the southeastern edge of the Plaza Mayor (Zocalo) in Mexico City, stone (unfinished), 358 cm diameter x 98 cm depth (Museo Nacional de Antropología)



Metalwork

Metalwork was an important artistic tradition in Aztec society, with skilled artisans creating jewelry and ceremonial objects from gold and silver. Rings, earrings, pendants, necklaces, and other ornaments were often decorated with symbolic imagery such as eagles, serpents, and tortoiseshell patterns. Aztec metalworkers used advanced techniques including **lost-wax casting** and delicate **filigree** work to produce highly detailed objects. Unfortunately, only a small amount of Aztec metalwork survives today because Spanish conquerors melted much of the gold and silver into bullion that could be transported back to Spain.

Small frog-shaped beads (6.18.7) were commonly created for necklaces and other personal adornments. Animal imagery, particularly frogs and turtles, was frequently used in Aztec jewelry because these creatures symbolized water, rain, fertility, and agricultural abundance. Many of these ornaments were cast individually using the lost-wax process, allowing artisans to create unique forms and intricate details.

One ornament shaped like a serpent's head features sharply serrated teeth and an articulated tongue, emphasizing the image of a snake prepared to strike. Another object, the gold **labret** (6.18.8), was designed to be inserted into a piercing below the lower lip. The movable tongue element shifted from side to side as the wearer moved, enhancing the dramatic appearance of the ornament. Labrets were often associated with authority, bravery, and high social status within Aztec culture.

Figure \(\PageIndex{7}\): Frog necklace (1400-1521, gold, 2.2 x 15.2 x 14 cm) (Public Domain)

Figure \(\PageIndex{8}\): Serpent labret (1325-1521, gold, 6.6 x 4.4 x 6.6 cm) (1325-1521, gold, 6.6 x 4.4 x 6.6 cm) (Public Domain)

Featherwork

Aztec artisans also created intricate miniature works inspired by plants, shells, birds, and other elements from the natural world. Highly valued materials such as jade and brightly colored feathers were commonly used to produce luxurious decorative objects. Among the most prized feathers were those from the Resplendent Quetzal, whose brilliant green plumage symbolized wealth, power, and divine authority.

Featherwork was an especially refined art form in Aztec culture. Artists carefully cut feathers into tiny fragments and attached them to a firm feather backing. Layers of softer natural feathers formed the base, while more decorative feathers were added on top using adhesive made from orchid bulbs. Because feathers are fragile organic materials, very few examples of Aztec feather art survive today. One rare surviving example is the feather shield (6.18.9), which demonstrates the extraordinary craftsmanship of Aztec featherworkers.

The reconstructed imperial headdress (6.18.10) further illustrates the remarkable beauty and prestige associated with quetzal feathers. Such headdresses were associated with rulers and elite members of society, emphasizing political authority, ceremonial importance, and connections to the sacred world. "The Resplendent Quetzal likely inspired Quetzalcoatl, the "plumed serpent" god of Mesoamerica. Legend has it that Quetzalcoatl helped create Earth. Rulers and nobility wore headdresses made from this trogon's shining green feathers, which symbolically connected them to the god."[2]

Figure \(\PageIndex{9}\): Feather shield (CC BY-SA 4.0)

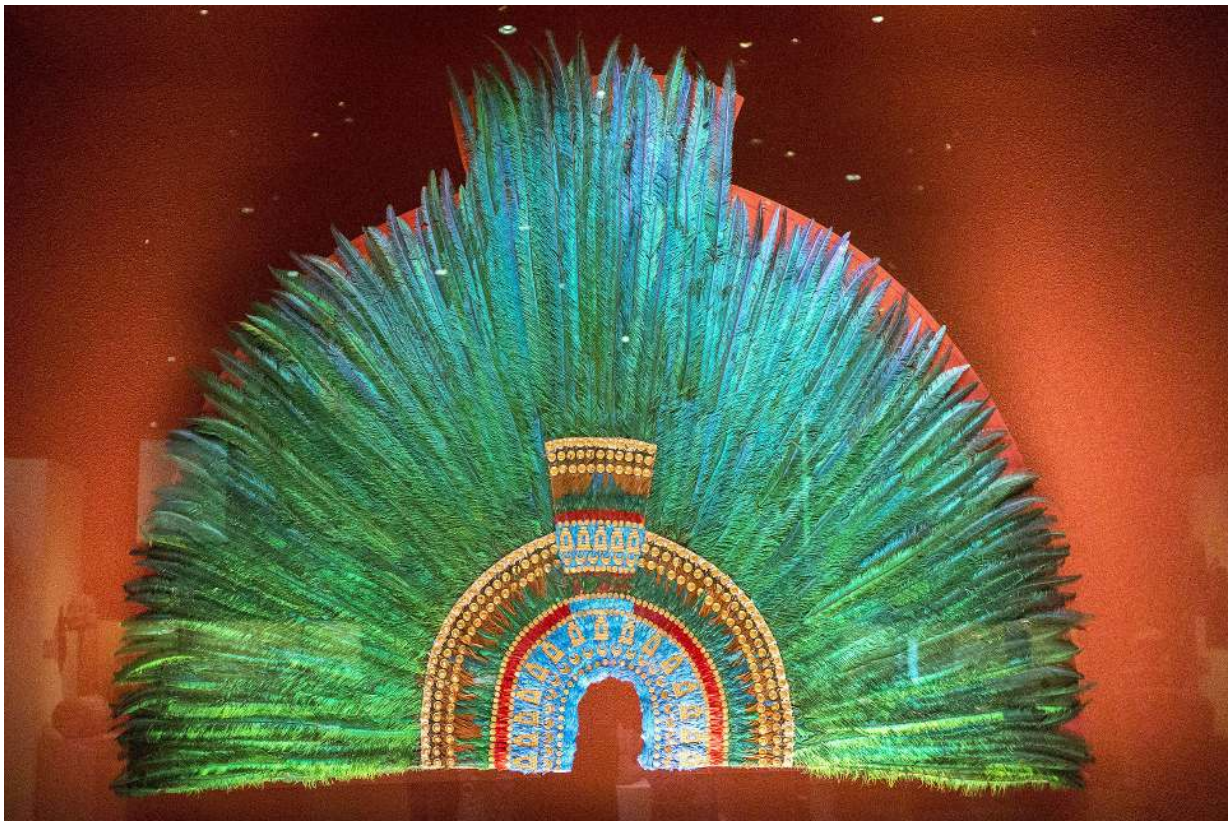


Figure \(\PageIndex{10}\): Feather headdress Moctezuma II (reproduction) (CC BY-SA 4.0)

Pottery

Although the Aztecs did not use a potter's wheel, they developed sophisticated ceramic traditions that included vessels with legs, handles, spouts, and highly inventive shapes. Most pottery was created using the **coil-building** method, in which long rolls of clay were stacked and smoothed together to form thin-walled vessels. Potters often covered the surfaces with red, black, or cream-colored slip, while more elaborate **polychrome ceramics** featured black or brown painted designs over brightly colored backgrounds.

Aztec ceramics were frequently decorated with motifs inspired by animals, plants, and geometric patterns, reflecting both natural and symbolic themes important to Aztec culture. Everyday utilitarian pottery (6.18.11) was commonly made from orange- or buff-colored clay and often left without slip decoration. Over time, **black-on-orange** pottery became a popular decorative style, using black painted designs against an orange clay surface.

More refined **polychrome ware** (6.18.12) featured orange or white slip backgrounds with increasingly complex painted imagery and ornamentation. Pottery was typically fired in simple **updraft kilns**, which directed heat upward through the chamber, although some potters continued to use open-pit firing methods. These ceramic traditions demonstrate the technical skill and artistic creativity of Aztec artisans despite the absence of wheel-thrown pottery techniques.

Figure \(\PageIndex{11}\): Ceramic bowl (15^{th} – early 16^{th} century, clay, 5.3 x 16.3 cm) (Public Domain)

Figure \(\PageIndex{12}\): Ceramic bowl (CC BY-SA 3.0)

[1] Retrieved from https://www.floridamuseum.ufl.edu/sc...tec-sun-stone/

[2] Retrieved from https://abcbirds.org/bird/resplenden...%20and%20light.

6.19: Conclusion

The artistic traditions of civilizations throughout the world demonstrate humanity's enduring desire to create meaning, preserve cultural identity, and express spiritual beliefs through visual form. From the sacred catacombs and frescoes of the **Late Roman Empire** to the radiant mosaics of the **Byzantine Empire**, art became a powerful tool for communicating religious devotion and political authority. As Christianity spread across Europe, monumental churches emerged during the **Romanesque** and **Gothic** periods, filled with wall paintings, sculptures, and stained-glass windows designed to educate and inspire worshippers. Similarly, during the **Islamic Golden Age**, mosques, mosaics, calligraphy, and geometric designs reflected both spiritual ideals and extraordinary scientific and mathematical advancements.

Throughout Asia, artists and architects developed sophisticated traditions that blended religion, philosophy, and technical mastery. The **Gupta Period** in India produced remarkable cave temples and rock-cut sculptures that celebrated Hindu and Buddhist beliefs. In Southeast Asia, the **Khmer Empire** constructed vast religious complexes with intricate stone carvings that demonstrated both engineering skill and devotion. The **Song Dynasty** in China refined painting traditions with expressive ink and color landscapes that emphasized harmony between humanity and nature. In Japan, the **Asuka, Nara, and Heian periods** introduced elegant pagodas and wooden architecture that reflected Buddhist influence and refined court culture.

African civilizations also contributed important artistic achievements that reflected spiritual practices, leadership, and community identity. The **Igbo of Nigeria** created expressive clay sculptures connected to ritual and ancestral traditions, while the people of **Djenné in Mali** became known for impressive bronze statues and metalworking techniques. Across these societies, art served religious, ceremonial, and social purposes while preserving cultural memory.

In northern Europe, the **Vikings** demonstrated remarkable craftsmanship through shipbuilding and woodworking, creating vessels capable of long-distance travel, trade, and exploration. Their artistic traditions combined practicality with decorative patterns inspired by mythology and nature.

Across the Pacific and the Americas, civilizations developed monumental architecture and highly specialized artistic traditions despite geographic isolation. On **Rapa Nui Island**, artists carved the monumental moai heads from volcanic stone to honor important ancestors. The **Ancestral Puebloans** built sophisticated housing complexes and cliff dwellings integrated into the landscape of the American Southwest. The **Maya** constructed pyramids, temples, and cities adorned with elaborate stone carvings and hieroglyphic inscriptions that recorded historical events and religious beliefs.

The **Inca Empire** mastered engineering, road systems, and textile production, creating finely woven tunics and fabrics that symbolized social rank and political authority. Their weaving traditions demonstrated extraordinary technical precision and artistic sophistication. The **Aztecs** developed highly skilled metalworking, featherwork, ceramics, and monumental sculpture traditions that reflected their religious worldview and military power. Jewelry, mosaics, and ceremonial objects made from gold, jade, feathers, and precious stones revealed both artistic refinement and spiritual symbolism.

Although these civilizations developed independently and often differed greatly in language, religion, geography, and political organization, they shared important similarities. Art and architecture were used to communicate power, preserve traditions, honor gods and ancestors, and express humanity's relationship with the natural and spiritual worlds. The surviving works from these cultures continue to inspire modern audiences and provide valuable insight into the complexity, creativity, and interconnectedness of global human history.

CHAPTER OVERVIEW

7: The Sacred Buildings of Civilizations (200 CE – 1400 CE)

All cultures had some kind of sacred belief whether it was one god, or many gods and they erected different types of structures including: temples, churches, mosques, or pagodas where they observed their religion. Globally, all of the buildings were designed, constructed, decorated and enhanced with some style of art: statues, stained glass, special trim, architectural configurations, or unique materials.

7.1: Overview
7.2: The Rounded Domes
7.3: The Vaulted Arch
7.4: The Multiple Stories
7.5: The Pyramids
7.6: Conclusion

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7.1: Overview

Throughout history, every culture developed sacred beliefs that shaped its art, architecture, and daily life. Whether societies worshipped one god or many gods, they constructed monumental spaces such as temples, churches, mosques, pagodas, and ceremonial centers where communities gathered for worship and ritual activities. These structures became more than functional buildings; they symbolized spiritual devotion, political authority, and cultural identity. Across the world, architecture was enhanced through sculpture, mosaics, stained glass, carvings, decorative trim, and carefully planned spatial designs. Some of these structures remain active places of worship today, while others survive as archaeological ruins or reconstructed monuments that continue to reveal the creativity and beliefs of past civilizations.

One of the most important artistic principles shared by many cultures was the use of **pattern**. Patterns organized repeated shapes, colors, and motifs into unified designs that brought harmony and balance to architecture and art. Artists incorporated spirals, circles, geometric forms, flowers, leaves, and symbolic imagery into mosaics, textiles, carvings, and paintings. Even when patterns were subtle, they helped unify the composition and guide the viewer's eye throughout the work. In many religious traditions, patterns also carried symbolic meaning, representing concepts such as eternity, harmony, or divine order.

The technique of **fresco painting** became one of the most enduring methods for decorating architectural surfaces. Frescoes were created by applying pigment directly onto wet lime plaster on walls or ceilings. As the plaster dried, the paint bonded permanently with the surface, allowing the images to survive for centuries if the plaster remained intact. Frescoes were widely used to illustrate religious stories, cultural traditions, and scenes from everyday life. The frescoes on the exterior walls of the havelis in Mandawa represent one of the largest concentrations of fresco painting in the world. Although some plaster has been damaged by earthquakes and weather, many of the colors remain remarkably vibrant centuries after they were first applied.

Another major decorative tradition was the creation of **mosaics**, images formed from tiny pieces of colored glass, tile, or stone called tesserae. Artists arranged these small fragments into detailed pictures and geometric designs before securing them with grout. Because mosaics are highly durable, they were commonly used on walls, ceilings, domes, and floors, surviving for hundreds or even thousands of years. Mosaics became especially important in Byzantine churches and Islamic mosques, where they created luminous surfaces filled with flowing geometric and floral patterns. These decorative systems transformed architecture into visually immersive sacred spaces and demonstrated the technical skill and artistic sophistication of their creators.

Launch Pad: Ancient and Byzantine Mosaic Materials

In the ancient Mediterranean world, the earliest-known mosaics, which date to the 8th century B.C., were made of large, water-smoothed pebbles arranged in geometric patterns. Over time, they were made of tiny pieces of glass or stone, called tesserae, which were used to create intricate patterns and images on the floors, walls, and ceilings of public and private spaces. By the Roman and Byzantine periods, an empire-wide trade existed for luxurious materials, such as marble and granite, which were used in their creation.

Artists and craftsmen throughout history developed a wide range of carving techniques to shape stone, wood, ivory, and other materials into decorative and symbolic forms. Carving involves removing or scraping away sections of material to create a desired image or design. Different civilizations created specialized tools based on the natural resources available in their environments, allowing them to produce increasingly detailed sculptures and architectural decoration. One important carving technique was **bas-**

relief, a French term meaning “low relief.” In bas-relief sculpture, artists carved figures so they projected slightly from a flat background, creating the illusion of three-dimensional depth. The term relief comes from the Latin word *relevo*, meaning “to raise.” By cutting away varying amounts of the surrounding surface, artists controlled how prominently the figures emerged from the background. Bas-relief became a common artistic method across many civilizations and was often used to depict religious stories, rulers, battles, and scenes from everyday life.

Another important artistic material was **glass**, particularly in the creation of stained-glass windows. Glass is primarily made from **silica**, an amorphous material that remains transparent even when colors are added. Small pieces of colored glass were carefully assembled into intricate images and patterns, then joined together to create large decorative windows. The art of stained glass dates back more than one thousand years and was especially important in churches, basilicas, mosques, and other sacred buildings. Sunlight passing through the colored glass transformed interiors into luminous spiritual spaces filled with vibrant color and symbolic imagery.

Religious structures were among the most significant architectural achievements of early civilizations because they represented spiritual beliefs, divine authority, and community identity. Temples, churches, mosques, pagodas, and ceremonial centers served not only as places of worship but also as cultural and artistic centers where architecture, sculpture, painting, mosaics, carvings, and stained glass were combined into unified visual experiences. In *Chapter 7 ~ The Sacred Buildings of Civilizations (200 CE – 1400 CE)*, the architecture and artistic traditions associated with these sacred structures are explored to better understand how civilizations expressed their beliefs through art and design.

Civilization	Sacred Building	Date of Construction
Byzantine	Hagia Sophia	537 CE
Jerusalem	Dome of the Rock	691 CE
Islamic Golden Age	Umayyad Mosque	715 CE
Viking	Borgund Stave Church	Around 1180 CE
Romanesque	Sant Climent de Taull	1123 CE
Gothic	Notre Dame Cathedral	Started 1163 CE
Ethiopia	Lalibela Church Complex	12th and 13th Centuries
Gupta Period	Mahabodhi Temple	5th or 6th Century
Khmer Empire	Bayon Temple	13th Century
Song Dynasty	Six Harmonies Pagoda	970 CE
Asuka, Nara, Heian Periods	Konpon Daito Pagoda	887 CE
Ancestral Puebloans	Kiva	Approx. 1080 - 1150
Mayan Classic Period	Kukulkan Temple	900 CE
Incan Empire	Temple of the Sun	Mid 1400 CE
Aztec	Templo Mayor	1326 CE (first version)

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7.2: The Rounded Domes

Definition: Term

- **Hagia Sophia**: A monumental religious building originally constructed as a Byzantine Christian church and later used as a mosque; famous for its massive dome and mosaics.
- **Dome of the Rock:** An important Islamic shrine built in Jerusalem during the late 7th century, recognized for its golden dome and elaborate mosaics.
- **Umayyad Mosque:** One of the oldest and most significant mosques in the Islamic world, known for its large courtyard, mosaics, and monumental architecture.
- **Mosaic**: An image or decorative design created by arranging small pieces of colored glass, stone, or tile called tesserae.
- **Dome**: A rounded architectural roof structure often used in religious buildings to create large open interior spaces.
- **Byzantine**: Relating to the Byzantine Empire, the eastern continuation of the Roman Empire centered in Constantinople.
- **Islamic Architecture**: A style of architecture associated with Islamic cultures and religions, often characterized by domes, arches, courtyards, calligraphy, and geometric decoration.
- **Tesserae**: Small pieces of glass, stone, or tile used to create mosaics.
- **Sacred Space**: A location considered holy or spiritually important where religious ceremonies and worship take place.
- **Architectural Influence**: The impact one culture, style, or building tradition has on the design and construction of another.

The Hagia Sophia, Dome of the Rock, and Umayyad Mosque are important religious structures that share many architectural and artistic similarities. These similarities developed because of shared religious functions, historical connections, regional traditions, artistic influences, and the availability of local building materials. Each structure was designed to inspire spiritual reflection while demonstrating the political and cultural power of the societies that built them.

One of the most striking features shared by these buildings is their extensive use of **mosaics** and monumental **domes**. The interiors are decorated with intricate mosaic designs made from colored glass, stone, and gold tesserae that create luminous surfaces filled with symbolic and decorative imagery. Their domes not only served structural purposes but also symbolized the heavens and the divine presence within sacred space. Together, these architectural and artistic elements demonstrate how Byzantine and Islamic traditions influenced one another while still maintaining distinct religious and cultural identities.

Byzantine Hagia Sophia (537 CE)

One of the greatest architectural achievements in world history is **Hagia Sophia (7.2.1)**, renowned for its immense scale, engineering innovation, and visual magnificence. Located in present-day Istanbul, Turkey, Hagia Sophia has served multiple religious and cultural roles throughout its history, functioning as a Greek Orthodox cathedral, a Roman Catholic church during the Crusades, an Ottoman mosque, a museum, and, since 2020 CE, once again as a mosque.

The first church constructed on the site was built in 360 CE and featured a wooden roof that was destroyed by fire in 404 CE. A second church erected in 415 CE also suffered destruction during riots and fires in 532 CE. Following this devastation, the Byzantine emperor Justinian I ordered the construction of an entirely new structure. Work on the current Hagia Sophia began in 532 CE and was completed remarkably quickly, opening in 537 CE. Hagia Sophia became one of the finest examples of **Byzantine architecture**, celebrated for its massive central dome, expansive interior space, marble columns, and shimmering mosaics. For nearly one thousand years, it remained the largest cathedral in the world and profoundly influenced the development of both Christian and Islamic architecture.

Figure \(\PageIndex{1}\): Hagia Sophia (CC BY-SA 3.0)

The cathedral follows the traditional **basilica-style** layout, consisting of a long rectangular structure with an entrance at one end leading through a central aisle toward the **apse**, the semicircular area at the opposite end used for religious ceremonies. Hagia Sophia was constructed on an enormous scale, measuring approximately 71.6 meters in length and 76.2 meters in width. Its massive central dome, spanning about 32.6 meters in diameter and rising dramatically above the interior space, became the dominant architectural feature and symbolized the heavens above worshippers.

The Byzantine emperor Justinian I intended Hagia Sophia to be the grandest church ever constructed. To achieve this vision, builders gathered luxurious materials from across the empire and reused architectural elements from earlier classical structures. Marble and columns were taken from ancient buildings, including Hellenistic columns from the Temple of Artemis. White marble and green porphyry were imported from Egypt, yellow stone from Syria, and dark stone from the Bosporus region. Many marble slabs were cut and polished so that the natural veining created symmetrical mirror-like patterns when installed along the interior walls (7.2.2).

The interior featured a total of 104 columns, with 64 located in the upper galleries and 40 on the lower level. These columns were decorated with elaborate abstract carvings and ornamental details. The **Ionic capitals** (7.2.3), placed at the tops of the columns, incorporated stylized acanthus leaf motifs and intricate pierced carving, reflecting both classical Greek influences and the decorative richness of Byzantine art.

Figure \(\PageIndex{2}\): West side of upper gallery (CC BY 2.0)

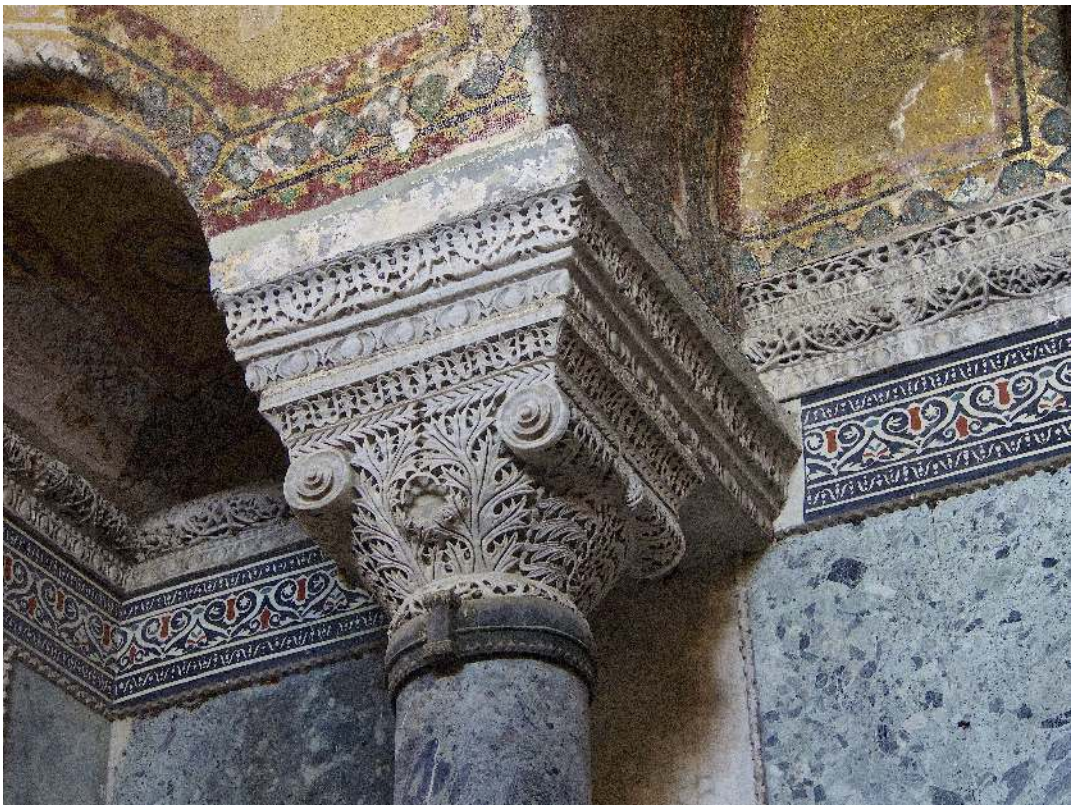


Figure \(\PageIndex{3}\): Ionic Column (CC BY 2.0)

The original dome of Hagia Sophia was designed with a relatively shallow profile. However, during a major earthquake in 558 CE, the immense structural stresses placed on the load-bearing supports caused the walls to push outward, resulting in the collapse of the dome and portions of the surrounding structure. The disaster revealed the engineering challenges involved in supporting such a massive roof over an enormous open interior space. After the collapse, the architects redesigned the dome by raising it approximately six meters higher than the original version. This increased height helped reduce the lateral pressure exerted against the walls and improved the building's overall structural stability. The redesigned dome incorporated **pendentives**—curved triangular supports that transition from a square base to a circular dome—as well as rib-like structural elements similar to the framework of an umbrella.

To further reduce weight and distribute structural forces more effectively, the dome was designed with forty windows placed around its base. These windows not only lightened the structure but also created the illusion that the dome floated above the building filled with light. The reconstructed dome (7.2.4), rising approximately 55.6 meters high, successfully distributed its weight onto the supporting walls and has remained standing for nearly fifteen centuries, demonstrating the extraordinary engineering achievements of Byzantine architecture.

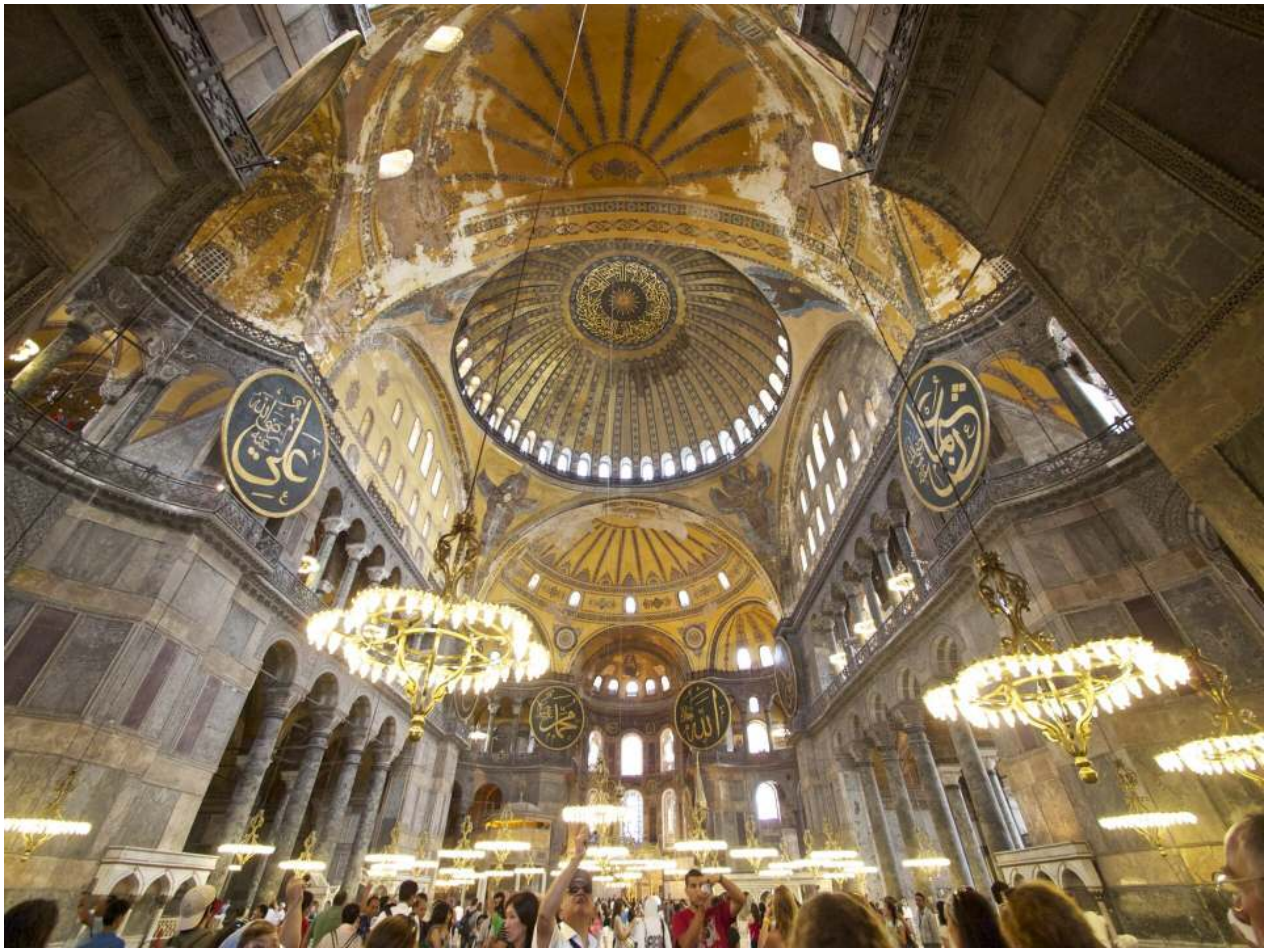


Figure \(\PageIndex{4}\): Interior of dome (CC BY 2.0)

The interior walls of Hagia Sophia were covered with richly colored marble and decorated with elaborate **mosaics** composed of small pieces of glass, colored stone, precious materials, and glazed tile called tesserae. To create a mosaic, artists first sketched the design directly onto the wall or ceiling surface. Small sections of adhesive were then applied, and individual tesserae were carefully pressed into place. After the adhesive dried, grout was spread between the pieces to secure the surface, a process similar to modern tile installation techniques.

Because mosaics often covered enormous surfaces, artists frequently stepped back from the wall to evaluate the placement of colors, patterns, and figures to ensure visual harmony from a distance. The mosaics in Hagia Sophia (7.2.5) (7.2.6) decorated walls, domes, arches, and upper galleries with images representing religious figures, sacred writings, geometric patterns, and symbolic imagery. The shimmering surfaces reflected light throughout the cathedral, creating a luminous spiritual atmosphere.

The creation of these monumental decorative programs required exceptional skill, patience, and labor. Mosaic production inside large cathedrals could take decades to complete because every piece had to be individually positioned by hand. The surviving mosaics in Hagia Sophia from its Christian period remain among the finest examples of Byzantine mosaic art and demonstrate the extraordinary craftsmanship of Byzantine artists.

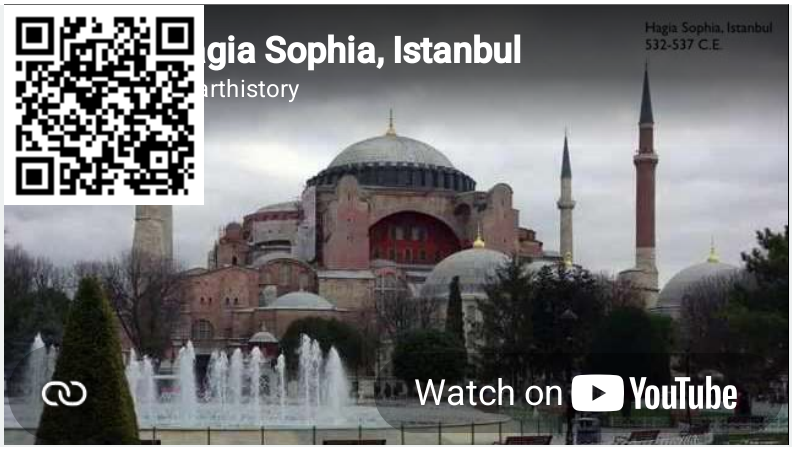
Figure \(\PageIndex{5}\): Comnenus Mosaic (CC BY-SA 3.0)

Figure \(\PageIndex{6}\): Empress Zoe mosaic (CC BY-SA 3.0)

Hagia Sophia was considered the spiritual and political center of the Byzantine, or Eastern Roman, Empire, and many emperors were crowned within its monumental interior. For centuries, the cathedral symbolized the power of both Christianity and the Byzantine state. However, during the Crusades and later conflicts, the structure suffered periods of damage, neglect, and deterioration. In 1453, the Ottoman sultan Mehmed II conquered Constantinople and transformed Hagia Sophia into a mosque. The new rulers repaired and strengthened the building while adapting it for Islamic worship. Many Christian images and mosaics were covered with plaster or concealed in accordance with Islamic traditions regarding religious imagery. At the same time, Islamic artistic elements such as calligraphy, medallions, prayer features, and new decorative mosaics were added to the structure. Today, Hagia Sophia remains a functioning mosque while still preserving visible elements from both its Christian and Islamic periods. The building stands as a unique architectural monument reflecting centuries of religious, political, and artistic transformation, where Byzantine mosaics and Islamic calligraphy coexist within the same sacred space.

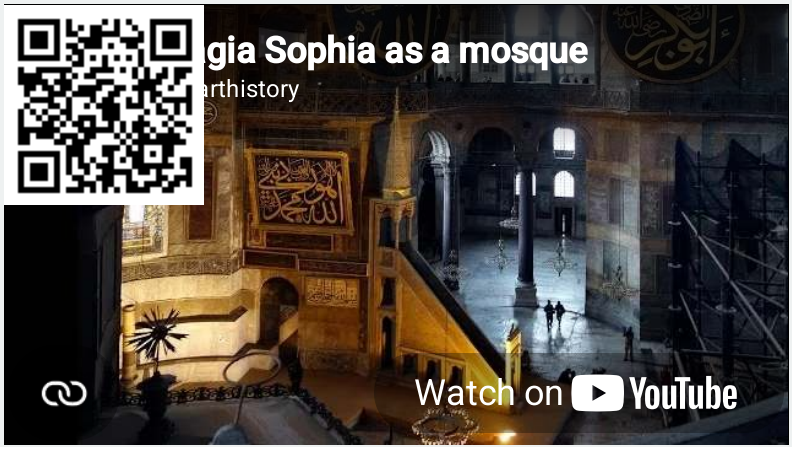
Hagia Sophia, Istanbul

Hagia Sophia, Istanbul, 532-37 (architects: Isidore of Miletus and Anthemius of Tralles)



Hagia Sophia as a mosque

This video focuses on Hagia Sophia after the conquest of Constantinople by the Ottomans in 1453.



Islamic Golden Age Dome of the Rock (691 CE)

Dome of the Rock, completed in 691 CE, is one of the oldest surviving works of Islamic architecture and art. Located on the Temple Mount in the Old City of Jerusalem, the structure is instantly recognizable because of its magnificent gilded dome and brilliant blue tile mosaics. The shrine became an important symbol of Islamic faith, artistic achievement, and political presence in Jerusalem. The Temple Mount site (7.2.7) has held religious significance for thousands of years and has been occupied by multiple faith traditions throughout history. Earlier structures on the site included Jewish temples, a Roman temple dedicated to Jupiter, and Christian buildings constructed during the Byzantine period. Many of these structures were destroyed or rebuilt over centuries of warfare, conquest, and religious conflict.

After Muslim forces captured Jerusalem in 637 CE, the Umayyad rulers commissioned the construction of the Dome of the Rock. Unlike a congregational mosque designed primarily for communal prayer, the building was created as a monumental shrine surrounding the sacred rock associated with important religious traditions. Remarkably, the Dome of the Rock has survived largely intact since its construction and remains one of the earliest and most significant examples of Islamic architecture in the world.

Figure \(\PageIndex{7}\): Temple Mount overview (CC BY-SA 4.0)

Figure \(\PageIndex{8}\): Dome of the Rock (CC BY-SA 4.0)

Dome of the Rock (7.2.8) was constructed over the sacred rock traditionally associated with the Prophet Muhammad and his miraculous Night Journey and ascension to heaven, where Islamic tradition teaches he met earlier prophets. Because of this spiritual significance, the site became one of the holiest places in Islam and an important pilgrimage destination. The exterior walls of the structure (7.2.9) were originally constructed from locally quarried limestone. Over centuries, portions of the building deteriorated because of weathering, neglect, and changing political control. In 1545, the Ottoman sultan Suleiman the Magnificent ordered extensive restoration work on the monument. During these renovations, the exterior was covered with brilliant blue mosaics and colorful ceramic tiles decorated with intricate floral patterns and inscriptions from the Quran. Seen from a distance, the vivid blue and multicolored tilework creates a striking visual contrast against the warm browns and earth tones of the surrounding Jerusalem landscape. The decorative surfaces not only enhanced the building's beauty but also reflected the importance of calligraphy, geometry, and color in Islamic art and architecture.

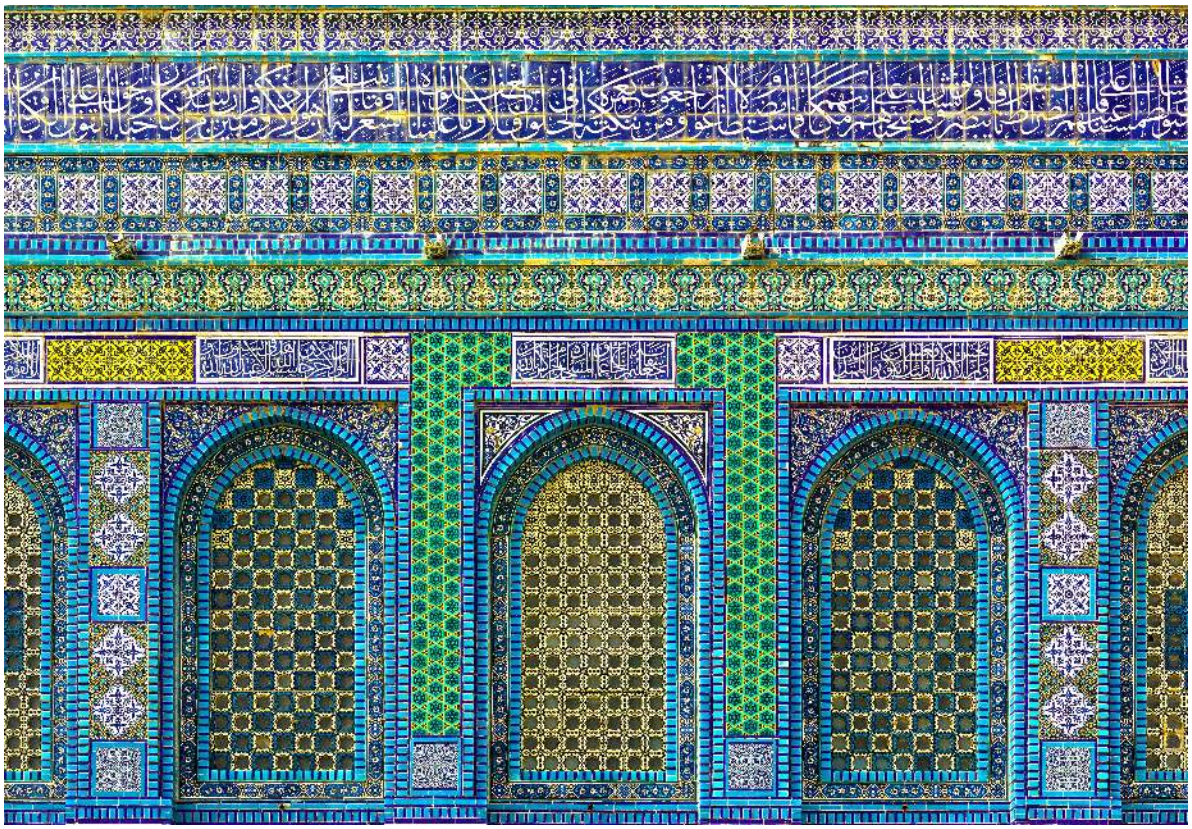


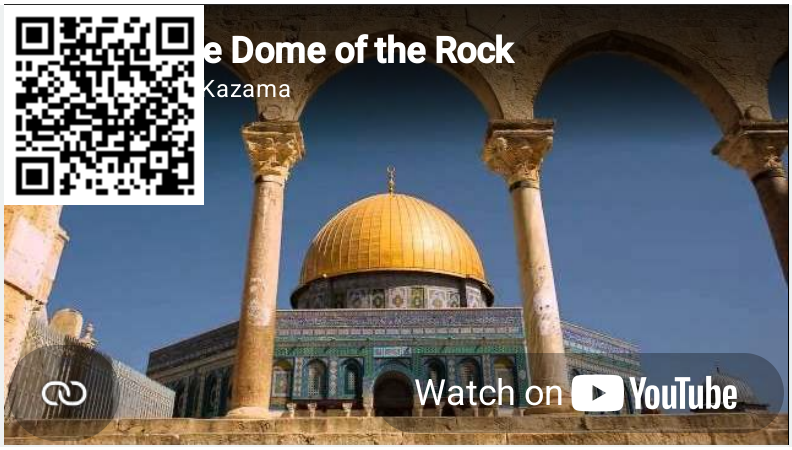
Figure \(\PageIndex{9}\): Exterior Wall (CC BY-SA 4.0)

The architects of Dome of the Rock designed the structure with an octagonal outer wall surrounding a circular inner sanctuary crowned by a monumental dome (x.x). The dome measures nearly twenty meters in diameter and rises to approximately fifty-four meters in height, creating a commanding presence over the Jerusalem skyline. To support the immense weight of the dome while preserving the sacred rock beneath it, the architects placed the structure on a system of twenty-four columns and piers arranged in concentric patterns around the central space.

Both the interior and exterior surfaces of the building are richly decorated with mosaics comparable to those found in other important religious monuments of the same period. The mosaic decorations feature flowing vegetal scrolls, floral motifs, geometric forms, and extensive **calligraphy** containing inscriptions from the Quran. These decorative elements are organized into highly symmetrical and repeating patterns (7.2.10), reflecting the Islamic artistic emphasis on balance, order, and infinite design. The combination of geometry, calligraphy, and ornamentation transforms the building into both a spiritual and artistic masterpiece of early Islamic architecture.

The Dome of the Rock

Narrated by Benedict Cumberbatch. Dome of the Rock, on the Temple Mount, Jerusalem, Al Quds.



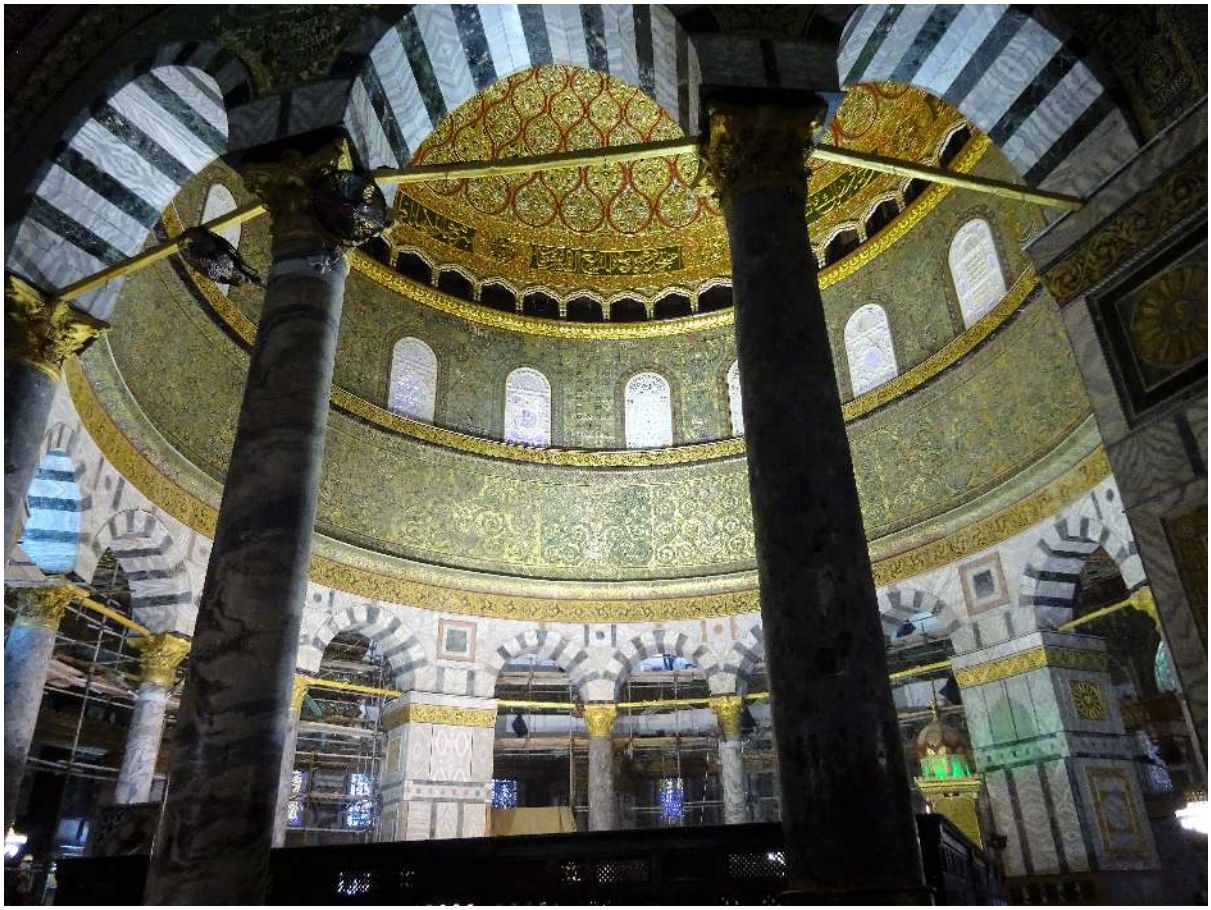


Figure \(\PageIndex{10}\): Inside of dome (CC BY-SA 4.0)

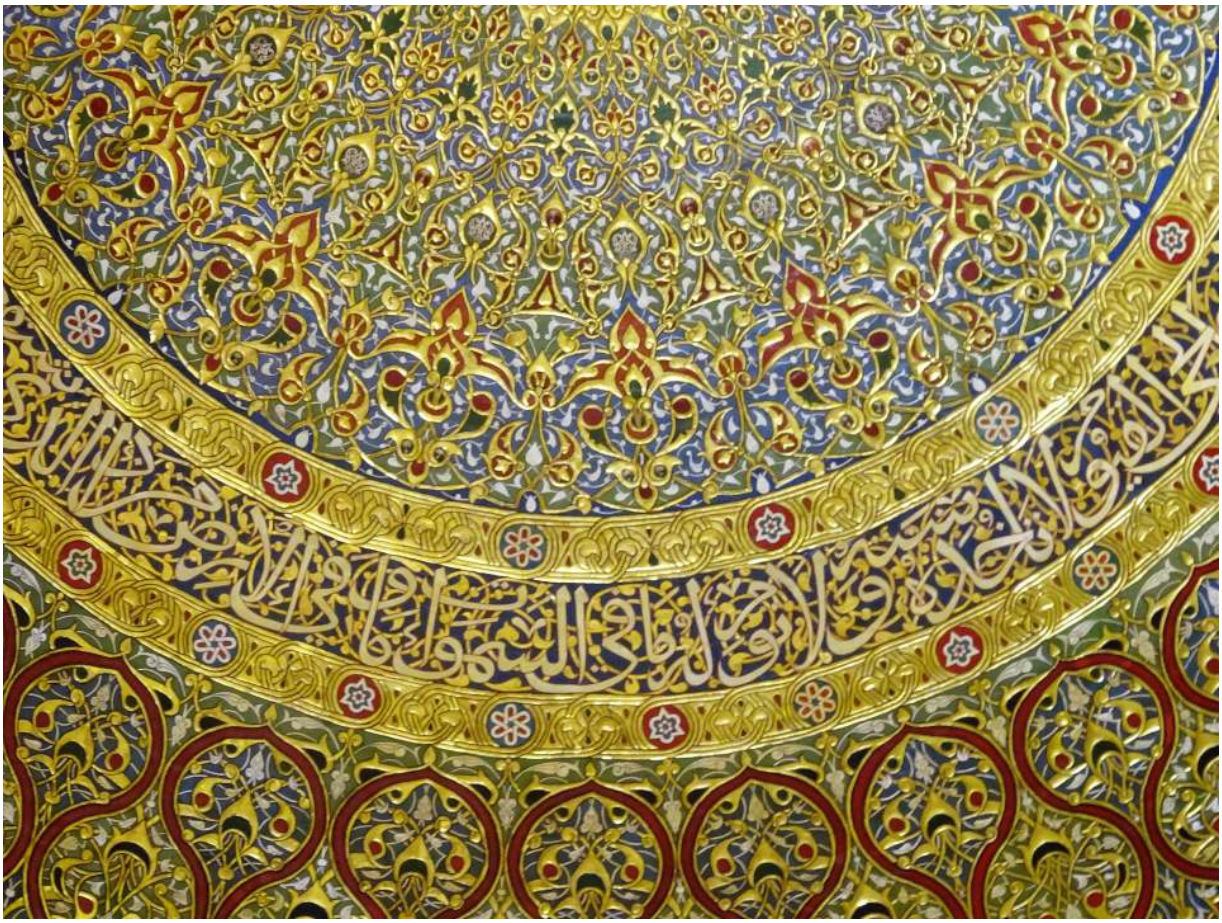


Figure \(\PageIndex{11}\): Dome Mosaics (CC BY-SA 4.0)

Islamic Golden Age Umayyad Mosque (715 CE)

Umayyad Mosque is located in the center of the Old City of Damascus and stands as one of the most important monuments of early Islamic architecture. The site has a long religious history that reflects the cultural and political changes of the region over thousands of years. Originally, the location contained a grand Roman temple dedicated to the god Jupiter and was considered one of the largest and most beautiful temples in Roman Syria. By the late 4th century, the temple complex had been transformed into a Christian church associated with John the Baptist, based on the tradition that his head, regarded as a sacred relic, was buried there.

Following the Muslim conquest of Damascus in 634 CE, the city became part of the expanding Islamic world. In 700 CE, the Umayyad caliph Al-Walid I declared his intention to create a mosque that would enhance the city's reputation and beauty. According to tradition, he proclaimed: "Inhabitants of Damascus, four things give you a marked superiority over the rest of the world: your climate, your water, your fruits, and your baths. To these, I wanted to add a fifth: this mosque."

Construction of the Umayyad Mosque (7.2.12) began in 706 CE and continued for nearly a decade before its completion in 715 CE. Once finished, the mosque became a major religious and architectural center for the people of Damascus and one of the defining masterpieces of early Islamic architecture.

Figure \(\PageIndex{12}\): Umayyad Mosque (CC BY-SA 3.0)

Thousands of workers from across the region participated in the construction of Umayyad Mosque, and the labor force eventually expanded to nearly 12,000 people. To create the new mosque, the earlier Christian church on the site was demolished, allowing the Umayyad rulers to construct a monumental Islamic religious center that reflected the growing power and influence of the Islamic Empire. Skilled Byzantine Art artisans were brought in to create the mosque's magnificent mosaics. Using colored glass and tile, they produced elaborate scenes of buildings, gardens, rivers, and landscapes that decorated the walls and architectural surfaces of the mosque. Mosaic decoration was a widely practiced art form throughout the Mediterranean world, and the Umayyad Mosque demonstrates how Islamic builders adapted and transformed earlier Byzantine artistic traditions into a distinctly Islamic visual style. The shimmering mosaics added beauty, light, and symbolic meaning to the sacred space while showcasing the technical mastery of the artists who created them.

Figure \(\PageIndex{13}\): Dome of the Clock (CC BY-SA 4.0)

In the eastern section of Umayyad Mosque, the **Dome of the Clock** (7.2.13) was added in 780 CE, followed nine years later by the construction of the **Dome of the Treasury** (7.2.14). These additions expanded the architectural and functional importance of the mosque complex while enhancing its visual balance and grandeur. The Dome of the Treasury was used to store valuable documents and financial resources connected to the administration of the mosque and the surrounding region.

Over the centuries, the mosque experienced repeated periods of destruction caused by warfare, earthquakes, and political upheaval. As different rulers gained control of Damascus, the structure often fell into disrepair before undergoing restoration and rebuilding campaigns. In 1082 CE, new rulers initiated major repairs that included reinforcing the structure with additional support pillars and constructing a larger, more stable central dome.

Throughout the following centuries, the mosque continued to experience cycles of damage, renovation, and reconstruction. Fires, invasions, and natural disasters altered portions of the original structure, while successive rulers restored and modified the building according to the architectural styles and needs of their own periods. As a result, the Umayyad Mosque seen today reflects layers of architectural history that combine early Islamic, Byzantine, and later Islamic influences into one of the most important religious monuments in the Islamic world.

Figure \(\PageIndex{14}\): Dome of the Treasury (CC BY-SA 3.0)

Umayyad Mosque is enclosed by four massive walls forming a large rectangular complex measuring approximately 97 meters by 156 meters. In the northern section of the mosque lies an expansive open courtyard surrounded by arcades supported by rows of stone columns. Between every two columns stands a supporting pillar, helping distribute the weight of the structure while creating a rhythmic architectural pattern around the courtyard.

The southern section of the mosque contains the sanctuary, where three long arcades define the prayer hall. These arcades are supported by two levels of architectural elements. The lower level features large semi-circular arches, while the upper level incorporates double arches that add both height and structural stability to the building. This layered arrangement of arches creates a sense of openness and visual harmony within the mosque interior.

The surfaces of the courtyard and arcades were originally covered with luxurious decoration, including shimmering glass mosaics (7.2.15), colored marble, and gold gilding. At the time of its construction, the Umayyad Mosque contained the largest mosaic program in the world. The mosaics depicted idealized landscapes, buildings, gardens, rivers, and flowing vegetation arranged in highly decorative patterns. Although only portions of the original mosaic decoration survive today (7.2.16), later rulers and restoration projects added new decorative embellishments over the centuries, creating the richly layered visual appearance seen in the mosque today.

Visit the Umayyad Mosque in Damascus

Palmyra, Khorsabad, the Umayyad Mosque and the Krak des Chevaliers are in danger because they are located in regions of conflict. The exhibit invites visitors to travel to these Syrian and Iraqi archeological treasures thanks to immersive technology. A captivating 360-degree video is projected on the walls of the space which intertwines digital 3D models with archival material and music. This exhibition offers a unique opportunity to better understand the dangers that threaten our heritage and the innovative methods used to preserve them.

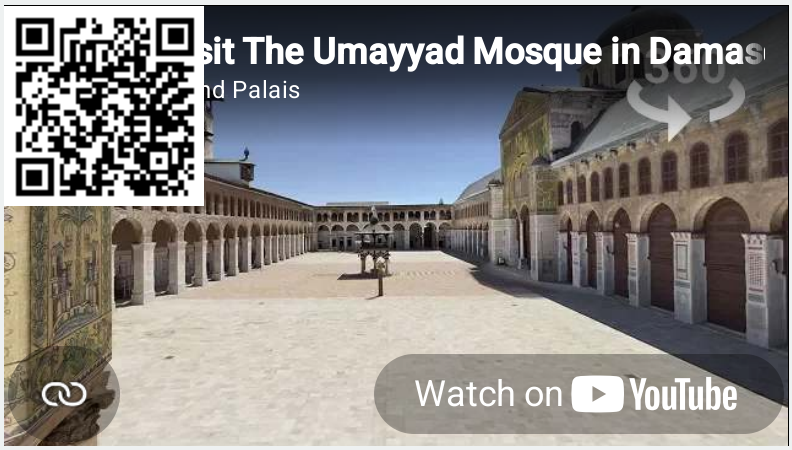


Figure \(\PageIndex{15}\): Mosaic (CC BY-SA 3.0)

Figure \(\PageIndex{16}\): Embellishments (CC BY-SA 3.0)

Behind the columns along the western portico of Umayyad Mosque is an enormous mosaic panel (7.2.17) measuring approximately 34.5 meters long and 7.3 meters high. Created in the early 8th century, the mosaic is composed of colored glass tesserae accented with gold and silver, producing a luminous surface that reflects light throughout the courtyard. Despite centuries of weathering and historical upheaval, the mosaic has survived with only minor damage.

The scene depicts an idealized landscape believed to represent the local **Barada River** and the surrounding region of Damascus as it may have appeared during the 8th century. The composition includes trees, architectural structures, flowing water, bridges, and lush vegetation arranged in a highly decorative and harmonious manner. Unlike many Islamic decorative programs that focus primarily on abstract geometry and calligraphy, this mosaic presents a detailed landscape scene without human figures.

Historians and religious scholars remain uncertain about the exact meaning and symbolism of the mosaic or why it differs from the more common decorative motifs found elsewhere in the mosque. Some interpretations suggest it may represent paradise, the prosperity of Damascus, or an idealized vision of the Islamic world. Regardless of its precise meaning, the mosaic stands as one of the finest surviving examples of early Islamic and Byzantine-influenced mosaic art.

Figure \(\PageIndex{17}\): Part of the Barada Panel (CC BY-SA 4.0)

Umayyad Mosque contains three important minarets that were constructed and modified over different historical periods. The oldest is the **Minaret of the Bride** (7.2.18), originally built around 800 CE and repeatedly repaired and expanded over the centuries. Today, the minaret is divided into two distinct sections. The lower and oldest portion is square in shape and constructed from large stone blocks, while the upper section consists of more decorative sculpted stonework. Inside, a staircase of approximately 160 steps leads to the top of the tower.

The **Minaret of Jesus** (7.2.19) rises above the main structure of the mosque and is the tallest of the three minarets. Its lower section is built in a square form using large stone blocks, while the upper portion transitions into an octagonal spire. Construction on the minaret began around the same period as the Minaret of the Bride, although it was not fully completed until 1247. According to Islamic tradition, the minaret is associated with the future return of Jesus, giving it both architectural and spiritual significance.

The third tower, the **Minaret of Qaitbay** (7.2.20), was added much later in 1488 during the Mamluk period. Unlike the earlier square towers, this minaret features a more elaborate octagonal design characteristic of later Islamic architectural styles. Together, the three minarets reflect the long architectural history of the mosque and demonstrate how successive rulers contributed new stylistic elements to the evolving structure over many centuries.

Figure \(\PageIndex{18}\): Minaret of the Bride (CC BY-SA 3.0)

Figure \(\PageIndex{19}\): Minaret of Jesus (CC BY-SA 3.0)

Figure \(\PageIndex{20}\): Minaret of Qaitbay (CC BY-SA 3.0)

Umayyad Mosque is one of the few major Islamic monuments to have preserved much of its original architectural form since its construction began in the 8th century. Because of its monumental scale, courtyard design, arcades, mosaics, and minarets, the mosque became an important architectural model for later mosques throughout the Middle East and the Islamic world. Its combination of Byzantine artistic traditions and early Islamic architectural principles helped establish many of the defining characteristics of Islamic religious architecture. Despite surviving centuries of earthquakes, fires, invasions, and rebuilding campaigns, the mosque has suffered significant damage in recent years because of the ongoing conflict in Syria. Warfare in and around Damascus has impacted portions of the historic structure and the surrounding Old City. Nevertheless, the Umayyad Mosque remains one of the most important surviving monuments of early Islamic civilization and continues to symbolize the artistic, religious, and cultural history of the region.

7.3: The Vaulted Arch

Definition: Term

- **Woodworking Traditions**: Skilled methods of carving, joining, and constructing objects or buildings from wood.
- **Stone Masonry**: The art and technique of building structures from cut stone fitted together.
- **Fresco Painting**: A painting technique in which pigments are applied onto wet plaster so the image becomes part of the wall surface as it dries.
- **Romanesque Architecture**: A medieval European architectural style characterized by thick walls, rounded arches, heavy stone construction, and small windows.
- **Gothic Engineering**: Architectural innovations developed during the Gothic period that allowed buildings to become taller, lighter, and filled with larger windows.
- **Pointed Arches**: Archways that rise to a pointed top, commonly used in Gothic architecture to distribute weight more efficiently.
- **Ribbed Vaults**: Arched ceiling structures reinforced with stone ribs that help support the roof and distribute weight.
- **Flying Buttresses**: Exterior stone supports that transfer the weight of a building outward, allowing for taller walls and larger windows.
- **Monolithic Churches**: Churches carved from a single piece of stone or rock rather than built from separate blocks.
- **Sacred Space**: A place considered holy or spiritually important where religious ceremonies and worship occur.
- **Pilgrimage**: A journey made to a sacred or religious site for spiritual purposes.
- **Gothic Architecture**: A medieval European architectural style characterized by height, light-filled interiors, pointed arches, ribbed vaults, flying buttresses, and large stained-glass windows.
- **Stained-Glass Windows**: Windows made from pieces of colored glass arranged into decorative or religious images that allow colored light into a building.
- **Flying Buttresses**: Exterior stone supports that transfer the weight of a roof or walls away from the building, allowing taller structures and larger windows.
- **Gargoyles**: Carved stone figures projecting from buildings, often serving as decorative rain spouts that direct water away from the walls.
- **Pointed Arches**: Arches that rise to a pointed top, distributing weight more efficiently and allowing buildings to be taller.
- **Ribbed Vaults**: Ceiling structures formed by intersecting arches reinforced with stone ribs to support roofs and distribute weight.
- **Barrel Vault**: A long, curved ceiling or roof shaped like a half cylinder.
- **Vaulting**: An architectural technique used to create arched ceilings or roofs.
- **Cathedral**: A large and important Christian church that serves as the central church of a bishop's district.
- **Verticality**: An architectural emphasis on height and upward movement.
- **Buttress**: A support structure built against a wall to help resist outward pressure from the roof or vaults.

Borgund Stave Church, Sant Climent de Taüll, Notre-Dame de Paris, and Rock-Hewn Churches of Lalibela are religious structures that share similar sacred architectural layouts while demonstrating dramatic differences in construction materials and regional building traditions. Although each building was created for **Christian worship**, the structures reflect the environments, resources, technologies, and artistic traditions of their specific cultures.

The materials used in these churches were highly localized, with builders relying on the natural resources available in their regions. In Norway, the Borgund Stave Church was constructed primarily from timber because of the abundance of forests and strong **woodworking traditions**. In Spain, Sant Climent de Taüll incorporated **stone masonry** and **fresco painting** characteristic of **Romanesque architecture**. The builders of Notre-Dame de Paris used limestone, **stained glass**, and advanced **Gothic engineering** techniques to create soaring interior spaces supported by **pointed arches**, **ribbed vaults**, and **flying buttresses**. In Ethiopia, the Lalibela Church Complex was uniquely carved directly into volcanic rock, creating **monolithic churches** formed from the landscape itself.

Despite these differences in materials and style, the churches shared common religious purposes and architectural principles. Each structure included sacred spaces designed for worship, ceremonial activities, pilgrimage, and spiritual reflection. Their layouts often emphasized processional movement, symbolic orientation, and the relationship between light and sacred space. Decorative

programs such as **frescoes**, carvings, stained glass, and sculptural details reinforced religious teachings and created visually immersive environments for worshippers.

These buildings also demonstrate how architecture adapted to local climates and available technologies. The steep wooden roofs of the Borgund Stave Church helped shed snow and rain in the harsh Scandinavian climate, while the thick stone walls of Sant Climent de Taüll provided durability and insulation. Notre-Dame de Paris showcased the technological innovations of Gothic engineering, allowing walls to become taller and thinner while supporting massive stained-glass windows. At Lalibela, the churches were carved downward into solid rock, blending architecture and landscape into a unified sacred environment that symbolized permanence and devotion. Together, these churches illustrate how civilizations across Europe and Africa interpreted Christianity through their own artistic traditions and environmental conditions. While their appearances differ greatly, they all demonstrate humanity's shared desire to create sacred spaces that inspire awe, communicate faith, and connect communities to the spiritual world.

Viking Borgund Stave Church (Around 1180 CE)

A **stave church** is a medieval wooden building constructed using a post-and-lintel system made from massive timber harvested from the forests of northern Europe. The name comes from the Norwegian word *stav*, meaning the vertical load-bearing posts that form the church's structural framework. Built between 1180 and 1250 CE, Borgund Stave Churchis one of the best-preserved examples of Norway's many surviving stave churches and is classified as a triple-nave stave church.

The church was constructed using an advanced timber-framing system in which the heavy wooden posts carried the weight of the structure. Four large corner posts were anchored to horizontal ground sills placed on top of a stone foundation, helping protect the wood from moisture and decay. The vertical staves were joined to the ground sills and to one another using carefully carved notches and grooves that locked together tightly, functioning similarly to modern dovetail joints. This sophisticated woodworking technique created a durable and flexible structure capable of surviving harsh Scandinavian weather conditions for centuries.

Figure \(\PageIndex{1}\): Borgund Stave Church (CC BY 2.0)

Borgund Stave Church (7.3.1) follows the traditional **basilica plan**, a layout commonly used in Christian church architecture. The church features a raised central **nave** (7.3.2) flanked by narrower side aisles, while arches surrounding the nave form an **arcade** that helps support the structure and define the interior space. This arrangement creates a strong vertical emphasis that draws attention toward the center of the church and enhances the sacred atmosphere of the interior.

The steep, shingle-covered roof (7.3.3) includes a narrow exterior walkway that allows access for maintenance and repairs. The roof structure relies on a sophisticated system of timber engineering, including large crossed wooden supports known as **scissor beams**. These angled beams intersect to help distribute the roof's weight evenly across the structure. Beneath the crossed beams, additional **trusses** reinforce the framework and provide further structural stability. This scissor-beam construction method is characteristic of many Norwegian stave churches and demonstrates the advanced woodworking knowledge of medieval Scandinavian builders.

Long horizontal wooden boards covered with overlapping shingles form the exterior roofing surface, helping protect the building from heavy snow and rain common in northern climates. Additional crossing beams and smaller stabilizing pieces lock the structure together, creating a durable and flexible framework capable of withstanding centuries of harsh weather conditions.

Figure \(\PageIndex{2}\): Interior View (Public Domain)

Figure \(\PageIndex{3}\): Roof shingles (CC BY-NC-ND)

Figure \(\PageIndex{4}\): Dragonhead carving (CC BY-ND 2.0)

A central **tower** rises above the multiple-tiered roofs of Borgund Stave Church, emphasizing the vertical design of the structure. Decorated **gables** extend outward from the roof peaks and are adorned with carved dragonheads (7.3.4), motifs similar to those found on traditional Norse ships. These dragonhead carvings likely reflected both Viking artistic traditions and protective symbolic meanings, blending older Scandinavian beliefs with Christian architecture. The ridge crests along the roof were further decorated with carved vines and repeating ornamental patterns that added rhythm and visual complexity to the building's exterior. Inside the church, elegant carved crosses decorated the base of the altar, reinforcing the Christian purpose of the structure. The richly textured wooden walls and intricate carvings completed the overall decorative program, demonstrating the remarkable craftsmanship and woodworking traditions of medieval Norwegian builders.

Norway - Borgund Stavkirke

Borgund dates back to the end of the 12th century. It had a strategic location in Sogn og Fjordane County on the old road connecting the eastern and western parts of Norway. This is an absolutely stunning beauty. It is the best preserved of all stave churches and it looks like a stave church should.

Romanesque Sant Climent de Taull (1123 CE)

Sant Climent de Taüll is an outstanding example of **Romanesque architecture** and religious art, both in its exterior design and interior decoration. Romanesque architecture is characterized by the use of **semicircular arches**, distinguishing it from the later **Gothic style**, which emphasized pointed arches and greater vertical height. Romanesque buildings typically feature symmetrical layouts, thick stone walls, large towers, rounded arches, narrow windows and doorways, vaulted ceilings, and arcades arranged in repeating semicircular forms.

The church was constructed primarily from brick and locally available stone, materials commonly used in medieval European architecture. Its walls are broad and solid, creating large surfaces ideal for decorative mural paintings. Many Romanesque churches, including Sant Climent de Taüll, were adorned with frescoes illustrating scenes from the Bible and Christian teachings. These images served both decorative and educational purposes, especially for worshippers who could not read.

Although the exact construction date of the church is unknown, it was officially consecrated in 1123 CE. Unlike larger pilgrimage churches built to accommodate travelers from distant regions, Sant Climent de Taüll primarily served the local community as a place of worship and religious gathering. The architecture and artwork were intended to inspire devotion, communicate spiritual ideas, and create a sacred atmosphere for the people who attended services there.

Figure \(\PageIndex{5}\): Sant Climent de Taull (CC BY-SA 2.0)

The layout of Sant Climent de Taüll f(7.2.5) follows the traditional **basilica plan**, consisting of three **naves** with an **apse** positioned at the end of each nave. The structure was built primarily from brick and stone, with large stone columns separating the nave spaces and supporting the arcades above. This style of **Romanesque architecture** relied on massive load-bearing walls (7.3.6), which limited the number and size of windows that could be incorporated into the building. As a result, the church interior remained relatively dim, creating a solemn and spiritual atmosphere. The broad interior wall surfaces functioned as blank canvases for extensive **fresco paintings** illustrating biblical stories and Christian teachings. These murals served an educational purpose by visually communicating religious narratives to worshippers, many of whom were unable to read. The combination of architecture and painted imagery transformed the church into a complete visual expression of faith.

A typical feature of Romanesque churches was the use of wooden roof structures, which unfortunately made them vulnerable to fire. The church tower at Sant Climent de Taüll rises from a solid base supporting an additional six levels above it. As the tower ascends, the windows gradually become larger, creating a lighter and more open visual effect while reducing the apparent heaviness of the structure. The tower's vertical emphasis reflects the influence of **Byzantine architecture**, particularly its tall tower forms. Because the tower's structural spans were narrower than the wide nave of the church, builders could safely incorporate more and larger windows into the upper sections.

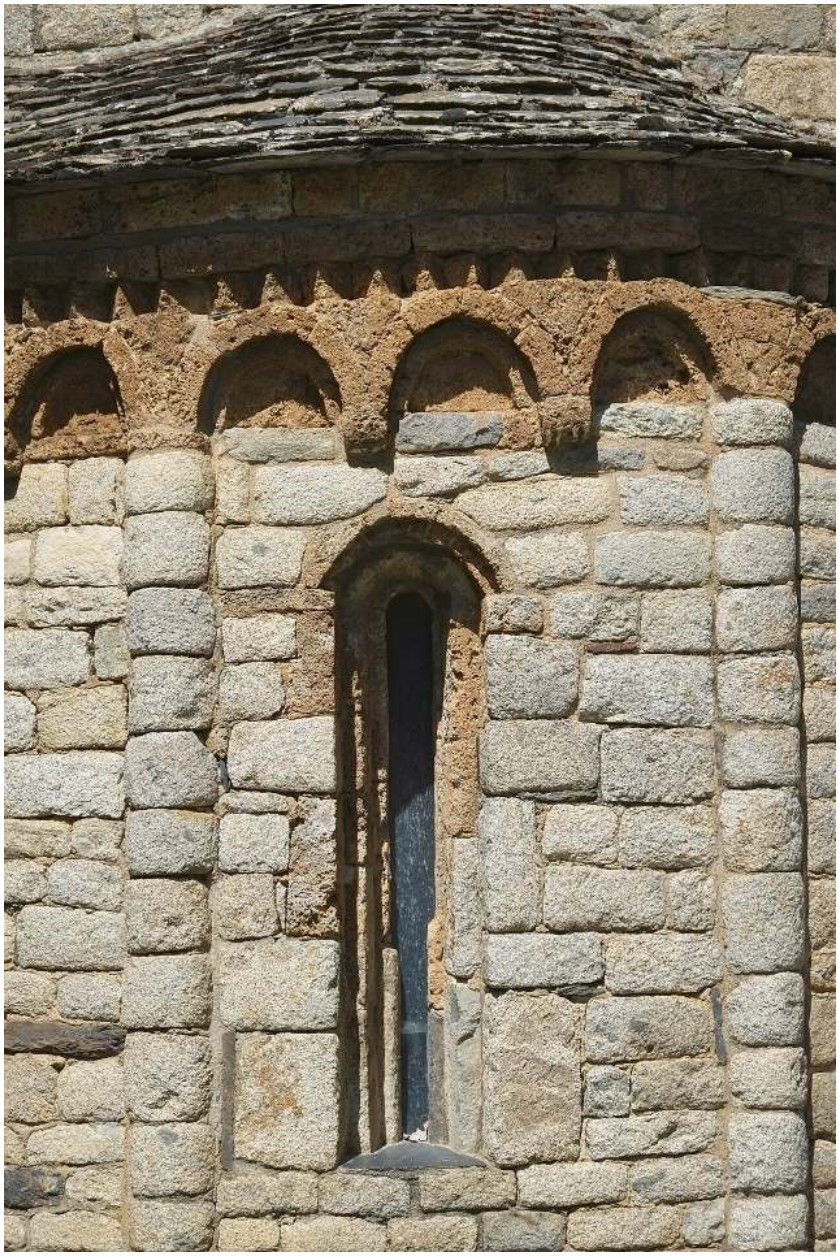


Figure \(\PageIndex{6}\): Window (C BY-SA 3.0)

Figure \(\PageIndex{7}\): Christ in Majesty (Public Domain)

The artwork in the apse of Sant Climent de Taüll is considered one of the finest surviving examples of **Romanesque art**. Although the names of the artists remain unknown, the frescoes were completed shortly after the church was constructed in the early 12th century. The murals combine multiple biblical themes within a carefully organized and highly symmetrical composition. At the center, Christ emerges prominently from the background, surrounded by symbolic imagery including lambs, dogs, saints, and decorative motifs associated with the death and resurrection of Christ. The arrangement of the figures follows a deliberate **hierarchical design**, a common feature of medieval religious art in which the most important figure is presented as the largest and most centrally positioned image. By placing Christ in the center of the composition, the artists emphasized His supreme spiritual authority and importance within the Christian narrative.

Although fresco paintings decorate the walls and ceilings throughout the church's naves, the most famous image is the mural known as **Christ in Majesty** (7.3.7), located in the central apse. Originally painted in the early 12th century, the fresco remained remarkably intact for centuries before the original was removed for preservation and placed in a museum. Today, a replica occupies the apse of the church. The mural was created using the traditional **fresco technique**, in which artists applied pigments directly onto wet lime plaster. As the plaster dried, the paint chemically bonded with the wall surface, making the image a permanent part

of the architecture itself. This method allowed the vibrant colors and imagery of the fresco to survive for hundreds of years and remain one of the most celebrated examples of Romanesque mural painting.

Gothic Notre Dame de Paris Cathedral (Started 1163 CE)

Notre-Dame de Paris, (7.3.8) located on the Île de la Cité in Paris, France, is one of the finest examples of **Gothic architecture** and one of the most recognized cathedrals in the world. The cathedral became a symbol of medieval French religious devotion, engineering achievement, and artistic accomplishment. Construction began in 1163 CE during a period when Gothic architecture was transforming church design through innovations that emphasized height, light, and structural elegance.

Before construction could begin, a special roadway was built to transport massive quantities of stone, timber, and other building materials to the island site. Several houses and existing structures had to be demolished to make space for the enormous cathedral complex. Over the following centuries, builders, architects, and artisans collaborated to create a monumental structure featuring pointed arches, ribbed vaults, flying buttresses, stained-glass windows, and sculptural decoration that would define the Gothic style throughout Europe.

Figure \(\PageIndex{8}\): Notre-Dame de Paris (Public Domain)

Cathedral of Notre-Dame, Paris

The Cathedral of Notre-Dame, Paris, begun 1163

Gothic cathedrals were designed to create dramatic interior spaces filled with light and color. Large stained-glass windows transformed sunlight into vibrant patterns that illuminated the interiors of the churches, creating a spiritual atmosphere intended to inspire worshippers. Surrounding many Gothic cathedrals was a complex network of **flying buttresses**, external stone supports that helped transfer the immense weight of the roof and walls outward from the building. Decorative **gargoyles** projected from the upper sections of the cathedrals, serving both as water spouts and symbolic guardians of the sacred structure.

During the Gothic period, architecture became a symbol of civic pride and religious devotion throughout Western Europe. Towns and cities competed to construct the tallest, most magnificent cathedrals, often dedicating generations of labor and enormous financial resources to their completion. The construction of a cathedral could involve thousands of workers from nearby villages and frequently required more than one hundred years to finish. As a result, Gothic cathedrals gradually rose higher and higher above the surrounding towns, becoming visible symbols of faith and community identity.

The Gothic style introduced several important architectural innovations, including **pointed arches**, **ribbed vaults**, and flying buttresses. The pointed arches (7.3.9) distributed structural weight more efficiently than the rounded arches of the earlier **Romanesque style**, allowing buildings to reach greater heights and incorporate much larger windows. This structural flexibility opened the walls for extensive stained-glass decoration and created interiors filled with light.

The development of **ribbed vaulting** (7.3.10) further revolutionized Gothic architecture. Ribbed vaults were formed by intersecting barrel vaults reinforced with stone ribs that directed weight toward columns and supports below. This engineering advancement made it possible to construct taller ceilings and more expansive interior spaces while reducing the heaviness of the walls. Together, pointed arches, ribbed vaults, and flying buttresses allowed Gothic cathedrals to achieve their characteristic verticality, elegance, and luminous interiors.

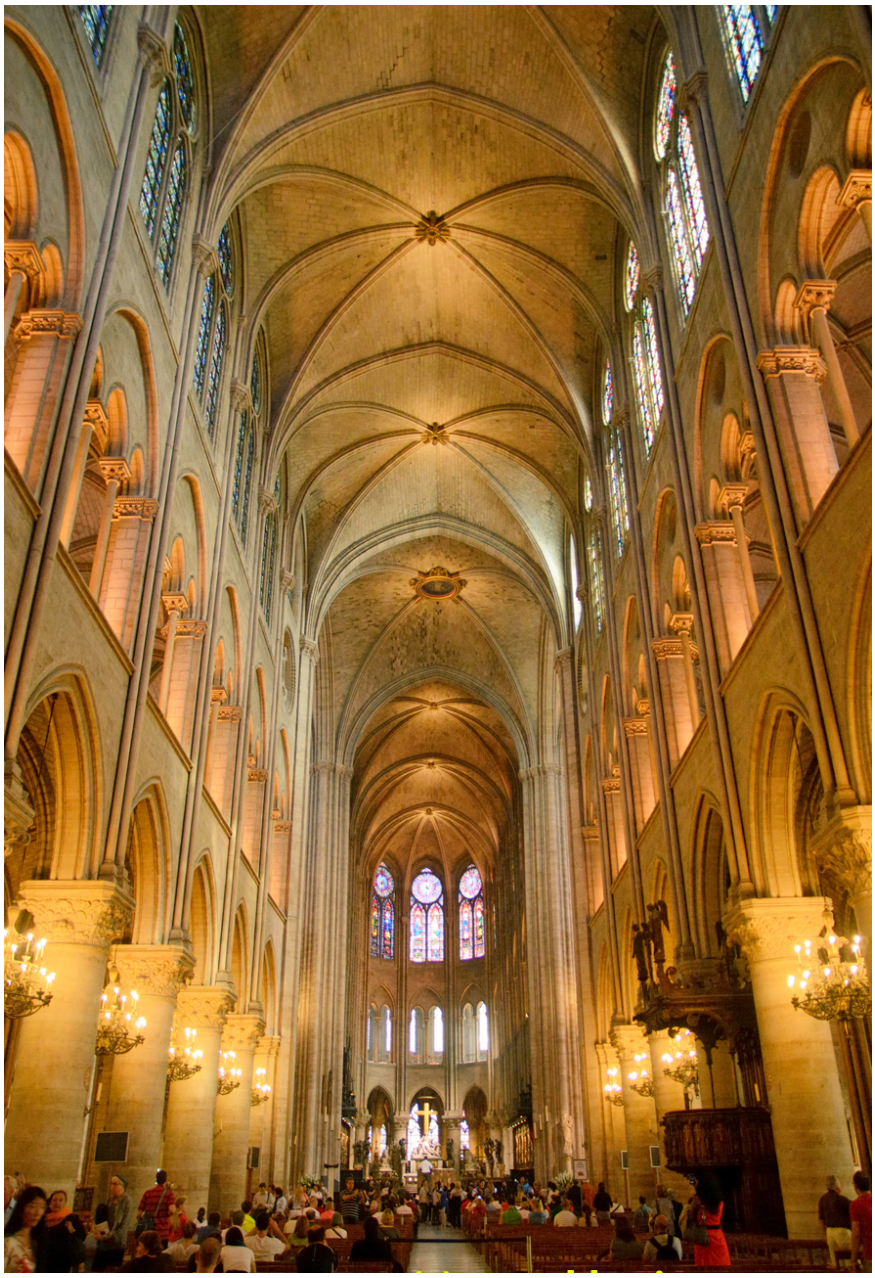


Figure \(\PageIndex{9}\): Pointed arches (CC BY-SA 4.0)

Figure \(\PageIndex{10}\): Ribbed vaults (CC BY-SA 3.0)

As **Gothic churches** increased in height, architects incorporated increasingly large openings for **stained-glass windows**, filling the interiors with colorful light. However, the taller walls and heavy stone roofs created strong **lateral forces** that pushed outward against the walls. Without additional support, the weight of the structure could cause sections of the walls to weaken or collapse under the pressure of the stone vaults above. To solve this engineering challenge, builders developed **flying buttresses** (7.3.11), an innovative support system designed to redirect the outward forces from the **pointed arches** and vaults safely down into the ground. Flying buttresses extended outward from the upper walls of the church to separate exterior supports anchored by heavy foundations. These structures absorbed and transferred the pressure created by the roof and high walls, stabilizing the building while allowing thinner walls and larger windows. Over time, flying buttresses became not only structural necessities but also important visual elements of **Gothic architecture** (7.3.12). Their graceful, arching forms contributed to the dramatic exterior appearance of Gothic cathedrals and symbolized the advanced engineering achievements of medieval builders.

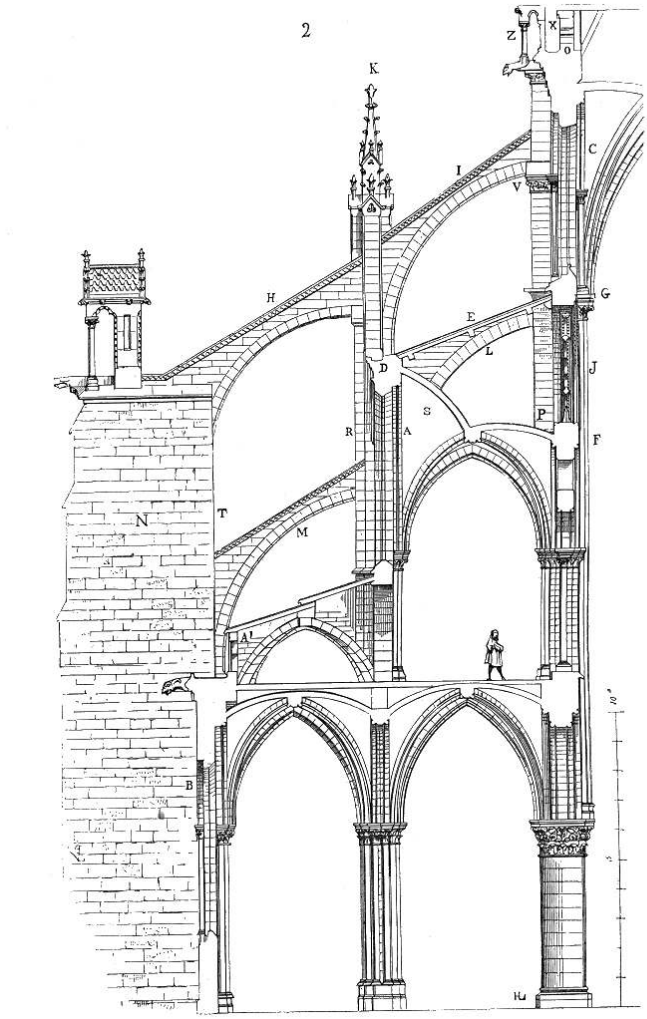


Figure \(\PageIndex{11}\): Buttress plan (Public Domain)

Figure \(\PageIndex{12}\): Flying buttresses (CC BY-SA 3.0)

Notre-Dame de Paris stands as a major tribute to **Gothic architecture**, and its overall design follows the traditional **basilica plan**. The **nave**, or central aisle of the church, extends toward the rounded **apse** at the eastern end of the cathedral. Along both sides of the nave are additional aisles separated by rows of columns known as **colonnades**. Crossing the nave near the apse is the **transept**, which gives the cathedral its characteristic cross-shaped layout. At the intersection of the nave and transept lies the **choir**, the area traditionally used by clergy and singers during religious ceremonies.

The basilica style refers to a large communal architectural space designed for gathering, worship, and ceremonial activities. Gothic builders adapted this ancient layout while introducing new structural innovations that emphasized height, light, and spaciousness.

Notre-Dame Cathedral was constructed gradually over many decades. The choir area was completed between 1163 and 1177 CE, while the high altar was finished in 1218 CE. Construction of the nave and transepts progressed through the early 13th century, and by approximately 1240 CE the western façade and many decorative details had been completed. Because the cathedral was built over such a long period, numerous architects contributed to its design, resulting in subtle stylistic differences and variations in height throughout the structure. Individual architects often specialized in particular aspects of the cathedral, such as the construction of the great halls beneath the towers or the assembly of the elaborate **rose windows**.

One of the most important design changes during construction occurred in the transept sections of the cathedral. Builders replaced a more ordinary gabled portal design with the spectacular **rose window** (7.3.13), a circular stained-glass window filled with intricate stone tracery and colored glass. The design proved so visually successful that a similar rose window was added to the southern transept. The portals beneath these windows were decorated with sculptural scenes from biblical and religious stories, serving as visual lessons that educated worshippers during religious gatherings and ceremonies.

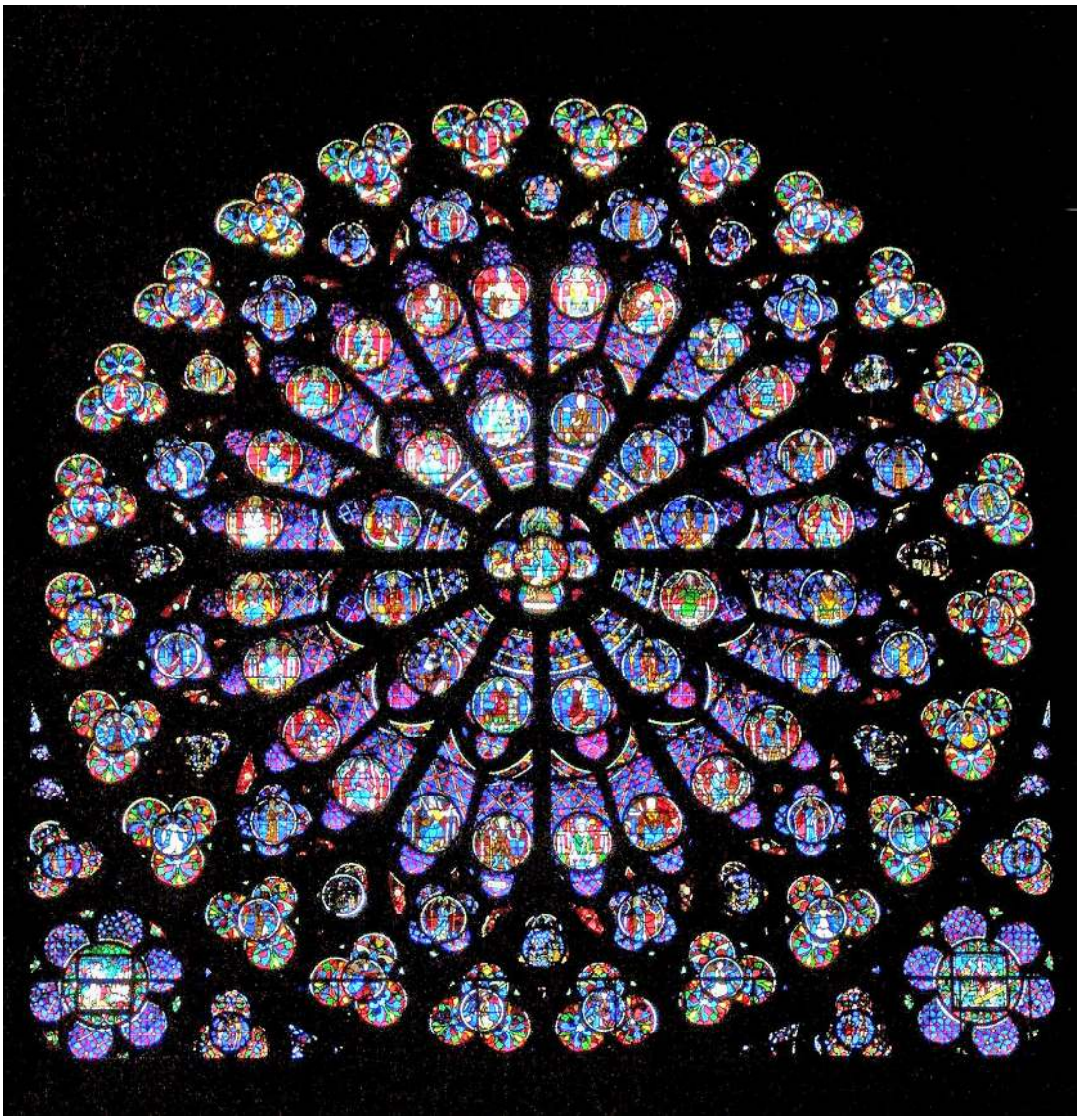


Figure \(\PageIndex{13}\): North rose window (CC BY-SA 3.0)

Figure \(\PageIndex{14}\): Chimera (CC BY-SA 3.0)

Notre-Dame de Paris was one of the earliest buildings to incorporate **flying buttresses**, the arched exterior supports that became a defining feature of **Gothic architecture**. Interestingly, the original architectural plans did not include these supports. However, after construction began, the thin walls and increasing height of the cathedral created structural problems. At the intersections of the **pointed arches** and vaults, gravitational forces pushed outward against the walls, causing dangerous fractures that threatened the stability of the building.

To solve this problem, the architects designed flying buttresses positioned precisely at the points where the walls were failing. These exterior supports redirected the lateral forces from the roof and upper walls safely into the ground, preventing further cracking and stabilizing the structure. The success of this engineering solution influenced other cathedral builders throughout Europe, and flying buttresses soon became a standard feature of Gothic cathedrals during the medieval period.

Notre-Dame is also celebrated for its extensive sculptural decoration. Small statues (7.3.15) representing religious figures, saints, and biblical stories appear throughout the cathedral and served as visual teaching tools for the largely illiterate medieval population. Originally, many of these sculptures were brightly painted and enhanced with gold gilding, creating a far more colorful appearance than the stone surfaces visible today.

Among the most famous sculptural elements are the **chimeras** (7.3.14) and **gargoyles** (7.3.16). Gargoyles were first developed in the 13th century as decorative waterspouts designed to channel rainwater away from the building's walls and foundations. Positioned along the roofline, they protected the cathedral from water damage while also serving symbolic purposes. Their grotesque and frightening appearances represented evil forces kept outside the sacred building, encouraging moral behavior and religious devotion. Over time, gargoyles became iconic guardians of Gothic cathedrals and some of the most recognizable features of medieval architecture.

Figure \(\PageIndex{15}\): Statues (CC BY-SA 3.0)

Figure \(\PageIndex{16}\): Gargoyles (CC BY-SA 4.0)

Ethiopian Lalibela Church Complex (12th and13th centuries)

Rock-Hewn Churches of Lalibela is located in northern Ethiopia and is famous for its remarkable churches carved directly into solid bedrock. Lalibela is considered one of the holiest religious sites in Ethiopia and dates primarily to the 12th and 13th centuries. The site is named after Gebre Mesqel Lalibela, the Ethiopian ruler traditionally credited with overseeing the construction of the churches between approximately 1181 and 1221 CE.

The complex consists of eleven rock-hewn churches grouped into two principal sections. Five churches are located north of the symbolic **River Jordan**, while five additional churches are situated to the south. The eleventh church, **Biete Ghiorgis** (Church of Saint George), stands somewhat apart from the others, although a network of trenches and passageways connects the entire complex. These carved pathways allow movement between the churches and contribute to the feeling of a unified sacred landscape.

Historians believe the names and arrangement of the churches were intentionally designed to reflect the layout of Jerusalem. According to tradition, Lalibela was envisioned as a “New Jerusalem” for Ethiopian Christians who could not safely travel to the Holy Land during periods of conflict. The churches therefore served not only as places of worship but also as symbolic recreations of sacred Christian geography.

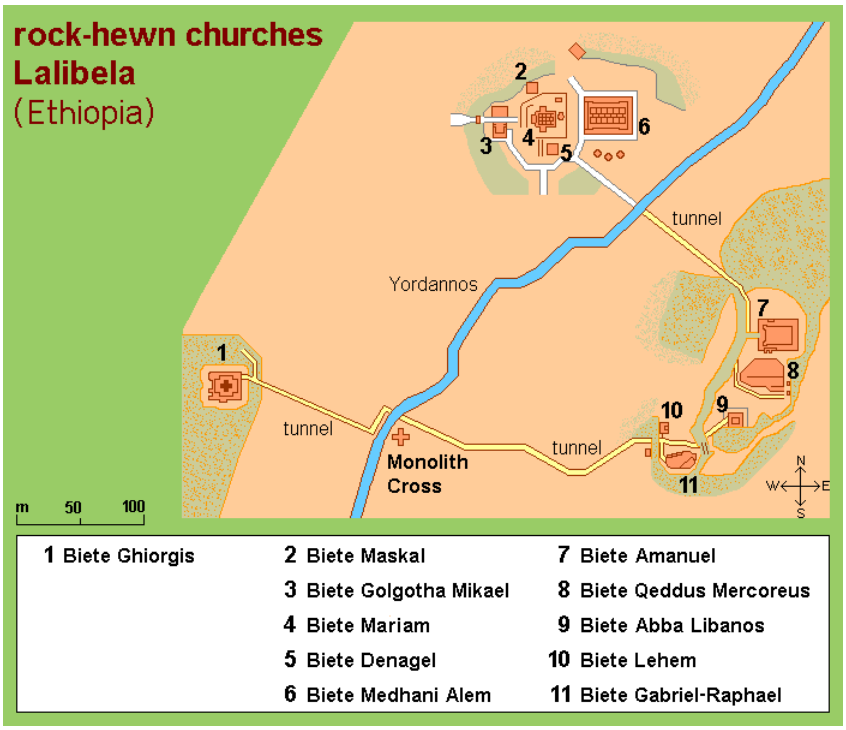


Figure \(\PageIndex{17}\): Lalibela (Public Domain)

The churches of Rock-Hewn Churches of Lalibela were carved directly from the volcanic rock of the mountainside into massive **monolithic** structures. Rather than being constructed from separate stone blocks, the builders removed material from the surrounding bedrock to shape entire churches complete with doors, windows, columns, roofs, floors, and pillars. This extraordinary method of construction required careful planning and highly skilled stone carving techniques. Four of the churches are completely freestanding, remaining attached to the bedrock only at their foundations. Other churches are partially detached from the surrounding rock, while some emerge only partially from the mountainside with visible façades carved into the stone. Together, the structures create a unified sacred complex integrated directly into the natural landscape.

To protect the churches from erosion and flooding, builders engineered an extensive system of drainage channels that redirected naturally flowing water away from the buildings and surrounding pathways. Trenches, ceremonial passageways, tunnels, and carved openings leading into caves and catacombs connected the churches throughout the complex. These interconnected spaces enhanced both the practical function and symbolic spiritual experience of Lalibela, transforming the site into a monumental religious landscape carved entirely from living rock.

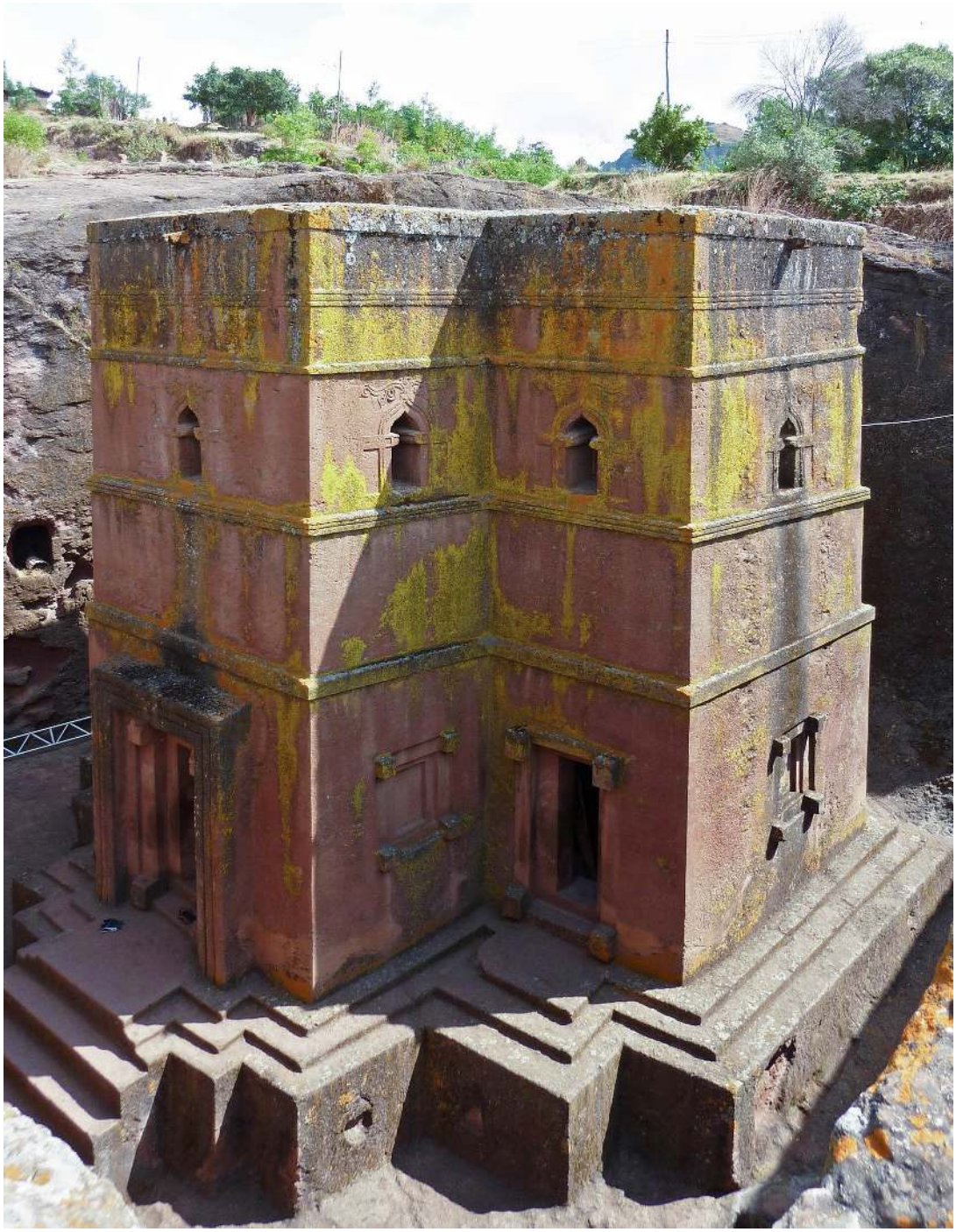


Figure \(\PageIndex{18}\): Biete Ghiorgis (CC BY-SA 3.0)

Each church within Rock-Hewn Churches of Lalibela possesses its own unique architectural design and configuration, demonstrating the creativity and technical skill of Ethiopian builders during the medieval period. Among the most famous is **Biete Ghiorgis** (7.3.18), or the Church of Saint George, which is carved in a distinctive **cruciform** shape and is often considered the most refined and elaborately executed church in the complex. The structure forms a massive stone cube extending approximately fifteen meters into the ground, with only the roof (7.3.19) visible at ground level.

Another important church is **Biete Medhani Alem** (7.3.20), which features five aisles and is widely regarded as the largest monolithic church in the world. Its enormous interior space reflects the ambition and engineering sophistication of the Lalibela complex. Inside many of the churches, walls and architectural surfaces are decorated with murals, **bas-reliefs**, and carved sculptures that reinforce the spiritual atmosphere of the sacred spaces.

From the exterior, **Biete Abba Libanos** (7.3.21) appears monumental in scale; however, its interior is comparatively small because portions of the roof and floor remain connected to the original mountainside. This blending of architecture and natural rock demonstrates how the churches of Lalibela were not simply constructed buildings but carefully sculpted environments integrated directly into the landscape itself.

Figure \(\PageIndex{19}\): Biete Ghiorgis roof (CC BY-SA 3.0)

Figure \(\PageIndex{20}\): Biete Medhani Alem (CC BY-SA 3.0)

Figure \(\PageIndex{21}\): Bete Abba Libanos (CC BY-SA 3.0)

Each of the churches within Rock-Hewn Churches of Lalibela has a unique architectural design and configuration. **Biete Ghiorgis**, or the Church of Saint George, is arranged in a **cruciform** shape and is considered the most elaborately executed church in the complex. The structure forms a massive stone cube extending approximately fifteen meters into the ground, leaving the roof visible at ground level. **Biete Medhani Alem**, designed with five aisles, is regarded as the world's largest **monolithic church**. The interiors of many of the churches are richly decorated with murals, **bas-reliefs**, and sculptural carvings that enhance the sacred atmosphere of the spaces. Although **Biete Abba Libanos** appears monumental from the exterior, its interior is comparatively small because portions of the roof and floor remain attached to the original mountainside. This blending of architecture with the natural rock landscape demonstrates the remarkable engineering and artistic skill of the builders at Lalibela.

Why the Town of Lalibela is One of Ethiopia's Holiest Sites

No one knows for certain why the Lalibela churches share many similarities with Judaism, but scholars propose a handful of holy theories.

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7.4: The Multiple Stories

Definition: Term

- **Mahabodhi Temple**: One of the most sacred Buddhist temples, located at the site where the Buddha is believed to have attained Enlightenment.
- **Ashoka:** A powerful Indian emperor of the 3rd century BCE who promoted and spread Buddhism throughout Asia.
- **Gupta Period**: A major era in Indian history (approximately 320–550 CE) known for achievements in art, religion, architecture, science, and literature.
- **Gautama Buddha:** The spiritual teacher and founder of Buddhism who attained Enlightenment and taught the path to spiritual liberation.
- **Enlightenment**: In Buddhism, the state of spiritual understanding and freedom from suffering achieved by the Buddha.
- **Pilgrimage Site**: A sacred place that people travel to for religious devotion or spiritual purposes.
- **Bodhi Tree**: The sacred fig tree under which the Buddha is believed to have attained Enlightenment.
- **Lotus Pond**: A symbolic water feature often associated with purity, spiritual growth, and Buddhist teachings.
- **Buddhism**: A religion and philosophy based on the teachings of the Buddha, emphasizing compassion, meditation, and the path to Enlightenment.
- **Temple Complex**: A group of religious buildings and sacred spaces organized around a central temple or shrine.
- **Sacred Site**: A location considered holy or spiritually important within a religious tradition.

Mahabodhi Temple, Bayon, Six Harmonies Pagoda, and Konpon Daitō are important religious structures found throughout Asia that reflect the strong influence of **Buddhism** on architecture and artistic traditions. Although these buildings developed in different regions and cultures, they share common features such as multi-story designs, dramatic rooflines, symbolic layouts, and richly decorated sacred spaces intended for worship, meditation, and pilgrimage. The architecture of these temples and pagodas often emphasized verticality, balance, and harmony with the surrounding environment. Roofs were designed in a variety of forms, including layered tiers, curved eaves, and towering spires that symbolized spiritual ascent and connection to the heavens. Builders used locally available materials such as stone, brick, and wood while adapting Buddhist architectural concepts to regional artistic traditions and climates.

Images and sculptures of the Gautama Buddha were commonly incorporated into the interiors and exteriors of these sacred buildings. Statues, relief carvings, murals, and decorative details depicting the Buddha and Buddhist teachings served as visual reminders of spiritual principles and helped guide worshippers in meditation and religious practice. Together, these structures demonstrate how Buddhism shaped the artistic and architectural development of many Asian civilizations.

Gupta Period Mahabodhi Temple (5th or 6th century)

Mahabodhi Temple (7.4.1) is one of the most important Buddhist pilgrimage sites in the world and one of the oldest surviving temples in India. The original structure on the site was commissioned by Ashoka, the Mauryan emperor of the 3rd century BCE who helped spread Buddhism throughout Asia. Although the earliest buildings were destroyed over time, later rulers rebuilt the temple, and the current structure dates primarily to the **Gupta Period** during the 5th or 6th century CE. Located in eastern India at Bodh Gaya, the temple marks the sacred site where Gautama Buddha is believed to have attained Enlightenment beneath the Bodhi Tree. Because of this association, the Mahabodhi Temple became one of the four holiest pilgrimage locations in Buddhism.

The imposing temple tower rises approximately fifty meters high and dominates the surrounding landscape. Its architecture combines brick construction with carved decorative elements and symbolic Buddhist imagery. The temple is integrated into a larger sacred complex that includes additional structures connected to the story and teachings of the Buddha's Enlightenment, including the sacred **Bodhi Tree** and the **Lotus Pond**. Together, these elements create a spiritual environment designed for meditation, pilgrimage, and religious reflection.

Figure \(\PageIndex{1}\): Mahabodhi Temple (CC BY-SA 2.5)

The brick construction of Mahabodhi Temple became highly influential in the development of brick architecture throughout India. The main temple walls rise to approximately fifty meters in height and follow the traditional style of classical Indian temple architecture. Entrances on the eastern and northern sides are richly decorated with carved moldings featuring honeysuckle patterns and images of geese, motifs commonly associated with Indian artistic traditions. Above the moldings are carved niches (7.4.2) containing images of Gautama Buddha. Additional decorative moldings and layered niches rise above these figures, creating a vertical rhythm across the temple's exterior surfaces. Alternating between the niches are distinctive circular openings known as **"cow eye windows,"** named for their resemblance to the shape of a cow's eye.

At the top of the structure (7.4.3), the central tower incorporates important architectural elements found in traditional Indian temples. One feature is the **amalaka**, a large stone disk with ridged edges positioned near the summit of the tower. Above the amalaka sits the **kalasha**, a dome-like cupola and crowning finial that symbolizes prosperity and spiritual completion. At each corner of the temple stand smaller shrine towers housing statues of the Buddha, reinforcing the sacred and symbolic importance of the structure throughout the entire temple complex.

Figure \(\PageIndex{2}\): Carved niche (CCC BY 2.0)

Figure \(\PageIndex{3}\): Tower top (CC BY 3.0)

Mahabodhi Temple faces east, a direction traditionally associated with spiritual awakening and enlightenment in many religious traditions. A main doorway leads through a hallway into the sacred inner chamber containing a 1.5-meter-high golden statue of Gautama Buddha (7.4.4). Worshippers visit the temple to offer flowers, meditate, and pray in honor of the Buddha and his teachings. The temple complex also includes the sacred tree associated with the Buddha's attainment of Enlightenment. The existing tree is believed to be a descendant of the original **Bodhi Tree** beneath which the Buddha meditated. Surrounding the temple are pillars, carved stones, and **stupas**—dome-shaped Buddhist monuments—that mark locations connected to the path the Buddha followed during his Enlightenment journey.

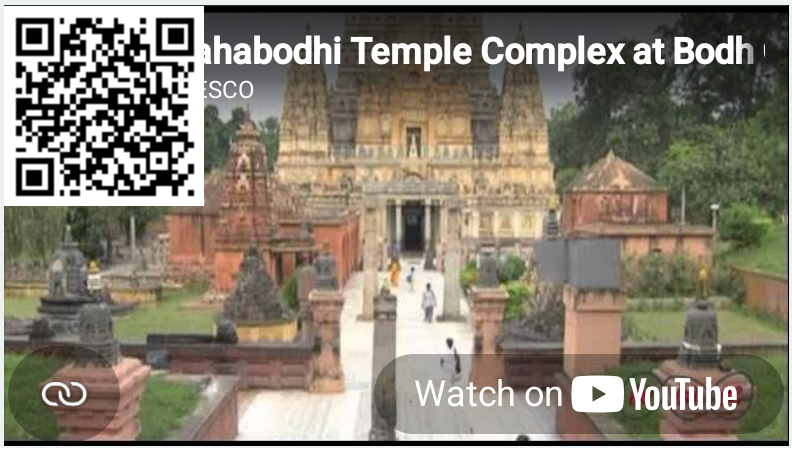
Decorative railings (7.4.5) encircle portions of the temple complex. Some sandstone posts date as far back as 150 BCE, making them among the oldest surviving architectural elements at the site. Many additional railings were constructed during the **Gupta Period** and decorated with carved figures, symbolic imagery, and representations of stupas, contributing to the sacred and artistic significance of the Mahabodhi Temple complex.

Figure \(\PageIndex{4}\): Buddha at Bodh Gaya (Public Domain)

Figure \(\PageIndex{5}\): Railing (CC BY-SA 4.0)

Mahabodhi Temple Complex at Bodh Gaya

The Mahabodhi Temple Complex is one of the four holy sites related to the life of the Lord Buddha, and particularly to the attainment of Enlightenment. The first temple was built by Emperor Asoka in the 3rd century B.C., and the present temple dates from the 5th or 6th centuries. It is one of the earliest Buddhist temples built entirely in brick, still standing in India, from the late Gupta period.



Khmer Empire Bayon Temple (13th century)

Bayon (7.4.6) was constructed in the center of the walled city of Angkor Thom, the capital of the Khmer Empire, during the 13th century. Rising above the surrounding city walls, the temple resembles a sacred mountain emerging from the landscape. Its design was intended to symbolize **Mount Meru**, the cosmic mountain in Hindu and Buddhist traditions believed to stand at the center of the universe. The temple honored the many deities and spiritual beliefs associated with the Khmer Empire while also reflecting the growing influence of Buddhism during this period. Bayon became the final major state temple built at Angkor Thom and served as the centerpiece of an enormous construction program that included bridges, defensive walls, roads, reservoirs, and additional buildings supporting the capital city.

The architecture of Bayon is especially famous for its massive stone towers decorated with enormous carved faces, believed to represent either Buddhist ideals, protective deities, or possibly the Khmer king himself. Together, the temple's symbolic design, monumental scale, and intricate stone carvings demonstrate the engineering sophistication and spiritual ambitions of the Khmer civilization.

Figure \(\PageIndex{6}\): Bayon Temple complex (CC BY-SA 3.0)

Bayon is famous for its thirty-seven massive towers decorated with enormous carved stone faces (7.4.7) that gaze outward in the four cardinal directions. These monumental faces create one of the most recognizable visual features of Khmer architecture and give the temple a mysterious and spiritual atmosphere. Because of Cambodia's wet and humid climate, lichen and vegetation have grown across many of the stone surfaces (7.4.8), gradually contributing to the deterioration of the carvings over time. Despite centuries of weathering, many of the sculptures remain remarkably well preserved.

The giant stone faces closely resemble portraits of Jayavarman VII, the Khmer ruler associated with the construction of Bayon. Historians believe the king may have intentionally represented himself as a **bodhisattva**, an enlightened being in Buddhism who postpones entering nirvana in order to help others achieve enlightenment. The temple originally contained fifty-four large towers, each carved with faces looking toward the cardinal directions, symbolically watching over the empire. Today, more than 200 of these monumental stone faces still survive, making Bayon one of the most extraordinary artistic achievements of the Khmer Empire.

Figure \(\PageIndex{7}\): Facial sculptures at the gateway (CC BY-NC-ND 2.0)

Figure \(\PageIndex{8}\): Deteriorated face (CC BY-SA 4.0)

A **bodhisattva** is a figure in Buddhism motivated by compassion who seeks to achieve enlightenment and become Buddha-like while helping others on their spiritual path. Bayon is arranged along an east-west axis and occupies a large square-shaped plan within the city of Angkor Thom. Together, the temple and surrounding city cover approximately nine square kilometers, making the complex even larger than the famous Angkor Wat. Unlike many temples, Bayon itself does not require separate defensive walls because the surrounding city already functioned as a fortified enclosure.

Along the roadway approaching the temple, monumental sculptures of gods stand guard (7.4.9), creating a ceremonial entrance into the sacred complex. The temple contains three major enclosures, or galleries, arranged on lower and upper terraces. The outer gallery walls are richly decorated with extensive **bas-reliefs** depicting musicians, horseback riders, elephants, military battles, and ceremonial processions.

Bayon is especially renowned for its two extraordinary sets of bas-reliefs that combine mythological scenes with depictions of everyday life. These carvings portray merchants conducting business, people drinking and dancing with friends, elephants pulling carts, farmers harvesting crops, and individuals gathering fruit from trees (x.x). The scenes provide valuable insight into the daily activities, social customs, and historical events of the Khmer Empire while also blending religious symbolism with realistic observations of ordinary life.

Figure \(\PageIndex{9}\): Bas-reliefs (CC BY 2.0)

The central tower of Bayon was originally designed in a **cruciform** shape but was later modified into a circular form as the temple evolved over time. At the center of the tower stands a 3.6-meter statue of Gautama Buddha protected by the flared hood of the serpent king, a symbolic figure associated with protection in Buddhist and Khmer traditions. At some point in the temple's history, the Buddha statue was removed, likely during periods of political or religious change, and was later discovered at the bottom of a well. Archaeologists and conservators recovered the fragmented sculpture, reconstructed it, and returned it to its original location within the temple.

Throughout its history, Bayon Temple underwent numerous modifications reflecting the changing governments and religious beliefs of the Khmer Empire. As rulers shifted between Buddhist and Hindu traditions, sections of the temple were altered, sculptures were replaced or reinterpreted, and architectural features were adapted to align with the dominant spiritual and political ideologies of the period.

The Bayon Temple Inside Angkor Thom

The Bayon is a well-known and richly decorated Khmer temple at Angkor in Cambodia. Built in the late 12th century or early 13th century as the official state temple of the Mahayana Buddhist King Jayavarman VII, the Bayon stands at the centre of Jayavarman's capital, Angkor Thom. Following Jayavarman's death, it was modified and augmented by later Hindu and Theravada Buddhist kings in accordance with their own religious preferences.

Song Dynasty Six Harmonies (Liuhe) Pagoda (970 CE)

Six Harmonies Pagoda (7.4.10) is situated on a hill overlooking the Qiantang River and Xi Hu Lake in eastern China. The pagoda was constructed during the Northern Song Dynasty in 970 CE using brick and wood, materials commonly used in traditional Chinese architecture. Its location above the river made the structure an important visual landmark as well as a sacred religious monument.

The name “Liuhe,” meaning “Six Harmonies,” is derived from the six Buddhist harmonies: heaven, earth, east, west, north, and south. These concepts symbolize universal balance and harmony within both the natural and spiritual worlds. According to local mythology, the original purpose of the pagoda was to honor these harmonies and serve as a spiritual effort to calm the powerful tidal waters and destructive flooding of the nearby Qiantang River. The pagoda reflects the influence of **Buddhism** on Chinese architecture and demonstrates how religious structures were often connected to both spiritual beliefs and the surrounding natural environment.

Figure \(\PageIndex{10}\): Six Harmonies Pagoda (CC BY-SA 4.0)

Figure \(\PageIndex{11}\): Pagoda hallway (CC BY-SA 4.0)

Six Harmonies Pagoda has been reconstructed and repaired many times over the past thousand years because of warfare, natural disasters, and deterioration. The present structure was largely rebuilt and modified in 1156 CE and today rises approximately 59 meters high. Although the exterior appears to contain thirteen stories, the interior actually consists of only seven levels, a design technique commonly used in Chinese pagoda architecture to create a more monumental appearance.

One of the taller pagodas in China, the structure is built on an octagonal plan symbolizing the Buddhist **Eightfold Path**, the spiritual path leading toward enlightenment and self-awakening. The pagoda's layout is divided into four main sections: a thick exterior wall, an inner circular ring, passageways, and interior chambers (7.4.11). Builders reused bricks from earlier Song Dynasty structures, demonstrating that architectural recycling and reuse were already common practices during the twelfth century. Between the outer and inner walls are winding staircases that lead to the upper floors and small chambers. The ceilings (7.4.12) of the seven interior rooms are decorated with low-relief carvings and painted imagery featuring flowers, birds, animals, and other decorative motifs. Niches carved into the walls (7.4.13) contain inscriptions from the **Sutra of Forty-Two Sections**, an important Buddhist text.

Throughout the rooms are pedestals supporting more than 200 intricate brick carvings depicting peacocks, parrots, lions, pomegranates, lotus flowers, and animated human and animal figures shown dancing or leaping with energetic movement. Wooden poles project elegantly from the corners of the exterior walls to support the extended roof eaves, where 104 iron bells hang from the structure. As wind passes through the pagoda, the bells create sound that enhances the spiritual atmosphere of the building. Viewed from a distance, the pagoda's contrasting dark and light tones create a balanced and harmonious appearance. Rising above the

landscape, it serves as both a religious monument and an important landmark overlooking the surrounding countryside, river, and lake.

Figure \(\PageIndex{12}\): ceiling décor (CC BY-SA 2.0)

Figure \(\PageIndex{13}\): wall décor (CC BY-SA 2.0)

Asuka, Nara, Heian Periods Konpon Daito Pagoda (887 CE)

Konpon Daitō (7.4.14) is part of a major Buddhist temple complex located in Koyasan, Japan. Nearby stands the large wooden **Kondo Hall**, an important ceremonial building where religious rituals and gatherings are held. However, the central visual focus of the complex is the striking red-and-white lacquered Konpon Daitō Pagoda, constructed between 816 and 887 CE. The pagoda measures approximately 48.5 meters in height and 25 meters on each side. It features two tiers and is recognized as the first pagoda built in the **tahōtō style**, a Japanese architectural form characterized by an even number of stories. The lower section of the structure is square, while the upper level is cylindrical and topped by a pyramid-shaped roof, creating a harmonious combination of geometric forms.

Although the balustrade surrounding the second story appears functional, it is purely decorative and cannot be accessed. At the top of the roof, bells are attached to a vertical shaft so they gently chime in the wind, adding both movement and sound to the spiritual atmosphere of the temple complex. The pagoda reflects the strong influence of Buddhism on Japanese architecture and demonstrates the refined craftsmanship of early Japanese wooden construction.

Figure \(\PageIndex{14}\): Konpon Daito Pagoda (CC BY-SA 2.0)

Tahōtō-style pagodas are Japanese Buddhist pagodas characterized by two-story structures and pyramid-shaped roofs. Although the upper levels often appeared functional from the exterior, many were largely empty inside and served primarily symbolic and architectural purposes rather than practical use. Inside Konpon Daitō are statues of Gautama Buddha along with figures representing the Four Vajra Saints positioned at the four cardinal directions. The interior space is supported by sixteen columns, each decorated with elaborate painted circular designs that wrap around the columns and create the effect of a three-dimensional **mandala**.

A **mandala** is a sacred symbolic diagram in Buddhism representing the cosmos, spiritual balance, and the path toward enlightenment. Most mandalas are traditionally created as two-dimensional paintings or drawings used in meditation and prayer. The three-dimensional mandala formed within the pagoda through painted architectural elements is highly unusual and demonstrates the sophisticated artistic and spiritual concepts incorporated into Japanese Buddhist architecture.

7.5: The Pyramids

Definition: Term

- **El Castillo:** The Pyramid of Kukulkan, a major Maya step pyramid located at Chichén Itzá on the Yucatán Peninsula.
- **Yucatán Peninsula**: A large peninsula in southeastern Mexico known for its Maya archaeological sites and limestone landscape.
- **Limestone Plain**: A flat landform primarily composed of limestone rock, often containing caves and underground water systems.
- **Cenotes**: Natural sinkholes or pools formed when limestone collapses, exposing underground freshwater sources.
- **Stereotomy**: The geometric technique of cutting and fitting stone blocks precisely together in construction.
- **Mortar**: A paste-like material used to bind stones or bricks together in construction.
- **Vault**: An arched ceiling or roof structure made from stone or brick.
- **Quetzalcoatl:** An important feathered serpent deity worshipped in several Mesoamerican cultures, associated with wisdom, creation, and the heavens.
- **Plumed Serpent**: A symbolic feathered snake figure representing Quetzalcoatl in Mesoamerican religion and art.
- **Mesoamerica**: A cultural region of ancient civilizations that included parts of present-day Mexico and Central America.
- **Temple Pyramid**: A stepped pyramid structure with a temple or shrine located at the top used for religious ceremonies.
- **Geometric Planning**: The use of mathematical shapes, measurements, and spatial organization in architecture and construction.

The pyramids of the Americas were monumental structures built by ancient civilizations throughout Mesoamerica and South America for religious, ceremonial, political, and astronomical purposes. Unlike the smooth-sided pyramids of ancient Egypt, most American pyramids were constructed as **step pyramids** with terraces and stairways leading to temples or shrines at the top. These pyramids served as sacred spaces where rituals, offerings, ceremonies, and sometimes sacrifices were performed.

Among the most famous are the pyramids created by the **Maya Civilization**, **Aztec Civilization,** and **Teotihuacan Civilization**. The Maya constructed towering pyramids such as **El Castillo at Chichén Itzá**, which was aligned with astronomical events like the equinoxes. The city of Teotihuacan featured massive structures including the Pyramid of the Sun and the Pyramid of the Moon, some of the largest pyramids ever built in the Americas. The Aztecs later built ceremonial pyramids such as the Templo Mayor in their capital city of Tenochtitlan.

In South America, civilizations such as the **Moche Civilization** and other Andean cultures constructed pyramid-like ceremonial platforms using adobe brick. Structures such as the Huaca del Sol and Huaca de la Luna in Peru served as political and religious centers.

The pyramids of the Americas demonstrated advanced engineering, mathematical planning, and astronomical knowledge. Builders carefully aligned many structures with celestial movements, cardinal directions, and sacred landscapes. These monumental works symbolized the power of rulers, the importance of religion, and the connection between humans, gods, and the cosmos. Today, the pyramids remain some of the most important surviving achievements of ancient American civilizations and continue to provide insight into their cultures, beliefs, and technological sophistication.

Mayan Classic Period Kukulkan Temple (900 CE)

El Castillo, also known as the Pyramid of Kukulkan (7.5.1), is the most important structure at Chichén Itzá on the Yucatán Peninsula. The pyramid rises from a limestone plain filled with natural sinkholes and pools of water called cenotes, while dense jungle surrounds the site. Constructed between approximately 800 and 900 CE, the pyramid was built over the remains of an earlier temple, reflecting the common Mesoamerican practice of constructing new sacred structures atop older ones.

The architects demonstrated remarkable engineering skill through the use of **stereotomy**, the art of precisely cutting and assembling stone blocks using advanced geometric planning. Massive stones were carefully shaped and fitted together without mortar, creating a stable and durable structure. This sophisticated knowledge of geometry and construction allowed the pyramid to maintain its form for centuries.

The walls and vaulted areas of the complex were richly decorated with carved battle scenes, religious imagery, and symbolic designs. Among the most elaborate carvings are repeated images of Quetzalcoatl, the feathered or plumed serpent deity associated

with wisdom, creation, and the heavens. Representations of Quetzalcoatl appear throughout the columns, stairways, and architectural substructures of the pyramid, reinforcing the sacred and ceremonial significance of the monument within Maya culture.

Figure \(\PageIndex{1}\): Kukulkan Temple (CC BY-SA 4.0)

El Castillo has a square base measuring approximately 53.3 meters on each side and rises about 24 meters high, with an additional 6-meter-high temple positioned at the summit. Each of the pyramid's four stairways contains 91 steps leading upward. Together, the stairways total 364 steps, and when the final platform step at the top is included, the total becomes 365 steps, symbolically representing the days of the solar calendar used by the Maya.

The pyramid (7.5.2) is organized into nine large terraced levels, with staircases dividing the sides of the structure. These divisions are believed to symbolize the 18 months of the **Maya calendar**. Carefully aligned to the northeast, the pyramid functioned not only as a religious and ceremonial monument but also as a physical representation of Maya astronomical and calendrical knowledge. The structure demonstrates the sophisticated mathematical, architectural, and astronomical understanding of the Maya civilization. Its design reflects the close relationship between religion, timekeeping, and the observation of celestial events within Maya culture.

Figure \(\PageIndex{2}\): North stairs (Public Domain)

During the spring and fall **equinoxes**, El Castillo produces one of the most remarkable astronomical effects in ancient architecture. As the sun moves across the sky, light and shadow create the appearance of seven triangular shapes along the northern staircase. Throughout the day, these triangles slowly descend the pyramid steps until they connect with the carved stone serpent heads (7.5.3) located at the base of the staircase. This visual effect creates the illusion of a massive serpent slithering down the pyramid, symbolically representing Quetzalcoatl, the feathered serpent god. The shadow display lasts for approximately forty-five minutes before disappearing as the position of the sun changes.

During the **winter solstice**, the sunlight creates a different effect as it appears to climb upward along the edge of the pyramid staircase toward the temple at the summit before gradually descending again. These carefully planned solar alignments demonstrate the advanced astronomical knowledge of the Maya civilization and reveal how architecture, religion, and celestial observation were deeply interconnected within Maya culture.

Figure \(\PageIndex{3}\): Serpent head (CC BY 2.0)

The **Red Jaguar Throne** (7.5.4), located within an inner chamber of El Castillo, symbolized political power, sacred authority, and religious significance within Maya culture. The chamber in which the throne was placed was considered an important ceremonial space likely reserved for rulers, priests, or elite religious rituals. The jaguar sculpture was richly decorated with intricate details, including inlays of flint and jade stones, while the body was painted red and the fangs were crafted from shell materials. In Maya symbolism, the color red was closely associated with death, sacrifice, blood, and spiritual transformation.

Jaguars held special importance in Maya society and religion because they represented strength, power, night, and the connection between the earthly and spiritual realms. The animal was often linked to rulers and supernatural beings, reinforcing the idea that political authority was tied to divine and cosmic forces. The Red Jaguar Throne therefore functioned not only as a ceremonial object but also as a visual expression of sacred kingship and spiritual power.

Figure \(\PageIndex{4}\): Red Jaguar throne (CC BY-SA 3.0)

The Secrets of El Castillo

Two National Geographic Explorers enter the Mayan Pyramid, El Castillo, in search of a hidden entrance to an underground cave. While inside they explain the significance of the jaguar throne and human sacrifice.

Incan Temple of the Sun (Mid 1400 CE)

Temple of the Sun (7.5.5) was constructed on a mountain ridge at Machu Picchu, Peru, at an elevation of approximately 2,430 meters above sea level. Nestled along the eastern slopes of the Andes Mountains and overlooking the Urubamba River, the temple occupied a dramatic and sacred setting within the Inca landscape. Machu Picchu itself functioned as a secondary royal and religious site connected to the larger Inca capital of Cusco and its primary Temple of the Sun. The complex at Machu Picchu was built during the mid-1400s under the Inca Empire and was abandoned roughly a century later following the Spanish conquest. Because the site was hidden high in the mountains and covered with dense vegetation, it remained largely unknown to the outside world until its international rediscovery in the early 1900s.

The Temple of the Sun was dedicated to the Inca sun god, one of the most important deities in Inca religion, and access to the sacred area was restricted primarily to priests and elite members of society. Some archaeologists believe Machu Picchu may have functioned as a ceremonial retreat or seasonal residence for nobility and high priests. The temple walls were constructed using **ashlar masonry**, a sophisticated Inca stoneworking technique in which carefully polished dry stones were cut and fitted together with extraordinary precision so that no mortar was required. The tightly joined stones helped the structure withstand earthquakes common in the Andes region. Within the temple is a large elliptical granite stone structure that historians believe symbolized the Inca concept of the celestial sphere and the cosmos. The semicircular design reflects the close relationship between Inca architecture, astronomy, and religious beliefs, emphasizing the sacred connection between the natural world, the heavens, and spiritual power.

Figure \(\PageIndex{5}\): Temple of the Sun (Public Domain)

The location of Temple of the Sun was highly significant to the Inca because they believed sacred spaces should be positioned as close to the heavens as possible. Built high in the Andes Mountains, the temple served as an important ceremonial site where major religious events and rituals were conducted. The architects incorporated two carefully aligned windows (7.5.6) that corresponded

with the winter and summer solstices. During these astronomical events, the rising sun shone directly through the windows onto the temple's altar or sacred stone. This precise alignment functioned much like a **sundial**, allowing the Inca to track seasonal changes, organize agricultural activities such as planting and harvesting, and regulate important ceremonial events.

The Inca also closely observed the stars and constellations, using astronomical knowledge to develop their calendar system and better understand natural cycles. Within the temple, a large carved stone served as an altar where priests performed rituals, offerings, and sacrifices connected to the worship of the sun god. Historians believe the original doorway of the temple may have been decorated with jewels and gold ornamentation designed to reflect sunlight, further emphasizing the sacred relationship between the temple, the sun, and divine power within Inca religion.

Figure \(\PageIndex{6}\): Window (CC BY-ND 2.0)

Beneath Temple of the Sun, an entrance below the tower led into an underground cavern decorated with carefully carved stone walls. Some historians and archaeologists believe this chamber may have served as a burial space for mummified members of the Inca aristocracy or religious elite. Burial practices in Inca society often emphasized honoring ancestors and maintaining spiritual connections between the living and the dead.

Following the arrival of the Spanish in South America during the 16th century, the Inca civilization at Machu Picchu was abandoned and gradually disappeared from public knowledge. Disease, warfare, and the collapse of the Inca Empire contributed to the decline of the site. Hidden high in the Andes Mountains and surrounded by dense vegetation, Machu Picchu remained largely isolated for centuries. Although the civilization itself faded, the remarkable stone architecture and sacred monuments dedicated to the sun survived. Today, Machu Picchu stands as one of the greatest achievements of Inca engineering, astronomy, and religious architecture, preserving the memory of a civilization deeply connected to the natural and spiritual worlds.

Aztec Templo Mayor (1326 CE)

Templo Mayor was located in Tenochtitlan, the capital city of the Aztec Empire and the site of present-day Mexico City. The Templo Mayor served as one of the principal religious and ceremonial centers of the Aztec civilization and symbolized the political and spiritual power of the empire. According to Aztec tradition, the god Huitzilopochtli instructed the Aztec people to establish their city where they discovered an eagle perched on a nopal cactus holding a snake in its mouth. When the Aztecs encountered this sacred sign, they founded Tenochtitlan and later constructed the great temple at that location. This legendary image remains an important symbol of Mexico today and appears on the national flag.

The design of the Templo Mayor reflected Aztec **cosmology**, or beliefs about the structure of the universe and the relationship between the gods, nature, and humanity. The multiple levels of the temple symbolized sacred cosmic layers and were carefully aligned with the **cardinal directions**. Gates connected the temple precinct to major roads throughout the city, reinforcing both ceremonial and urban organization. The sacred temple complex covered approximately 4,000 square meters and was enclosed by

protective walls surrounding ceremonial buildings, shrines, and ritual spaces. The Templo Mayor functioned as the spiritual heart of the Aztec world, where religious ceremonies, offerings, and sacrifices were performed in honor of the gods.

Figure \(\PageIndex{7}\): Templo Mayor model recreated (CC BY-SA 3.0)

Templo Mayor (7.5.7) was dedicated to two of the most important deities in Aztec religion: Tlaloc, the god associated with rain, fertility, and agriculture, and Huitzilopochtli, the god of war, the sun, and military power. Each deity was honored with a separate staircase leading to an individual shrine located at the summit of the temple. The twin pyramids symbolized two sacred mountains believed to hold spiritual significance within Aztec cosmology. At the top of the structure, two shrines crowned the pyramids, each devoted to one of the gods. In the center of the ceremonial square stood a spire dedicated to Quetzalcoatl in the form of **Ehecatl**, the wind god.

Construction of the first temple began around 1326 CE. Over time, the temple was rebuilt six additional times after wars, flooding, and natural disasters damaged earlier versions. The final version of the Templo Mayor consisted of twin pyramids with four sloping terraces and passageways between each level that provided access to the upper shrines. The sacred stairways leading to the temples were reserved primarily for priests and individuals chosen for ritual sacrifice. These ceremonies were central to Aztec religious practice and reflected their belief that offerings and sacrifices were necessary to sustain the gods and maintain the balance of the universe.

Figure \(\PageIndex{8}\): Serpent (CC BY-SA 3.0)

Figure \(\PageIndex{9}\): Frogs (CC BY-SA 3.0)

The third version of Templo Mayor was constructed under the rule of Itzcoatl around 1427 CE. This phase of the temple included sculptures of divine warriors positioned to guard the upper shrines, emphasizing the sacred and military importance of the temple complex within Aztec society. During the reign of Montezuma I, the fourth temple was built between 1440 and 1481 CE, a period when the Aztec Empire was reaching the height of its political and cultural power. Using extensive labor and locally available resources, Aztec artists and craftsmen created increasingly elaborate sculptures, carvings, and architectural decorations throughout the temple complex.

Montezuma ordered the creation of massive undulating serpent sculptures (7.5.8) that extended along the spiraling stairways of the temple. These serpents likely symbolized sacred cosmic forces and connections to deities such as Quetzalcoatl. In the center of the shrine area, enormous sculpted frogs (7.5.9) were added, possibly associated with water, fertility, and the rain god Tlaloc. Together, these monumental carvings reinforced the religious symbolism and ceremonial importance of the Templo Mayor.

Figure \(\PageIndex{10}\): Skulls (CC BY-SA 4.0)

Templo Mayor was fully completed and functioning as the ceremonial center of the Aztec Empire when the Spanish arrived in Tenochtitlan in the early 16th century. Following the conquest, warfare, disease, and colonization devastated the Aztec population, and much of the temple complex was intentionally destroyed by the Spanish conquerors. Stones from the sacred buildings were reused in the construction of colonial structures throughout the growing city. During archaeological excavations in the 20th century, researchers uncovered numerous ceremonial objects buried within the remains of the temple. These discoveries included stone urns, carved slab boxes, small bells, gemstones, and other offerings believed to have been placed within the structure as part of religious rituals and sacrificial ceremonies.

Several important remnants of the temple still survive today. Among them are panels decorated with rows of carved skulls (7.5.10) once covered with stucco, two life-sized clay sculptures of Aztec warriors, and a carved stone eagle used in sacrificial rituals where the hearts of victims were placed as offerings to the gods. These surviving artifacts provide insight into the religious practices, artistic achievements, and ceremonial traditions of the Aztec civilization.

Unearthing the Aztec past, the destruction of the Templo Mayor

Unearthing the Aztec past, the destruction of the Templo Mayor (Mexico City)

earthing the Aztec past, the destru
arthistory
Watch on YouTube

7.6: Conclusion

Many civilizations during this period were shaped by military strength, conquest, and expanding political power, concepts clearly reflected in their art and architecture. Monumental structures symbolized the authority of rulers, religious leaders, and empires, whether seen in the grand mosques of the Islamic Golden Age, the towering pyramids of the Maya and Aztecs, or the sacred temple complexes of the Khmer Empire. Art became a visual language through which societies communicated power, spirituality, cultural identity, and their understanding of the universe.

The imagery and artistic traditions of these cultures developed along many different paths. Some civilizations emphasized luminous decoration and symbolic storytelling, such as the stained glass and soaring architecture of the **Gothic period**, while others created monumental stone carvings like the mysterious moai of Rapa Nui National Park. Across the world, artists used local materials and regional techniques to produce mosaics, sculptures, frescoes, textiles, ceramics, carvings, and monumental buildings that reflected their beliefs, environments, and technological abilities. The chart illustrates how each culture used art differently while still sharing common human desires to express faith, authority, memory, and identity.

Throughout history, civilizations have continually risen and declined in response to changing circumstances. As explored in previous chapters, many societies—despite being separated by geography and culture—faced similar challenges that contributed to their collapse. Climate change altered environments and agricultural systems, diseases spread through populations with devastating effects, and warfare or invasions weakened empires and destroyed cities. Yet even when civilizations disappeared, their artistic achievements survived, influencing future cultures and preserving the memory of their accomplishments.

History demonstrates that cultural development is cyclical. As one civilization declines, another emerges, building upon the ideas, technologies, and artistic traditions of the past. In the next chapter, attention shifts to the **Renaissance**, meaning “rebirth,” a period in which Europe experienced renewed interest in classical knowledge, humanism, scientific inquiry, and artistic innovation that would transform the course of world history.

CHAPTER OVERVIEW

8: Renaissance - The Growth of Europe (1400 CE – 1550 CE)

Emerging from the dark ages in Europe, Italy awakened the world with innovative ideas in arts, architecture, and engineering, producing some of the most amazing inventions in history. The Renaissance began in the 15th century and changed European art from utilitarian to aesthetic art, almost overnight.

8.1: Overview
8.2: Early to Mid-Renaissance
8.3: High Renaissance
8.4: Conclusion

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8.1: Overview

Emerging from the **Dark Ages** in Europe, Italy became the center of extraordinary innovation in art, architecture, science, and engineering during the Renaissance. Beginning in the 15th century, the Renaissance transformed European art from primarily functional and religious imagery into works emphasizing beauty, realism, and human experience. Political and economic changes contributed to this transformation as Europe gradually shifted away from the medieval feudal system toward powerful city-states, especially in Italy, where trade and wealth encouraged cultural growth.

Humanism became a dominant intellectual movement during the Renaissance. Scholars and philosophers focused increasingly on human potential, education, science, and the study of classical Greek and Roman texts. Scientific discoveries challenged older medieval beliefs, including the understanding that the earth revolved around the sun rather than remaining fixed at the center of the universe. Individual achievement, curiosity, and self-awareness became highly valued, contributing to major social and economic changes throughout Europe. The expansion of trade routes, especially along the Silk Road, brought enormous wealth into Italian cities and increased demand for luxury goods from the East. This growing economy helped create a prosperous middle class with disposable income and leisure time, allowing greater patronage of artists, architects, and scholars.

The word **Renaissance** is French for “rebirth,” while the Italian term is *Rinascita*. The period represented a rebirth of classical ideas from ancient Greece and Rome, inspiring dramatic changes in philosophy, literature, science, and visual art. Artists began to study anatomy, perspective, light, and nature to create more realistic images. Religious paintings, which previously featured flat compositions, rigid poses, elongated figures, and symbolic gold halos, evolved into naturalistic scenes with lifelike emotions and believable human forms. For example, earlier medieval depictions of the Madonna (8.1.1) emphasized symbolic spirituality through stylized figures, while later Renaissance works such as *Madonna with the Child and Two Angels* (8.1.2) portrayed the Virgin Mary as a realistic mother interacting naturally with children. This shift toward realism and emotional expression became one of the defining characteristics of Renaissance art.

Figure \(\PageIndex{1}\): *Madonna* (Public Domain)

https://human.libretexts.org/@go/page/308311

Figure \(\PageIndex{2}\): *Madonna with the Child and Two Angels* (Public Domain)

During the Renaissance, churches became major patrons of art because of the rapid construction and decoration of religious buildings throughout Europe. Churches commissioned paintings, sculptures, frescoes, altarpieces, and architectural decoration to inspire worshippers and communicate Christian teachings. Much of the artwork was **typological**, meaning artists visually connected stories and symbols from the Old Testament to events in the New Testament to reinforce Christian doctrine. There was also renewed devotion to the Virgin Mary, and many Renaissance artworks adopted a **hieratic** appearance, emphasizing Mary's spiritual importance through dignified poses, symbolic placement, and idealized beauty. Images of the Madonna became some of the most common and celebrated subjects in Renaissance painting.

Artists increasingly used **oil paint on wooden panels**, a technique that allowed for greater detail, richer color, smoother blending, and more realistic textures than earlier methods. Oil painting made it possible to create both large church commissions and smaller devotional artworks intended for private homes. Churches frequently ordered monumental **altarpieces** with hinged panels, known as polyptychs, that could be opened or closed to display different religious scenes according to specific ceremonies or holy days.

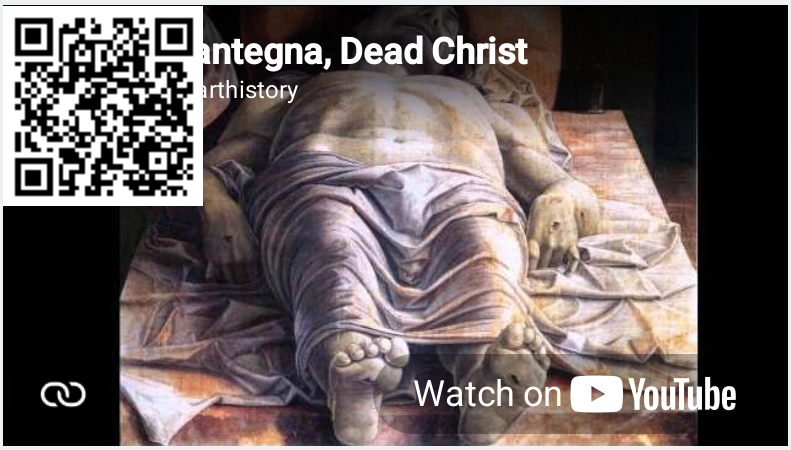
The Renaissance also introduced revolutionary artistic techniques and ideas. One of the most important developments was **linear perspective**, a system using converging parallel lines to create the illusion of depth and three-dimensional space on a flat surface.

Filippo Brunelleschi helped develop the mathematical principles of perspective while designing the dome of the Florence Cathedral, also known as the Duomo.

Another important Renaissance technique was **foreshortening**, mastered by Michelangelo. Foreshortening exaggerates parts of a figure or object that are closer to the viewer in order to create realistic spatial depth. Michelangelo's famous sculpture David demonstrates his sophisticated understanding of anatomy, proportion, and perspective, reflecting the Renaissance fascination with realism and the human form.

Mantegna, Dead Christ

Andrea Mantegna, Dead Christ, tempera on canvas, c. 1480 - 1500 (Pinacoteca di Brera, Milan)

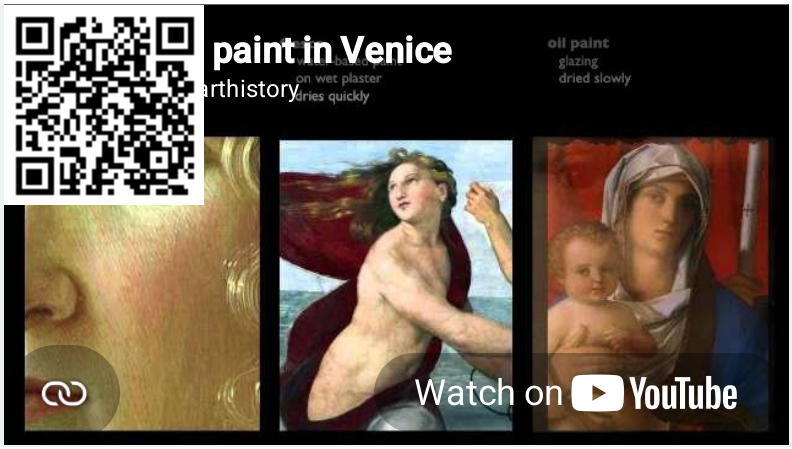


Oil painting became one of the most important artistic advancements during the Renaissance. Like all paint, oil paint is made from three main components: **pigment** (the color), a **binder** (the oil that holds the pigment together), and a **thinner** used to dilute the paint and improve its application. Because oil served as the base, artists used chemical thinners to adjust the consistency and drying properties of the paint. Although oil-based paints had existed as early as the 12th century, they were difficult to prepare and not widely available. Earlier medieval artists commonly used the **egg tempera** technique, in which pigments were mixed with egg yolk. During the Renaissance, however, artists increasingly replaced egg tempera with mixtures using **linseed oil** or **walnut oil** as binders.

Oil paints offered significant advantages over earlier painting methods. They dried more slowly, allowing artists additional time to blend colors, create smooth transitions, and achieve greater detail. Oil paint also produced richer colors, deeper shadows, and more convincing textures, helping artists create a stronger sense of **realism** and three-dimensional form in their paintings. Despite these advancements, Renaissance artists still faced limitations in available colors and materials. Pigments often depended on regional resources and goods transported along the Silk Road trading routes. Expensive or rare pigments such as ultramarine blue, made from lapis lazuli imported from Asia, were highly valued and sometimes reserved for important religious figures like the Virgin Mary. As a result, the geographic location of an artist and access to trade networks strongly influenced the range of colors available in Renaissance artworks.

Oil Paint in Venice

A review of fresco and tempera and the development of the use of oil paint by artists in Venice.



The development of **oil paint** during the Renaissance allowed artists to create deeper, richer colors and smoother transitions between light and shadow. These capabilities made possible the technique known as **sfumato**, one of the four major painting methods of the Renaissance. The word *sfumato* means “to evaporate like smoke” and describes the subtle blending of tones and edges so that transitions between forms appear soft and almost invisible. Leonardo da Vinci became one of the greatest masters of sfumato and used the technique extensively in many of his paintings, including the famous Mona Lisa. Through delicate shading and carefully blended layers of paint, Leonardo created lifelike skin tones, atmospheric depth, and realistic facial expressions. Sfumato allowed objects and figures to appear more natural and three-dimensional by eliminating harsh outlines and creating gradual transitions between light and dark areas.

The Renaissance represented a major turning point in European history, bridging the gap between the Middle Ages and the modern world. The rediscovery of classical Greek and Roman texts, combined with the invention of the printing press, dramatically increased literacy and the spread of knowledge throughout Europe. Scientific inquiry, experimentation, and humanistic learning expanded rapidly during this period, laying the foundation for the later **Scientific Revolution** that continued to transform the world. In Chapter 8, *Renaissance: The Growth of Europe*, the achievements and artworks of important Renaissance artists, architects, and thinkers are explored in greater detail, illustrating how this remarkable period reshaped European culture, science, and artistic expression.

8.2: Early to Mid-Renaissance

Definition: Term

- **Filippo Brunelleschi**: An important Italian Renaissance architect and engineer best known for designing the dome of Florence Cathedral and developing linear perspective.
- **Renaissance**: A period of cultural rebirth in Europe beginning in the 14th century that emphasized art, science, humanism, and classical learning.
- **Classicism**: An artistic and architectural style inspired by the ideas, balance, and forms of ancient Greek and Roman culture.
- **Gothic Style**: A medieval architectural style characterized by pointed arches, ribbed vaults, flying buttresses, and tall stained-glass windows.
- **Florence Cathedral**: Also called the Cattedrale di Santa Maria del Fiore, a famous cathedral in Florence known for Brunelleschi's massive dome.
- **Octagonal Dome**: A dome built over an eight-sided base or structure.
- **Linear Perspective**: A mathematical drawing system that creates the illusion of depth and three-dimensional space on a flat surface using converging lines.
- **Antiquity**: Ancient times, especially referring to the civilizations of Greece and Rome.
- **Engineering Innovation**: The creation of new construction methods or technologies to solve structural problems.
- **Symmetry**: Balanced proportions and matching forms on opposite sides of a design.
- **Scaffolding**: Temporary support structures used during building construction.
- **Cathedral**: A large and important Christian church that serves as the central church of a bishop's district.

The **Early to Middle Renaissance** was one of the most important periods in the development of **human awareness**, **individualism**, and **intellectual curiosity**. It represented a dramatic contrast to the Middle Ages, when much of European society focused primarily on religious authority, feudal systems, and traditional beliefs. During the Renaissance, people increasingly emphasized human potential, observation, education, and the value of individual achievement.

The Renaissance sparked new conversations about science, mathematics, engineering, philosophy, literature, and the arts. Scholars rediscovered ancient Greek and Roman writings, inspiring renewed interest in classical knowledge and encouraging critical thinking and experimentation. Artists studied anatomy, perspective, light, and nature to create more realistic and emotionally expressive works, while scientists and engineers explored the mechanics of the natural world.

This period became a cultural rebirth that celebrated innovation and creativity. Advances in trade, education, and technology—including the invention of the printing press—helped spread new ideas rapidly across Europe. The Renaissance laid the foundation for modern scientific inquiry, artistic expression, and intellectual freedom, transforming European society and influencing the development of the modern world.

Filippo Brunelleschi

Filippo Brunelleschi (1377–1446) became one of the most influential architects of the Early Renaissance. Although the passage states he was born in France, Brunelleschi was actually born in Florence, Italy, where he later helped transform Renaissance architecture through his engineering innovations and revival of classical ideas. At the beginning of the Renaissance, architecture began shifting away from the highly vertical and decorative **Gothic style** toward a renewed interest in the balanced proportions and symmetry of ancient Greek and Roman **classicism**. One of the greatest architectural challenges of the period involved the construction of Florence Cathedral, formally known as the Cattedrale di Santa Maria del Fiore (Cathedral of Saint Mary of the Flower).

Construction of the cathedral began in 1296 in the Gothic style and included plans for an enormous octagonal dome intended to make the church one of the largest in the world. However, for nearly 200 years no architect could devise a practical method for constructing such a massive dome over the open crossing of the cathedral. As a result, the unfinished opening remained exposed to the weather for generations.

Drawing inspiration from ancient Roman engineering and classical principles, Brunelleschi revived and refined techniques related to **linear perspective** and geometric construction. He designed an innovative dome system capable of spanning the enormous

opening without requiring traditional wooden scaffolding. His revolutionary engineering solution transformed Renaissance architecture and became one of the defining achievements of the era.

Figure \(\PageIndex{1}\): Dome of the Cathedral (CC BY 2.0)

In 1418, Filippo Brunelleschi convinced the leaders of Florence to approve his revolutionary design for the dome of Florence Cathedral (8.2.1). His proposal involved constructing two domes—one nested inside the other—which was an unprecedented engineering solution at the time. After presenting his innovative plan, Brunelleschi received the contract to complete the massive unfinished cathedral dome. The resulting **double-walled dome** system (8.2.2) used lightweight bricks and allowed the structure to rise higher while remaining stable and durable. The dome ultimately reached approximately 43.2 meters in height and became one of the greatest architectural achievements of the Renaissance.

To strengthen the structure during construction, Brunelleschi developed a unique **herringbone brick pattern** (8.2.3), in which bricks were arranged in a spiraling interlocking design. This method distributed weight outward toward the dome's supports and prevented the bricks from slipping as the dome curved upward. The herringbone pattern became a brilliant engineering innovation that allowed the enormous dome to be built without traditional wooden centering supports. Because no existing machinery could lift heavy materials to such heights, Brunelleschi also invented and designed specialized hoisting machines, cranes, and lifting devices to transport stone, brick, and tools to the workers above the city. His combination of mathematics, engineering, and architectural vision transformed the Florence Cathedral dome into one of the greatest technical wonders of the Renaissance. Today, visitors can still climb to the lantern at the top of the dome and enjoy panoramic views of Florence.

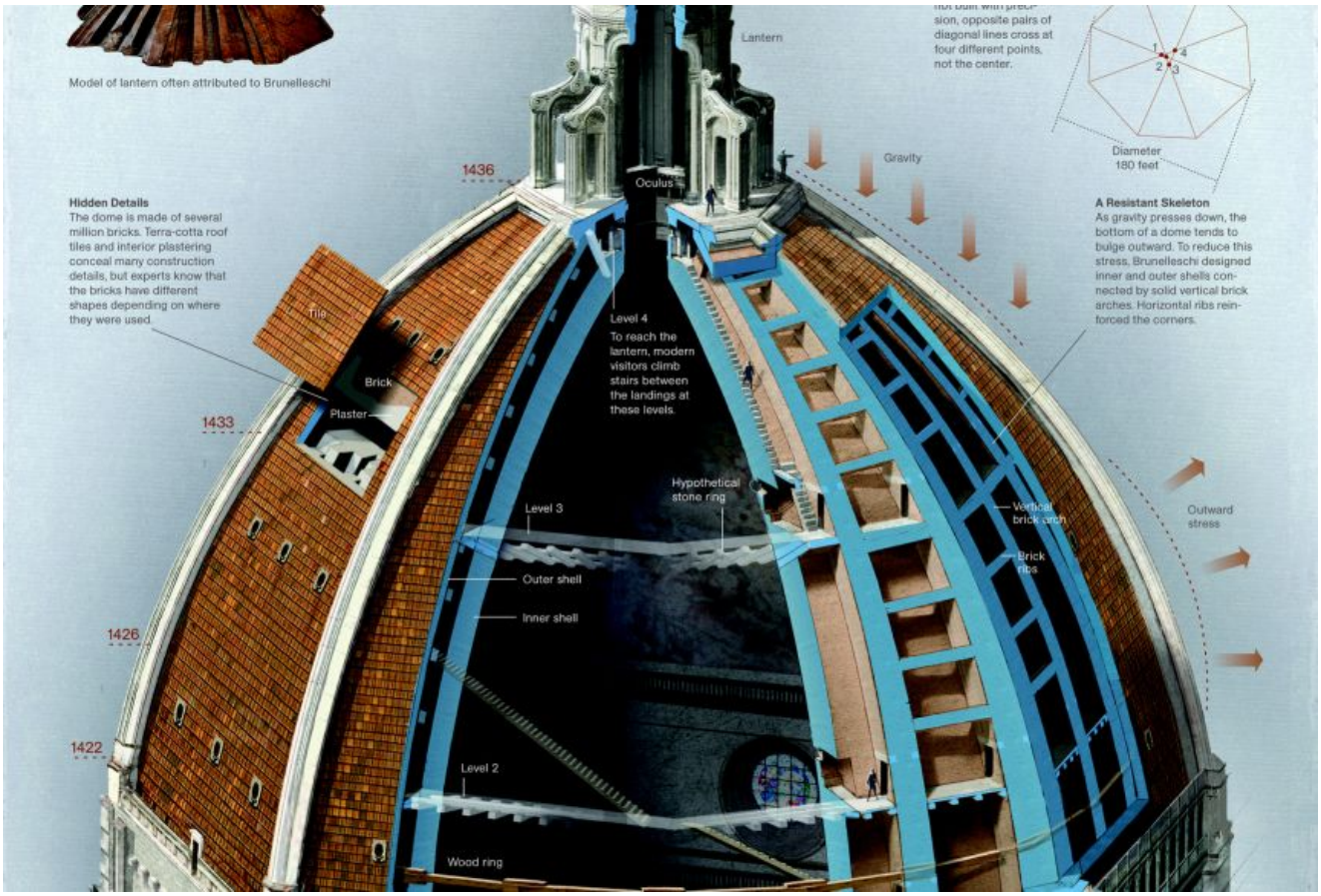


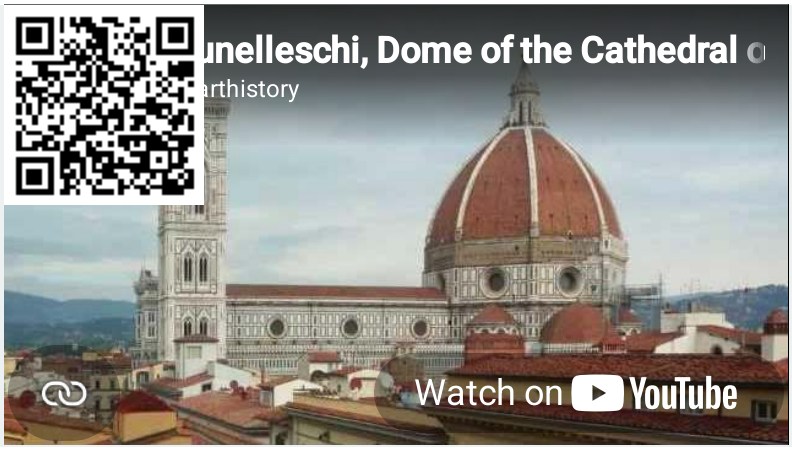
Figure \(\PageIndex{2}\): Brunelleschi dome exterior (CC BY-NC-SA)

Figure \(\PageIndex{3}\): Brunelleschi dome exterior (CC BY-SA 4.0)

Filippo Brunelleschi originally intended for the interior of the dome of Florence Cathedral to be covered in gold, allowing light entering the cathedral to reflect dramatically throughout the vast interior space. However, Brunelleschi died before the decoration could be completed, and the interior of the dome was instead left whitewashed for a period of time. Later, the Duke of Florence commissioned artists to decorate the inside of the dome with monumental painted scenes (x.x) illustrating **The Last Judgment** from the Bible. These enormous frescoes depict heaven, hell, angels, saints, and the final judgment of humanity according to Christian belief. Covering the immense curved interior of the dome, the paintings transformed the architectural masterpiece into a powerful religious and artistic experience that combined Renaissance engineering with dramatic visual storytelling.

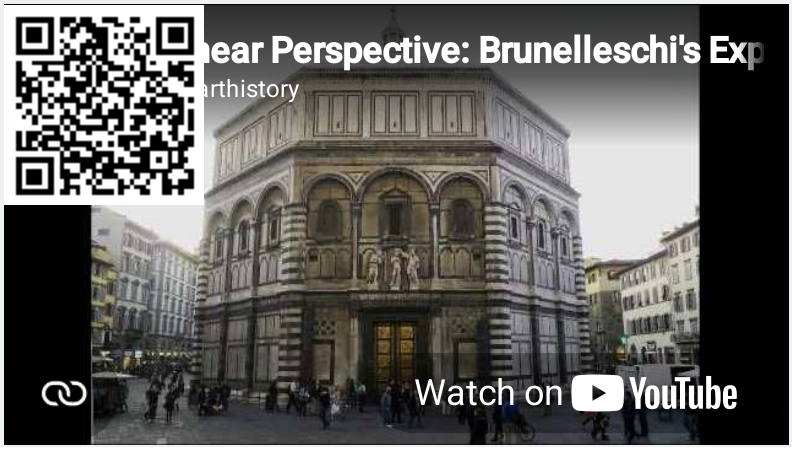
Brunelleschi, Dome of the Cathedral of Florence

Brunelleschi, Dome of the Cathedral of Florence, 1420-36.



Linear Perspective: Brunelleschi's Experiment

An introduction to Filippo Brunelleschi's experiment regarding linear perspective, c. 1420, in front of the Baptistry in Florence.



Donatello (1386–1466), born Donato di Niccolò di Betto in Florence, was one of the pioneering artists of the Early Renaissance. Working in the cultural center of Florence, Donatello helped revive classical artistic traditions inspired by ancient Greece and Rome while developing a new naturalistic style that emphasized realism, anatomy, and individual expression. Donatello received important support from Cosimo de' Medici, the influential leader of the powerful Medici family and one of the major patrons of Renaissance art. Around 1430, Donatello created his famous bronze sculpture David (8.2.4), recognized as the first freestanding nude statue produced in Europe since antiquity.

Before designing the sculpture, Donatello studied classical Greek and Roman art alongside Filippo Brunelleschi. Their study of ancient sculpture, proportion, and anatomy influenced the revival of classical ideals during the Renaissance. Donatello’s David combined biblical subject matter with the naturalistic human form admired in ancient art, making it one of the defining masterpieces of Renaissance sculpture.

Figure \(\PageIndex{4}\): *David* (CC BY-SA 4.0)

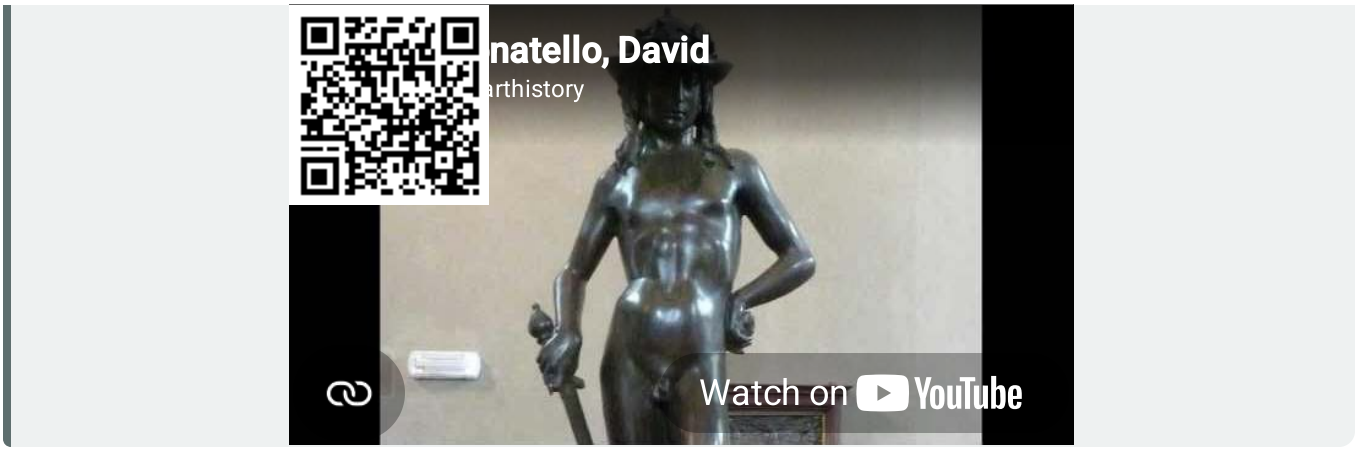
Figure \(\PageIndex{5}\): *David* closeup (CC BY-SA 4.0)

David revived the traditional freestanding sculptural stance associated with ancient Greek and Roman statues, making the work revolutionary during the Early Renaissance. For centuries during the Middle Ages, sculpture had generally been attached to architecture or created in rigid, symbolic forms. Donatello's David reintroduced the classical ideal of a fully freestanding nude figure rendered with naturalism, balance, and human emotion. The youthful David is portrayed with a tall, slender body standing in a relaxed **contrapposto** pose, where the figure's weight rests primarily on one leg while the other bends naturally forward over the severed head of Goliath. David leans casually on his sword, creating a graceful sense of movement and balance. His calm expression and enchanting smile (8.2.5), combined with smooth polished skin and long curly hair flowing beneath his helmet, give the sculpture an unusual combination of elegance, sensuality, and confidence.

The statue was displayed on a column in the courtyard of the Medici Palazzo rather than in a public town square, suggesting that the nude male figure may have been considered controversial in 15th-century Florence. At the time, such an openly naturalistic and human-centered depiction differed dramatically from the more modest and symbolic traditions of medieval art. Through works like David, Donatello helped lead the Renaissance movement toward greater acceptance of humanism, classical influence, realism, and the celebration of the human body as a subject worthy of artistic admiration.

Donatello, David

Donatello, David, bronze, late 1420s to the 1460s, likely the 1440s (Museo Nazionale del Bargello, Florence).



Tommaso di Ser Giovanni di Simone (aka Masaccio)

Masaccio, born Tommaso di Ser Giovanni di Simone (1401–1428), was one of the most influential painters of the **quattrocento**, the 15th-century period of the Early Renaissance in Italy. Although his artistic career lasted only a few years before his death at age twenty-six, Masaccio profoundly transformed Western painting through his innovative use of realism, perspective, and spatial depth. Moving away from the flatter and more decorative **Gothic style**, Masaccio introduced a highly convincing use of **linear perspective**, a mathematical system for creating the illusion of three-dimensional space on a flat surface. The word perspective derives from a Latin term meaning “to see through.” His paintings employed a **one-point perspective** system in which parallel lines converge toward a single **vanishing point** (8.2.6), similar to railroad tracks appearing to meet in the distance.

Masaccio’s mastery of perspective revolutionized painting because it allowed viewers to experience a believable architectural and spatial environment within the artwork. His famous fresco The Holy Trinity, located in Santa Maria Novella in Florence, demonstrates this innovation. Painted above a tomb, the fresco creates the illusion of a deep architectural chapel receding into space behind the wall. Through perspective, realistic figures, and careful use of light and shadow, Masaccio helped establish many of the artistic principles that would define Renaissance painting for generations.

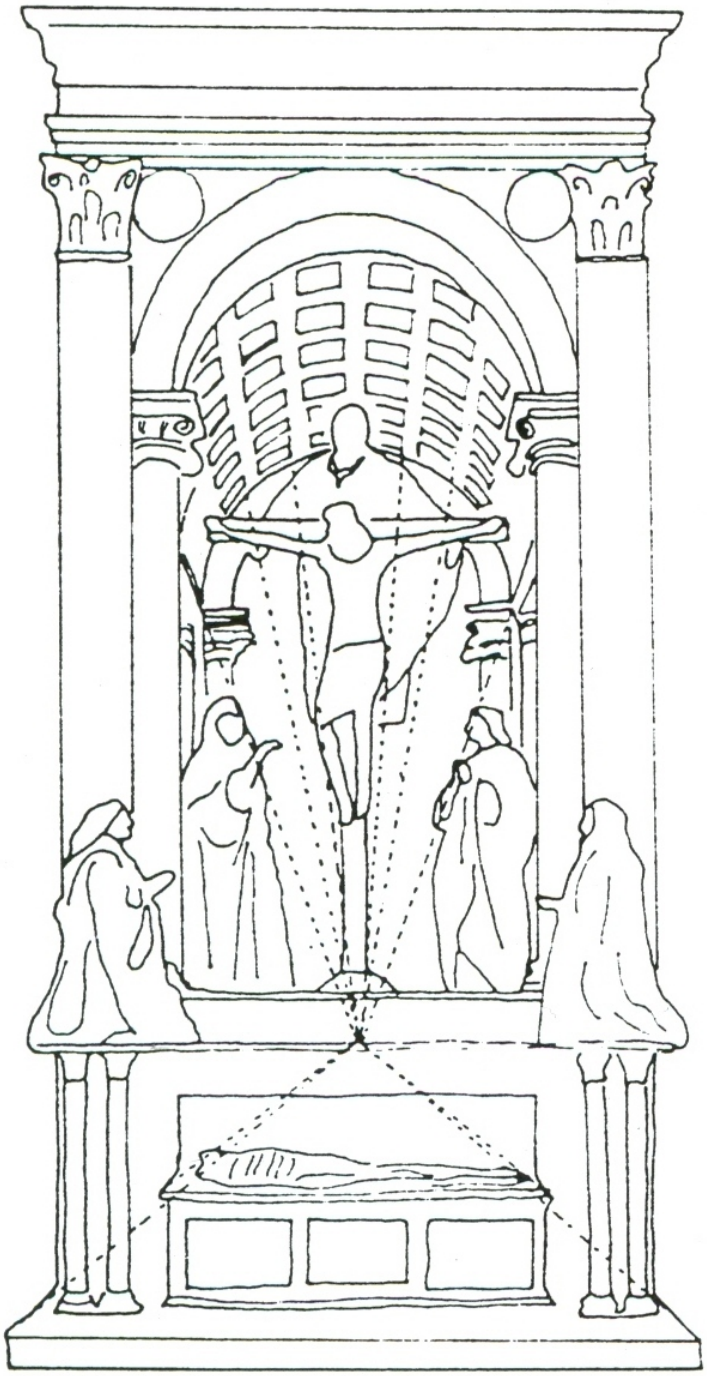


Figure \(\PageIndex{6}\): Perspective of the Trinity (Public Domain)

Quattrocento refers to the 15th century in Italy and is used to describe the art, architecture, and cultural developments of the Early Renaissance. Masaccio moved away from the flatter and more decorative **Gothic style** by introducing realistic spatial depth through the use of **perspective**. The word perspective comes from a Latin term meaning “to see through.” His innovative use of **linear one-point perspective** transformed painting and drawing by creating the illusion of three-dimensional space on a flat surface.

In one-point perspective, all parallel lines visually converge toward a single **vanishing point** (8.2.7), much like railroad tracks appearing to meet in the distance. This technique allowed artists to organize space mathematically and create more believable

architectural environments. Masaccio's famous fresco The Holy Trinity, located in Santa Maria Novella in Florence, demonstrates this revolutionary technique. Painted above a tomb, the fresco creates the illusion of a deep architectural space receding behind the wall, making the figures and setting appear remarkably realistic for the period.

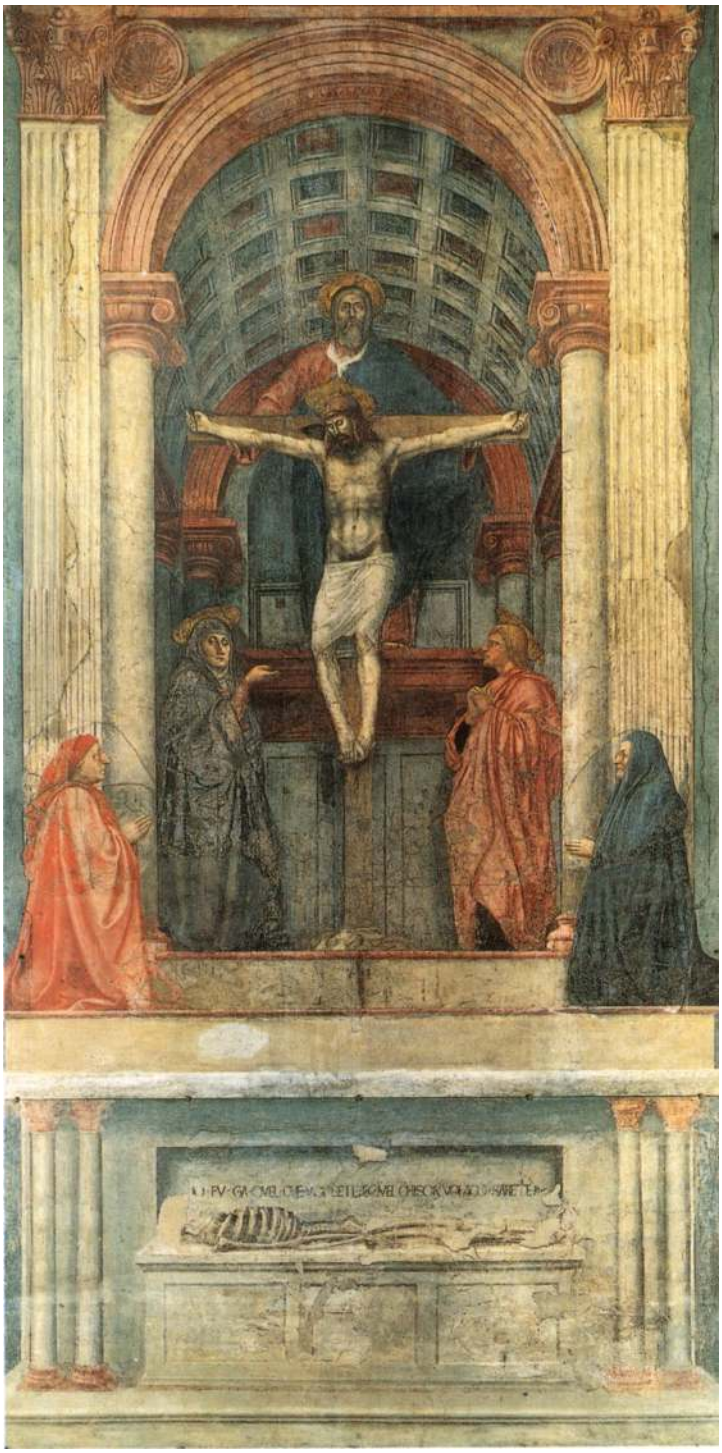


Figure \(\PageIndex{7}\): *Trinity* (Public Domain)

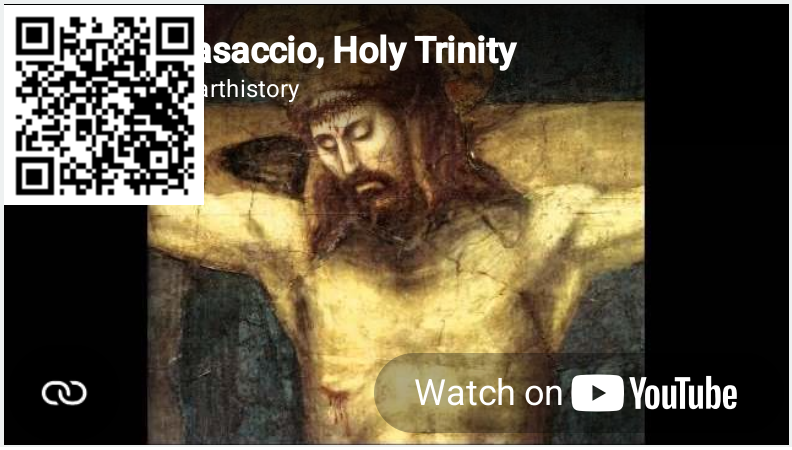
Masaccio may have drawn inspiration from the ancient Roman triumphal arches located in the Roman Forum when designing the architectural setting for The Holy Trinity. The fresco features a carefully constructed architectural space with **barrel vaults** and a coffered ceiling that recedes realistically into the background through the use of **linear perspective**. Masaccio used columns, arches, and the illusion of deep architectural space to create one of the earliest convincing examples of perspective in Renaissance

painting. The ceiling appears to extend far behind the wall, producing a realistic three-dimensional environment that dramatically differs from the flatter compositions typical of earlier **Gothic art**.

At the center of the composition is Christ on the cross, depicted with a naturalistic muscular body and realistic human anatomy. Christ looks downward toward Mary, while the surrounding figures are arranged within the illusionistic architectural setting. Below the sacred scene is an open tomb bearing the inscription: “As I am now, so you shall be. As you are now, so once was I,” a reminder of human mortality and the inevitability of death. The perspective system centers at a vanishing point located beneath the cross, helping unify the entire composition spatially. Masaccio’s remarkable use of perspective, realism, anatomy, and architectural illusion profoundly influenced later Renaissance artists and helped establish many of the visual principles that would define Renaissance painting.

Masaccio, Holy Trinity

Masaccio, Holy Trinity, c. 1427, Fresco, 667 x 317 cm, Santa Maria Novella, Florence.



Alessandro di Mariano di Vanni Filipepi (also known as Sandro Botticelli)

Sandro Botticelli, born Alessandro di Mariano di Vanni Filipepi (1445–1510), was an important Early Renaissance painter associated with the School of Florence. Supported by Lorenzo de' Medici, Botticelli worked during the height of Renaissance artistic achievement and became known for his graceful figures, flowing lines, and mythological subjects. At the age of fourteen, Botticelli apprenticed with Fra Filippo Lippi, where he developed his skills in drawing, painting, and composition. Surrounded by the intellectual and artistic environment of Florence, Botticelli became one of the leading painters of the Renaissance.

In 1485, Botticelli created one of the most famous paintings of the Renaissance, The Birth of Venus (8.2.8). Inspired by classical mythology and ancient Greek sculpture, the painting depicts Venus, the goddess of love, emerging from the sea and standing gracefully upon a giant seashell. Botticelli likely drew inspiration from ancient statues collected by the Medici family. In the scene, the wind god Zephyr gently blows Venus toward the shore while an attendant waits to cover her with a flowing red robe. The composition combines mythology, beauty, elegance, and classical ideals, reflecting the Renaissance fascination with ancient Greek and Roman culture as well as the celebration of human beauty and harmony.

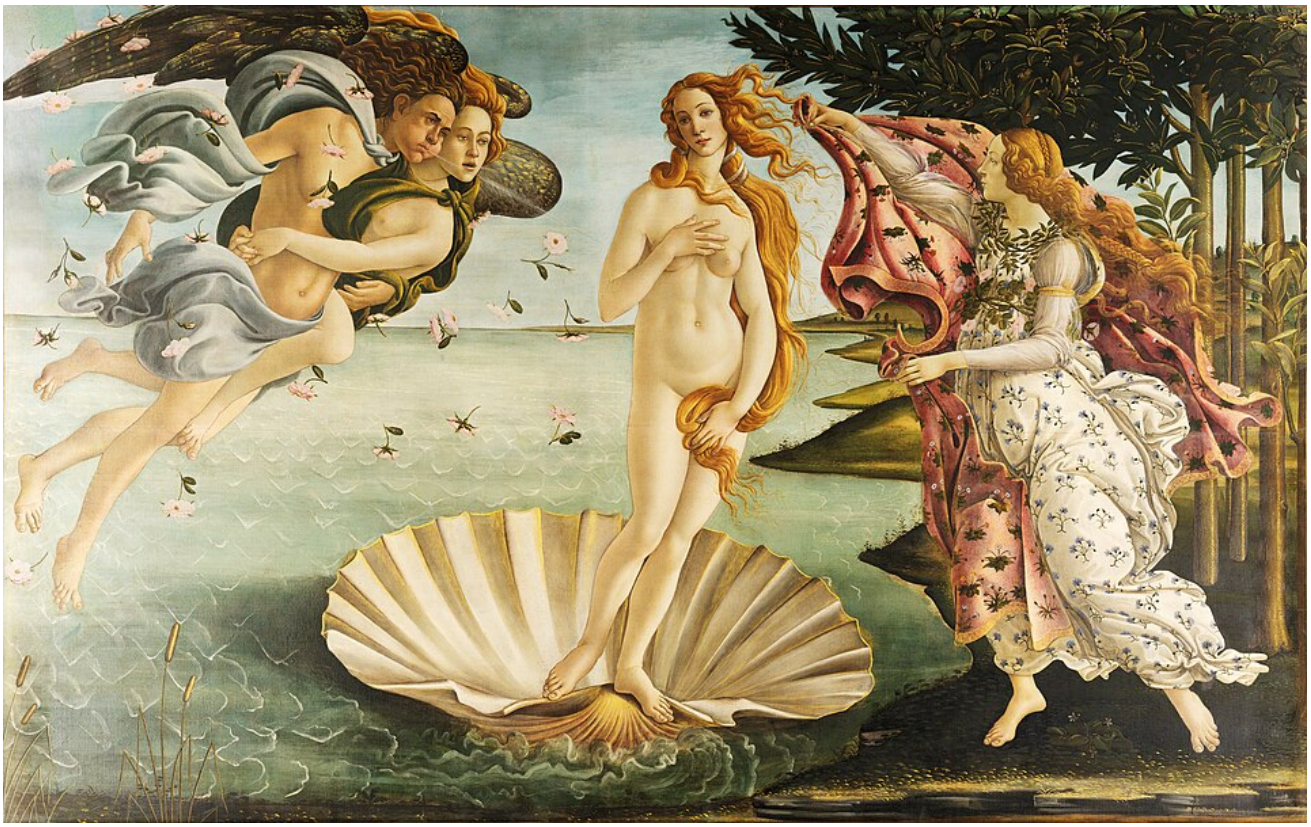


Figure \(\PageIndex{8}\): *The Birth of Venus* (Public Domain)

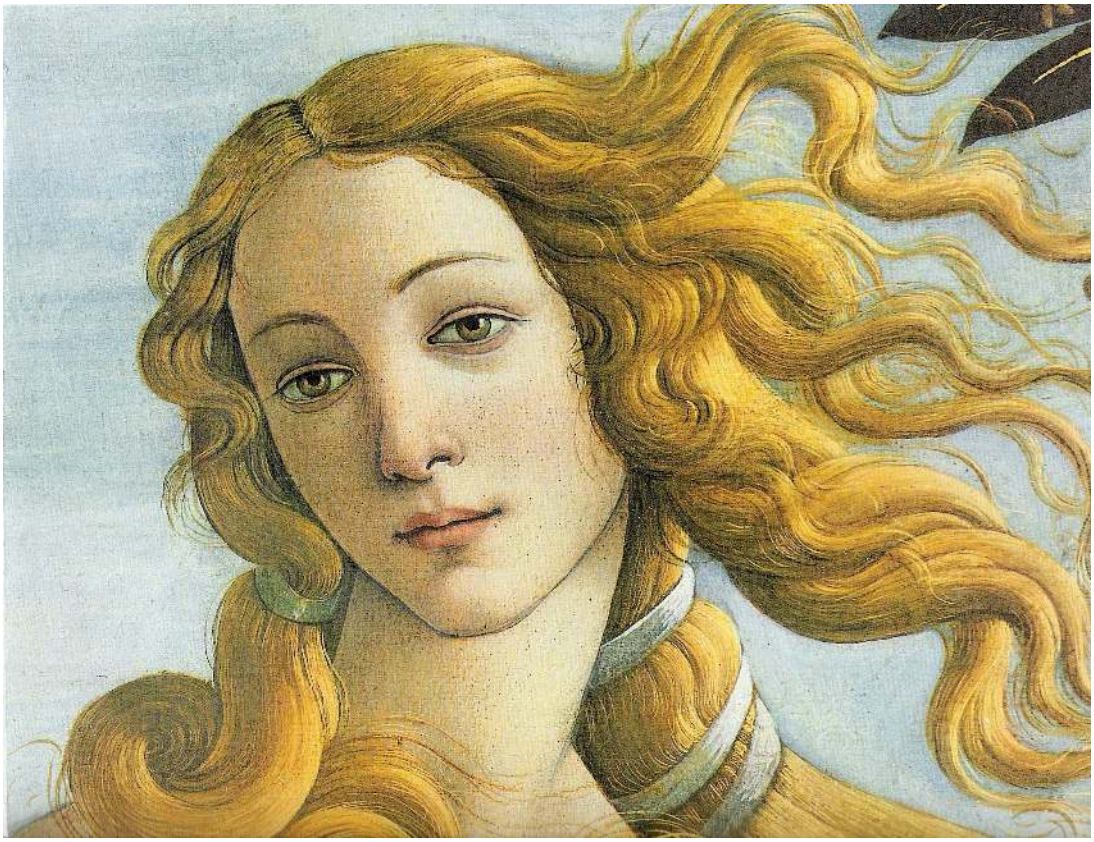


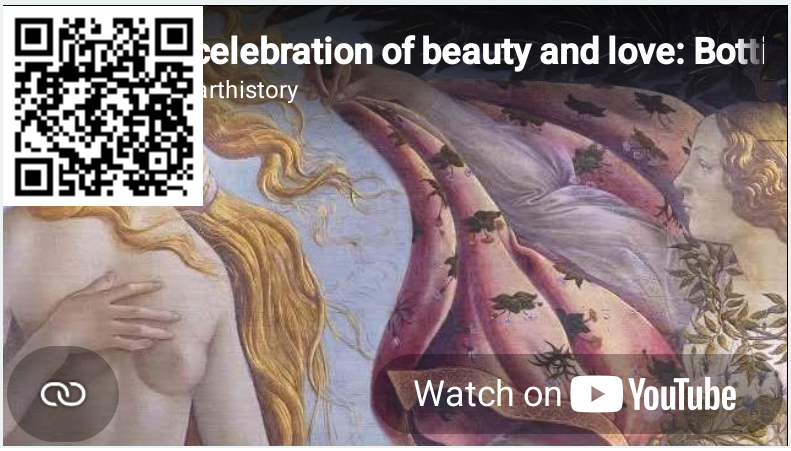
Figure \(\PageIndex{9}\): *Closeup of Venus* (Public Domain)

Unlike the highly structured spatial realism found in the paintings of Masaccio, the background of The Birth of Venus by Sandro Botticelli appears flatter and less concerned with mathematical depth and perspective. The figures seem almost weightless, floating gracefully rather than standing firmly on the ground, creating a dreamlike and poetic atmosphere that differs from the more realistic tendencies typical of many Renaissance artists.

The body and face of Venus (8.2.9) are painted with delicate pastel tones and soft flowing lines rather than strong anatomical realism. Her expression appears calm and melancholy, while her long hair moves dramatically in the wind, adding elegance and motion to the composition. These qualities give the painting an ethereal and sensual quality that blends classical mythology with idealized beauty. Botticelli's style emphasized graceful contour lines, decorative movement, and emotional atmosphere over strict realism and scientific perspective. This unusual approach made *The Birth of Venus* one of the most distinctive and memorable paintings of the Renaissance, reflecting both the era's fascination with classical mythology and its growing appreciation for beauty, poetry, and human emotion.

A celebration of beauty and love: Botticelli's Birth of Venus

Sandro Botticelli, Birth of Venus, c. 1485, tempera on canvas, 172.5 x 278.5 cm (Uffizi Gallery, Florence)



Jheronimus van Aken (aka Hieronymus Bosch)

Hieronymus Bosch, born Jheronimus van Aken (1450–1516), was an early Netherlandish painter renowned for his imaginative, highly detailed, and often unsettling imagery. His paintings combined religious symbolism, moral lessons, fantasy, and surreal landscapes unlike anything produced by most other Renaissance artists. Bosch became especially famous for creating scenes filled with strange creatures, symbolic objects, and dramatic visions of human temptation and spiritual consequence. His most celebrated work is The Garden of Earthly Delights (8.2.10), painted around 1490. The painting is a large **triptych**, meaning it consists of three hinged panels painted on oak wood. When the outer panels are closed, viewers see a monochromatic black-and-white image (8.2.11) representing the world during creation. The earth appears as a globe-like form with a flat landscape beneath gathering clouds that resemble the atmosphere surrounding the planet.

When the panels are opened, however, the interior reveals an extraordinary explosion of color and detail depicting scenes traditionally interpreted as heaven, earthly temptation, and hell. The dramatic contrast between the subdued exterior and the vivid interior surprises viewers and heightens the emotional and symbolic impact of the work. Bosch's paintings are filled with unusual imagery, fantastical creatures, symbolic references, and moral warnings about sin, desire, and human behavior. His imaginative visual style made him one of the most unique and influential painters of the Northern Renaissance.

Figure \(\PageIndex{10}\): *Garden of Earthly Delights* (Public Domain)

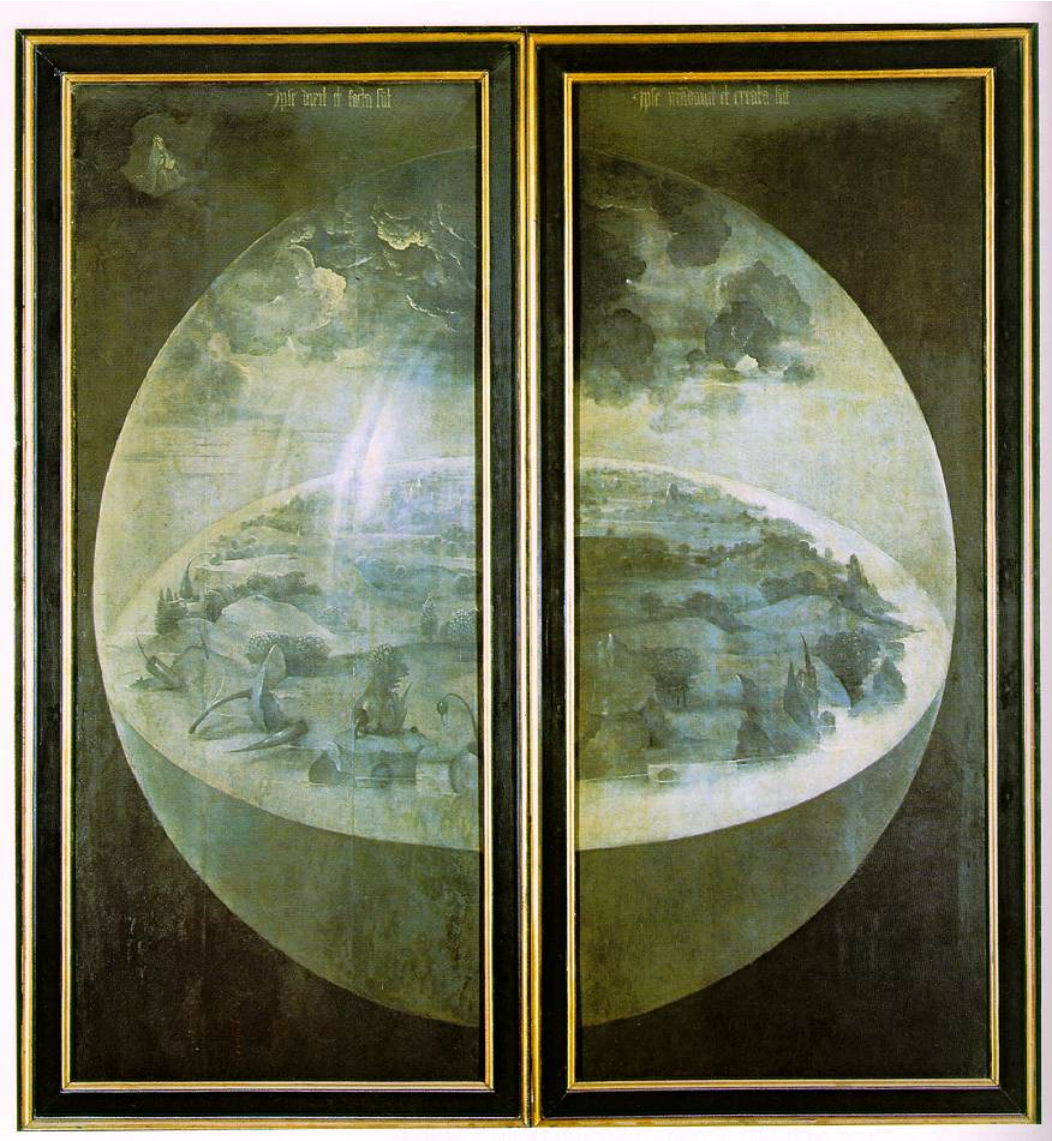


Figure \(\PageIndex{11}\): *Garden of Earthly Delights* exterior (Public Domain)

Figure \(\PageIndex{12}\): *Garden of Earthly Delights* panel (Public Domain)

When the wings of The Garden of Earthly Delights are opened, viewers encounter a radiant and highly imaginative world filled with countless nude figures engaged in humorous, strange, and sometimes unsettling activities. The artistic freedom encouraged during the Renaissance allowed Hieronymus Bosch to experiment with religious imagery in remarkably inventive ways. Although painted centuries ago, the bizarre and surreal scenes appear strikingly modern and continue to fascinate contemporary audiences. As the viewer explores the triptych, the eye moves constantly across the crowded compositions, creating a dreamlike and emotionally intense experience. One section of the panel (8.2.12) depicts people eating oversized fruit, giant birds soaring through the landscape, and horses racing among fantastical scenes where beauty and repulsion exist side by side. Bosch combined playful imagery with darker symbolic undertones, creating a world that appears both enchanting and morally ambiguous.

The painting presents an imaginary realm suspended between heaven and hell, where figures seem free from responsibility, maturity, and ordinary human limitations. The strange landscapes, unusual creatures, and surreal combinations of forms give the work an almost science-fiction quality far ahead of its time. Because Bosch left no written explanations of his ideas, viewers and historians continue to debate the meaning of the painting. This mystery contributes to the enduring fascination of *The Garden of Earthly Delights*, inviting audiences to wander through its symbolic world and interpret its strange and imaginative imagery for themselves.

Leonardo di ser Piero da Vinci (aka Leonardo da Vinci)

Leonardo da Vinci (1452–1519) is considered one of the greatest figures of the Renaissance because of his extraordinary achievements in art, science, engineering, anatomy, mathematics, architecture, astronomy, music, and invention. Leonardo embodied the ideal of the “Renaissance man,” someone skilled across many fields of knowledge and driven by intense intellectual curiosity. Born into a prominent Tuscan family, Leonardo moved to Florence as a teenager to begin his artistic training. He joined the painters’ guild and quickly thrived in the creative and scholarly environment of Renaissance Florence. Throughout his career,

Leonardo worked for various patrons, producing paintings, engineering designs, scientific studies, architectural plans, and mechanical inventions.

Leonardo became especially fascinated with human anatomy. To better understand how the human body functioned, he secretly studied and dissected corpses, carefully observing muscles, bones, organs, and the brain. His anatomical drawings (8.2.13) were remarkably detailed and scientifically advanced for the period. Among his studies are famous illustrations of the human body and detailed images of a fetus in the womb (8.2.14), demonstrating both artistic skill and scientific observation. Driven by an insatiable curiosity about the natural world, Leonardo filled thousands of notebook pages with sketches, scientific investigations, engineering concepts, and observations about anatomy, physics, water, flight, and mechanics. His combination of artistic mastery and scientific inquiry made him one of the most influential thinkers in history.

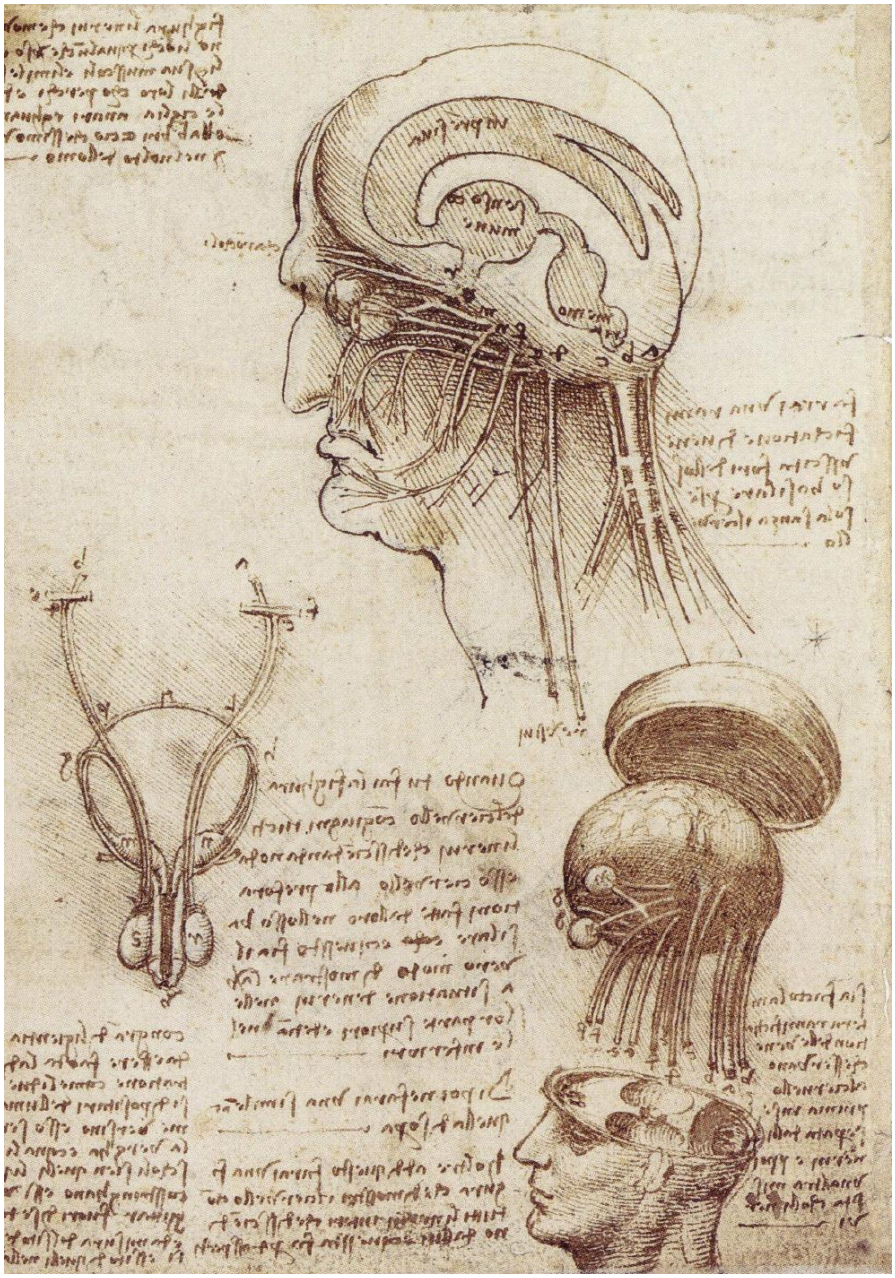


Figure \(\PageIndex{13}\): Brain physiology (Public Domain)

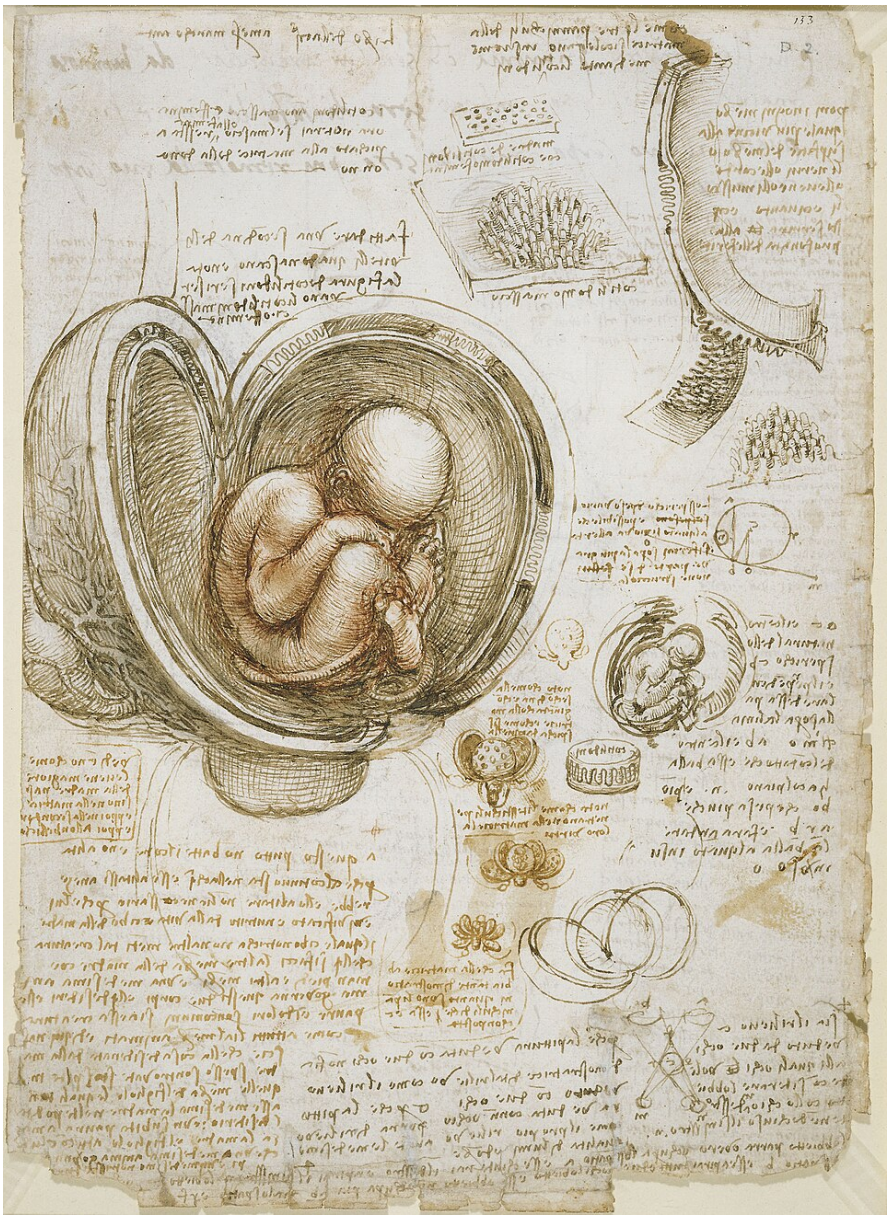


Figure \(\PageIndex{14}\): *Fetus in the womb* (Public Domain)

Leonardo da Vinci left behind an enormous collection of drawings, notebooks, and scientific studies that continue to be examined today. His work reveals a deep fascination with the natural world and an extraordinary attention to detail. Leonardo carefully observed nature, anatomy, movement, light, plants, animals, and mechanical systems, studying every form and structure before beginning a finished artwork. Before painting, Leonardo typically created numerous preparatory sketches and compositional studies, carefully planning every aspect of the final image. His artistic process reflected both scientific observation and creative experimentation, allowing him to achieve remarkable realism and balance in his paintings.

Although Leonardo completed only about nineteen paintings during his lifetime, he produced thousands of drawings, notes, diagrams, and written observations. His notebooks explored subjects ranging from anatomy and engineering to astronomy and hydraulics, demonstrating his wide-ranging intellectual curiosity. Leonardo also developed a distinctive writing style in which he wrote backward in reverse Italian script, a method often called **mirror writing**. The text can be read normally when viewed in a mirror. Historians continue to debate whether this technique was intended for secrecy, convenience, or simply personal habit. Regardless, Leonardo's notebooks remain some of the most valuable records of Renaissance scientific and artistic thought.

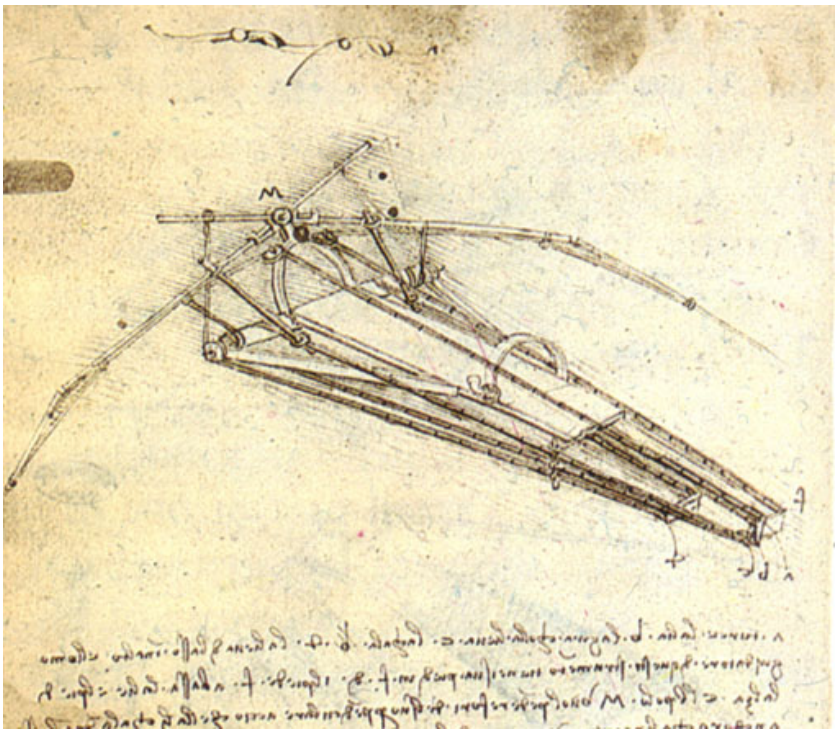


Figure \(\PageIndex{15}\): *Flying Machine* (Public Domain)

Leonardo da Vinci designed and envisioned an extraordinary range of tools, machines, and conceptual inventions centuries ahead of their time. His notebooks contain detailed sketches and engineering studies exploring mechanics, flight, architecture, military technology, hydraulics, anatomy, and scientific observation. One of Leonardo's most famous drawings is Vitruvian Man (8.2.16), created in 1492 using ink on paper. The drawing depicts an idealized male figure positioned within both a circle and a square, illustrating perfect human proportions based on the writings of the ancient Roman architect Vitruvius. The image symbolizes the Renaissance belief that mathematics, science, nature, and the human body were interconnected through harmonious proportions.

Leonardo's journals also contain numerous designs for flying machines, musical instruments, pumps, bridges, cannons, and other inventions. Among the most remarkable is the human-powered **ornithopter** (8.2.15), a conceptual flying machine inspired by the movement of birds. The design featured a lightweight wooden framework and large mechanical wings intended to generate lift through human motion. Although many of Leonardo's inventions were never built during his lifetime, his notebooks demonstrate an extraordinary imagination and understanding of engineering principles. His studies of motion, mechanics, and anatomy helped lay the groundwork for later scientific and technological developments.

Leonardo da Vinci's Drawing Materials

In this short film, conservator Alan Donnithorne explores the materials that Leonardo da Vinci used to produce his magnificent drawings. Using examples from the holdings of the Royal Collection at Windsor Castle, the film looks at how Leonardo achieved the full range of effects, tailoring his materials to particular types of drawing.

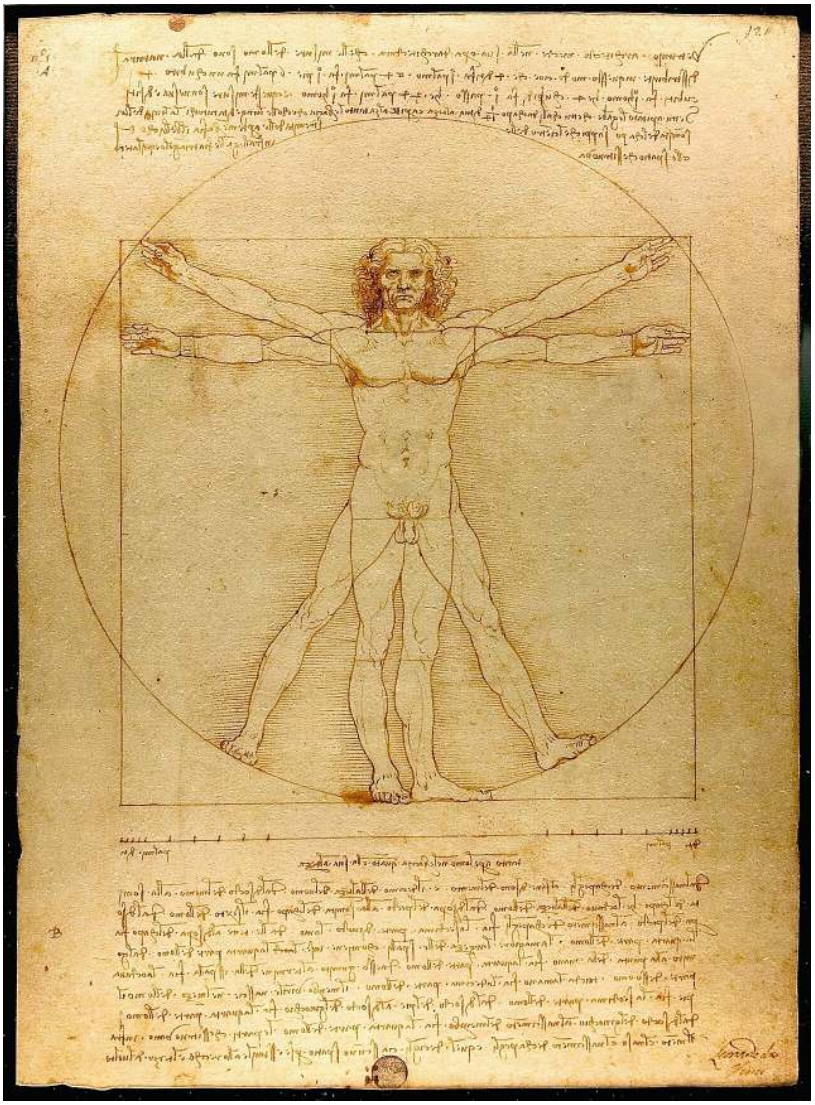


Figure \(\PageIndex{16}\): *Vitruvian Man* (Public Domain)

Leonardo da Vinci continues to inspire artists, scientists, engineers, and philosophers centuries after his death. His relentless curiosity, scientific observation, and artistic brilliance established him as one of the greatest figures of the Renaissance and one of the most influential individuals in history. Leonardo's ability to combine art, anatomy, engineering, mathematics, and imagination places him among the greatest creative minds of all time.

One of Leonardo's most famous and mysterious works is Mona Lisa (8.2.17). The painting has fascinated viewers for centuries because of its enigmatic expression and the many theories surrounding the identity of the sitter. Some have speculated that the portrait contains hidden symbols or even elements of a disguised self-portrait, while other theories focus on tiny markings supposedly visible in the eyes of the figure.

Traditionally, the painting is believed to portray Lisa Gherardini, the wife of a Florentine cloth merchant. However, Leonardo never delivered the portrait to the merchant, instead continuing to work on it for years. The figure is shown seated in a half-length pose wearing relatively simple clothing, with a distant atmospheric landscape and what appears to be a window-like opening behind her. The subtle modeling of the face, the delicate use of **sfumato**, and the famous mysterious smile create an emotional and psychological depth that continues to captivate audiences. Rather than relying on dramatic action or elaborate symbolism, the power of the *Mona Lisa* comes from its realism, quiet expression, and the sense that the viewer is being drawn into the painting itself.

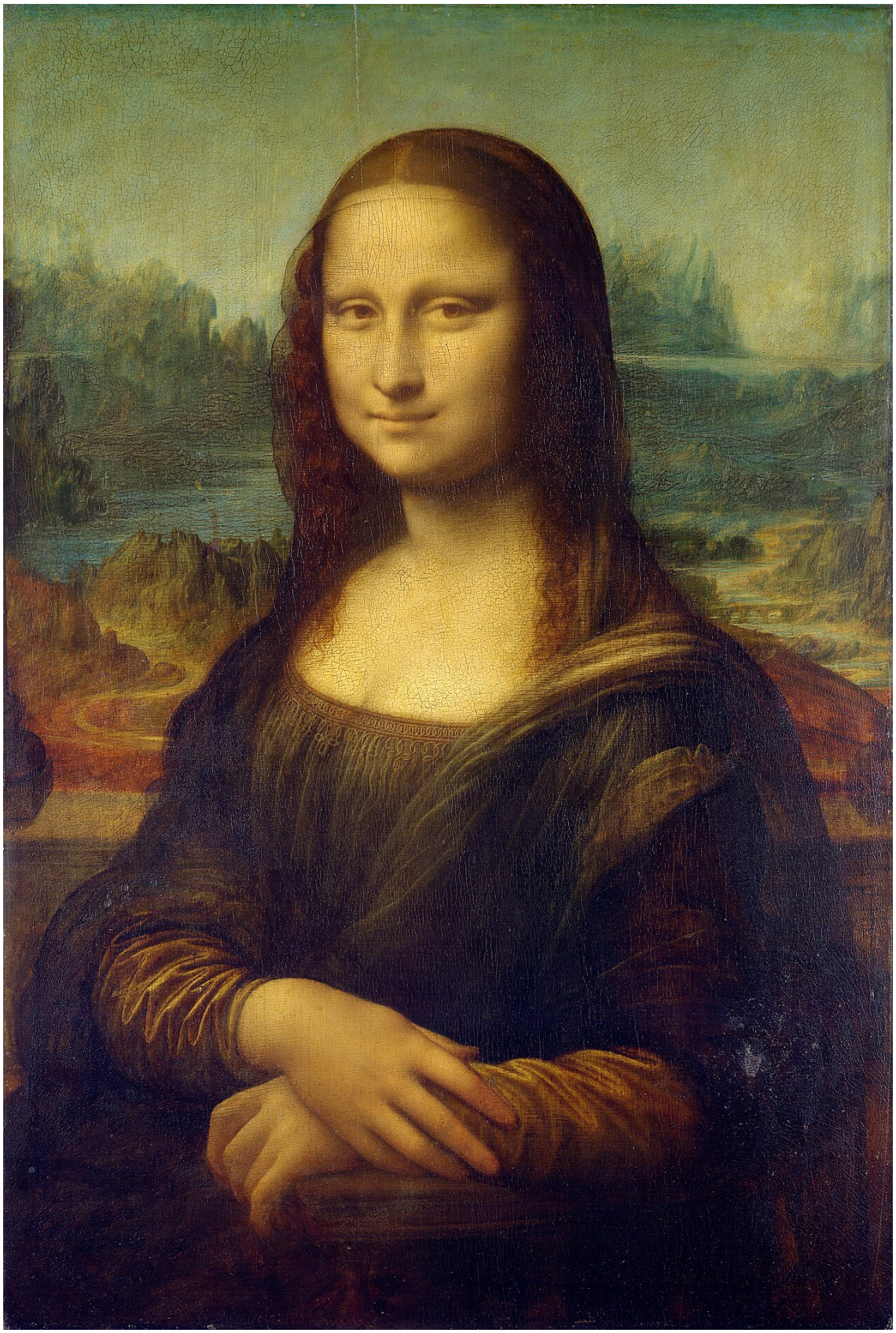
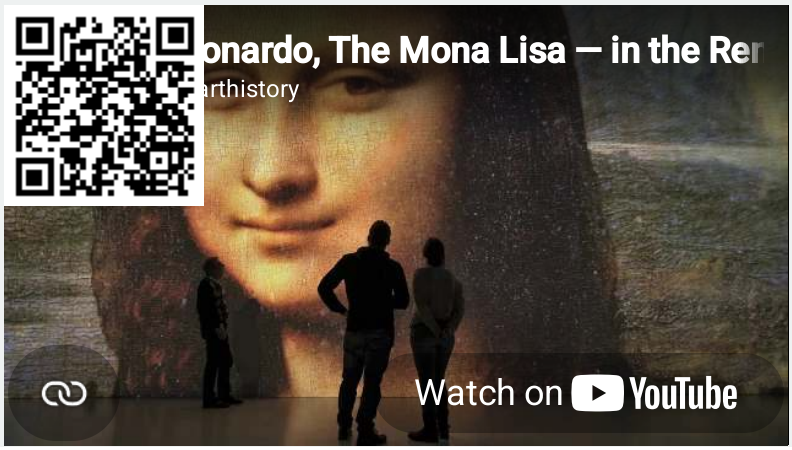


Figure \(\PageIndex{17}\): *Mona Lisa* (Public Domain)

Leonardo, The Mona Lisa - in the Renaissance and today

Mona Lisa, 1503-06, oil on wood, 77 x 53 cm (Louvre, Paris)



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8.3: High Renaissance

Definition: Term

- **Carrara Marble**: Fine white marble from Carrara, Italy, highly valued for sculpture because of its purity and smooth texture.
- **Monumental Sculpture**: A very large sculpture created to impress viewers and symbolize importance or power.
- **Anatomical Realism**: Accurate artistic representation of muscles, bones, veins, and the human body.
- **Contrapposto**: A natural standing pose where a figure's weight rests on one leg, creating balance and movement.
- **Humanism**: A Renaissance philosophy emphasizing human potential, achievement, and the importance of classical learning.
- **Idealized Figure**: A representation of the human body perfected according to artistic standards of beauty and proportion.
- **Psychological Tension**: Emotional intensity or inner thought expressed through posture and facial expression.
- **Biblical Hero**: A heroic figure from the Bible, such as David, often represented in religious art.
- **Renaissance Humanism**: The Renaissance belief that humans possess dignity, intelligence, and creative potential.
- **Classical Ideals**: Artistic principles inspired by ancient Greek and Roman art emphasizing harmony, realism, proportion, and beauty.
- **Hellenistic art:** A style of Greek art from the Hellenistic period (323–31 BCE) characterized by dramatic movement, emotional expression, realism, and detailed representations of people and everyday life.
- **Coffered ceilings:** Ceilings divided into recessed panels, usually square or polygonal in shape, often decorated and used in Greek and Roman architecture to create visual depth and elegance.
- **Reflectography:** A scientific imaging technique, often using infrared light, that allows conservators and historians to see underdrawings or changes hidden beneath the surface layers of a painting.
- **Linear perspective:** A mathematical system used by artists to create the illusion of depth and space on a flat surface by making parallel lines appear to meet at a single vanishing point.
- **Foreshortening:** A technique used to create the illusion that an object or figure extends into space by shortening its proportions from the viewer's perspective.
- **Chiaroscuro:** An artistic technique using strong contrasts between light and dark to create the illusion of volume, depth, and dramatic effect.

The **High Renaissance** was the peak period of the Renaissance and occurred approximately between 1490 and 1527 CE. During this time, artists, architects, and thinkers achieved extraordinary levels of technical skill, realism, balance, and harmony in their work. The High Renaissance built upon the discoveries of the Early Renaissance, including perspective, anatomy, proportion, and classical inspiration, and refined them into highly sophisticated artistic masterpieces.

The movement was centered primarily in Rome, Florence, and other Italian cities, where wealthy patrons such as the Catholic Church and powerful families funded monumental artistic projects. High Renaissance art emphasized ideal beauty, balanced compositions, realistic human anatomy, emotional expression, and harmonious proportions inspired by ancient Greek and Roman art.

High Renaissance artists perfected techniques such as **linear perspective**, **foreshortening**, **chiaroscuro** (contrasting light and dark), and **sfumato** to create highly realistic and balanced compositions. Architecture during the period also reflected classical ideals of symmetry, proportion, and geometric order. The High Renaissance came to an end around 1527 CE after the Sack of Rome, a devastating attack that disrupted the artistic and political center of Renaissance Italy. However, the achievements of the High Renaissance profoundly influenced Western art for centuries and remain some of the most admired works in world history.

Michelangelo di Lodovico Buonarroti Simoni

Michelangelo (1475–1564), born Michelangelo di Lodovico Buonarroti Simoni, was one of the greatest artists of the High Renaissance and is widely considered one of the most influential creative figures in history. He excelled as a sculptor, painter, architect, engineer, and poet, demonstrating extraordinary mastery across multiple disciplines. Michelangelo became especially famous for his ability to transform marble into lifelike human figures filled with energy, emotion, and anatomical realism. His sculptures appear almost alive, reflecting his deep understanding of the human body and his belief that the figure already existed within the stone waiting to be revealed.

To create his masterpieces, Michelangelo personally traveled to the marble quarries at Carrara to select the exact blocks of marble he wanted to use. He carefully supervised the extraction process, ensuring the quality and integrity of the stone before it was cut from the mountain and transported to his workshop. His attention to every stage of the artistic process reflected both his perfectionism and his remarkable technical skill. Michelangelo's organic style, emotional intensity, and monumental treatment of the human form helped define High Renaissance art and influenced generations of artists long after his death.

Quarrying and carving marble

Take a trip to the quarries of Italy

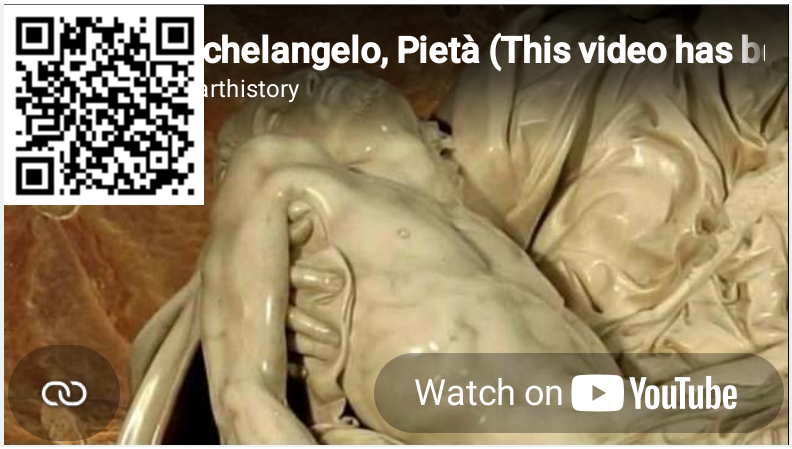
One of Michelangelo's first major commissions was the marble sculpture Pietà (8.3.1), created for a side altar in St. Peter's Basilica in Rome. The sculpture depicts the Virgin Mary holding the lifeless body of Christ after the crucifixion, a subject known in Christian art as the *Pietà*, meaning "pity" or "compassion." Contemporary writers and critics praised the work for its extraordinary beauty, technical perfection, and emotional power. One writer declared that no sculptor could surpass Michelangelo's level of grace, design, and ability to polish and carve marble. The sculpture quickly established Michelangelo's reputation as one of the greatest artists of the High Renaissance.

The flowing folds of Mary's robe appear to cradle and support Christ's body, creating both visual balance and emotional tenderness. Michelangelo carved Christ with remarkable anatomical precision and softness, making the marble appear almost like living flesh. The calm expression on Christ's face and the youthful serenity of Mary contribute to the sculpture's sense of spiritual beauty and quiet sorrow. The *Pietà* demonstrates Michelangelo's ability to combine technical mastery, realism, and emotional depth, qualities that became defining characteristics of High Renaissance sculpture.

Figure \(\PageIndex{1}\): *Pieta* (CC BY 2.5)

Michelangelo, Pieta

Michelangelo, Pietà, 1498-1500, marble (Saint Peter's Basilica, Rome)



David (8.3.2) is one of the greatest masterpieces of the High Renaissance and one of the most celebrated sculptures in history. Carved from luminous white marble from Carrara, the monumental statue stands approximately 4.10 meters tall and depicts an idealized young David poised before his battle with Goliath. Unlike many earlier artists who portrayed David after his victory holding the severed head of Goliath, Michelangelo chose to represent the tense psychological moment before the battle begins. David stands alert and contemplative, his body prepared for action while his expression reflects concentration, courage, and restrained anxiety.

Michelangelo's extraordinary attention to anatomical detail surpassed that of many other sculptors of the time. The figure's muscles, tendons, and veins (8.3.3) are carved with remarkable realism, giving the marble the appearance of living flesh beneath the skin. The tension in David's hands and arms suggests physical readiness, while the thoughtful expression on his face (8.3.4) conveys the emotional intensity of the moment before combat. The sculpture combines physical perfection, psychological depth, and classical ideals of beauty and proportion. Through David, Michelangelo transformed a biblical hero into a symbol of human strength, intellect, and inner resolve, qualities central to Renaissance humanism and artistic achievement.

Figure \(\PageIndex{2}\): *David* (CC BY 3.0)

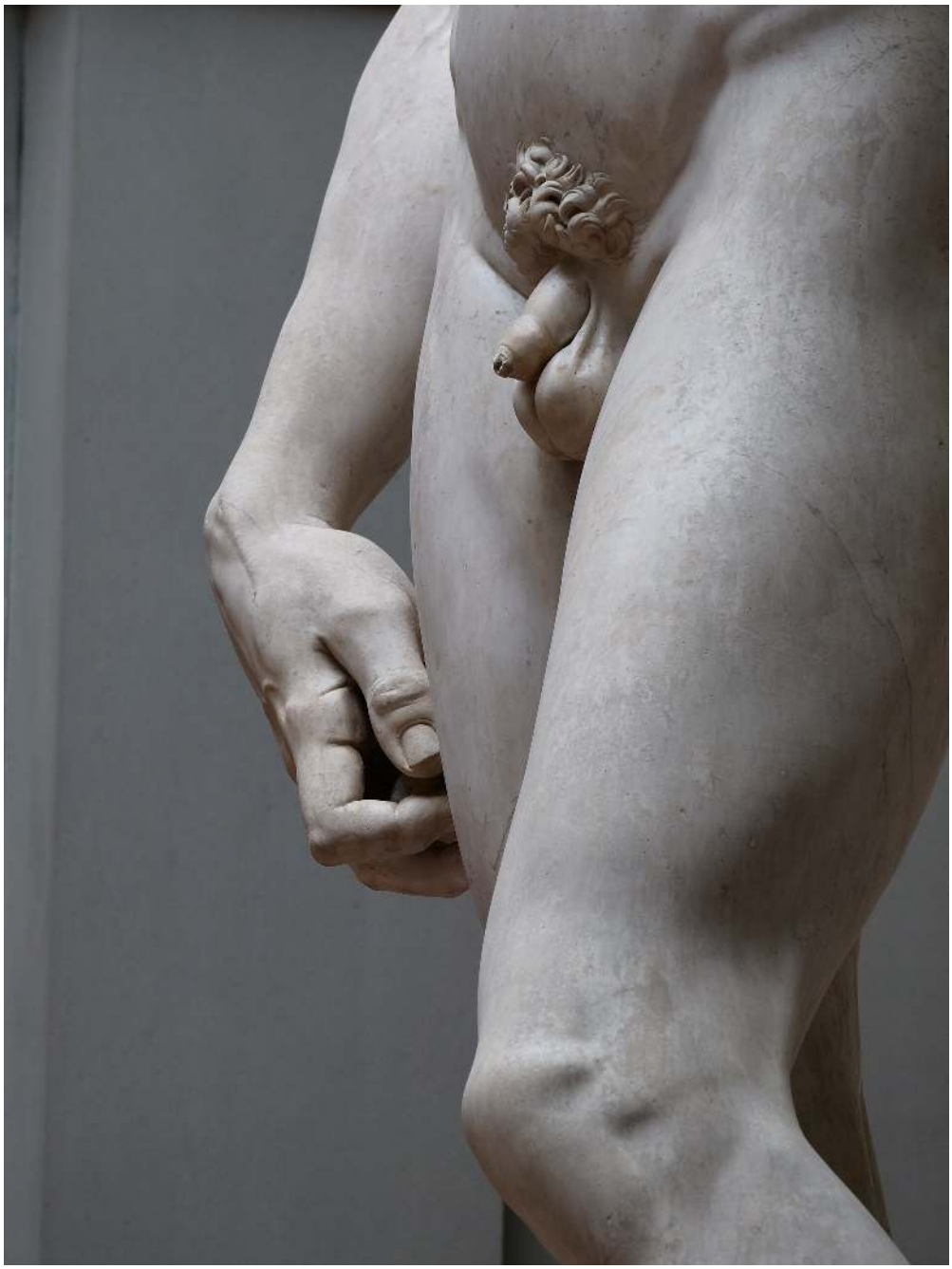


Figure \(\PageIndex{3}\): Leg and hand (CC BY 4.0)

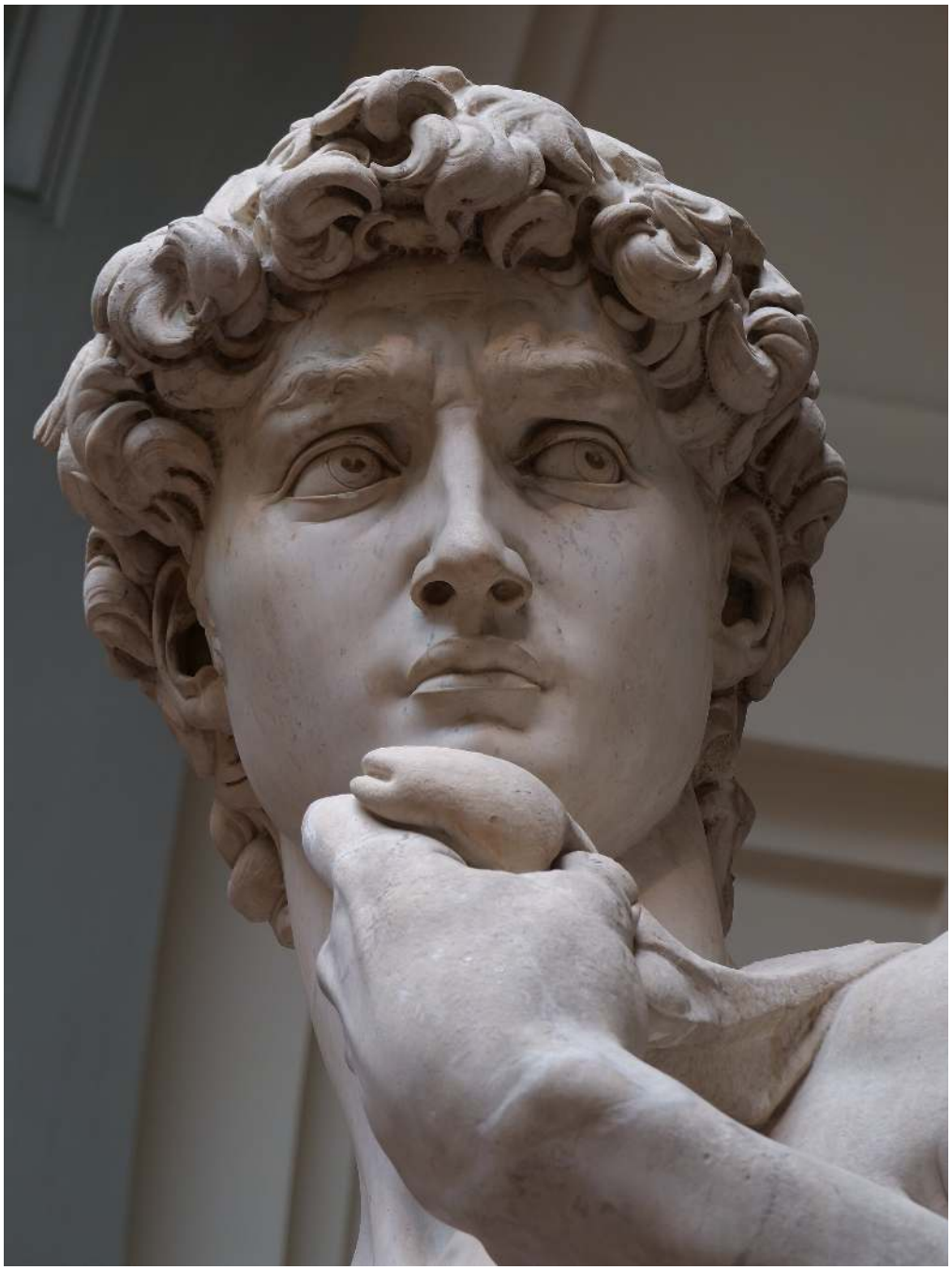
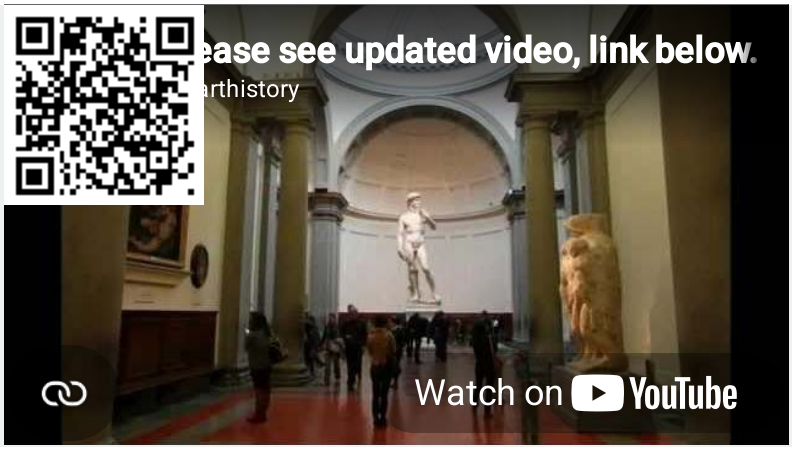


Figure \(\PageIndex{4}\): Head (CC BY 4.0)

David

Michelangelo, David, marble, 1501-04 (Galleria dell'Accademia, Florence)



Michelangelo was also a great painter even though he believed painting should be left to others because he considered himself primarily a **sculptor**. However, he knew he had to paint the **Sistine Chapel ceiling (**8.3.5) or face the wrath of the pope, who demanded that the project be completed. The massive ceiling is over 20 meters high, and Michelangelo designed special **scaffolding** so he could stand beneath the curved ceiling while painting. He began the work in 1508, carefully sketching figures, planning complex compositions, and preparing the surface for the **frescoes**.

The process of creating a fresco involved painting directly onto fresh wet plaster, requiring speed and precision before the plaster dried. Michelangelo spent years working on the ceiling, often in uncomfortable positions while reaching overhead to paint detailed biblical scenes and heroic human forms. His work demonstrated extraordinary knowledge of **human anatomy**, movement, and emotional expression. The ceiling contains scenes from the Book of Genesis, including the famous image of the **Creation of Adam**, where God reaches out toward Adam with extended hands. The completed ceiling became one of the greatest masterpieces of the **Italian Renaissance** and established Michelangelo as one of the most important artists in the history of Western art.

Figure \(\PageIndex{5}\): *Sistine Chapel* (CC BY 3.0)

The central ceiling consists of **nine panels** from the **Book of Genesis**, starting with the story of **Creation** and ending with **Noah and the Flood**. The very center panel is the iconic **Creation of Adam (**8.3.6), showing the outstretched hand of God giving life to Adam. Adam's finger extends toward God but does not quite touch, creating a sense of tension and magnetism between humanity and the divine. This image has become one of the most famous works in the history of **Western art**.

The **Libyan Sibyl** (8.3.7) is one of the most profound figures painted on the ceiling. Sibyls were female prophets from the ancient world believed to foretell the coming of Christ. Painted in a regal orange dress, the Libyan Sibyl lifts a large book from the shelf with a twisting motion that demonstrates Michelangelo's mastery of **human anatomy** and movement. Her powerful arms and back create a dramatic sense of strength, while the flowing folds of her clothing add realism and energy to the figure. The twisting pose reflects the influence of **Hellenistic art**, emphasizing tension, motion, and idealized beauty. Through these figures and scenes, Michelangelo transformed the **Sistine Chapel ceiling** into one of the greatest masterpieces of the **Italian Renaissance**.

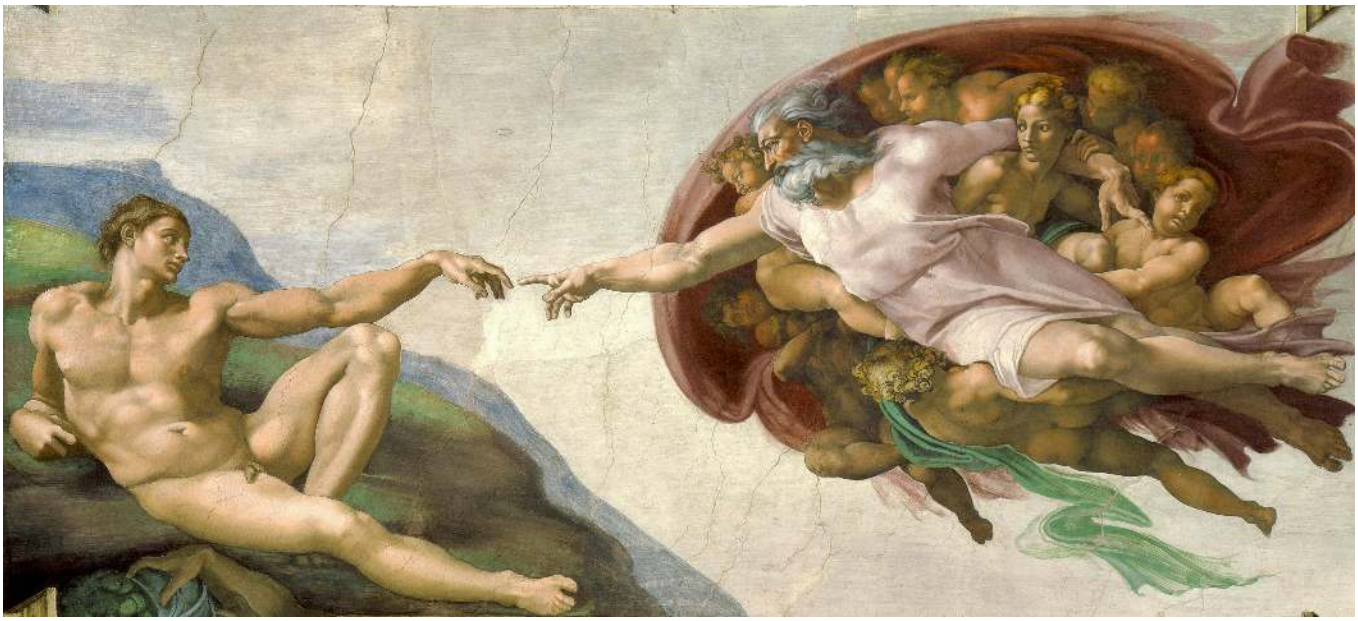


Figure \(\PageIndex{6}\): *Creation of Adam* (Public Domain)

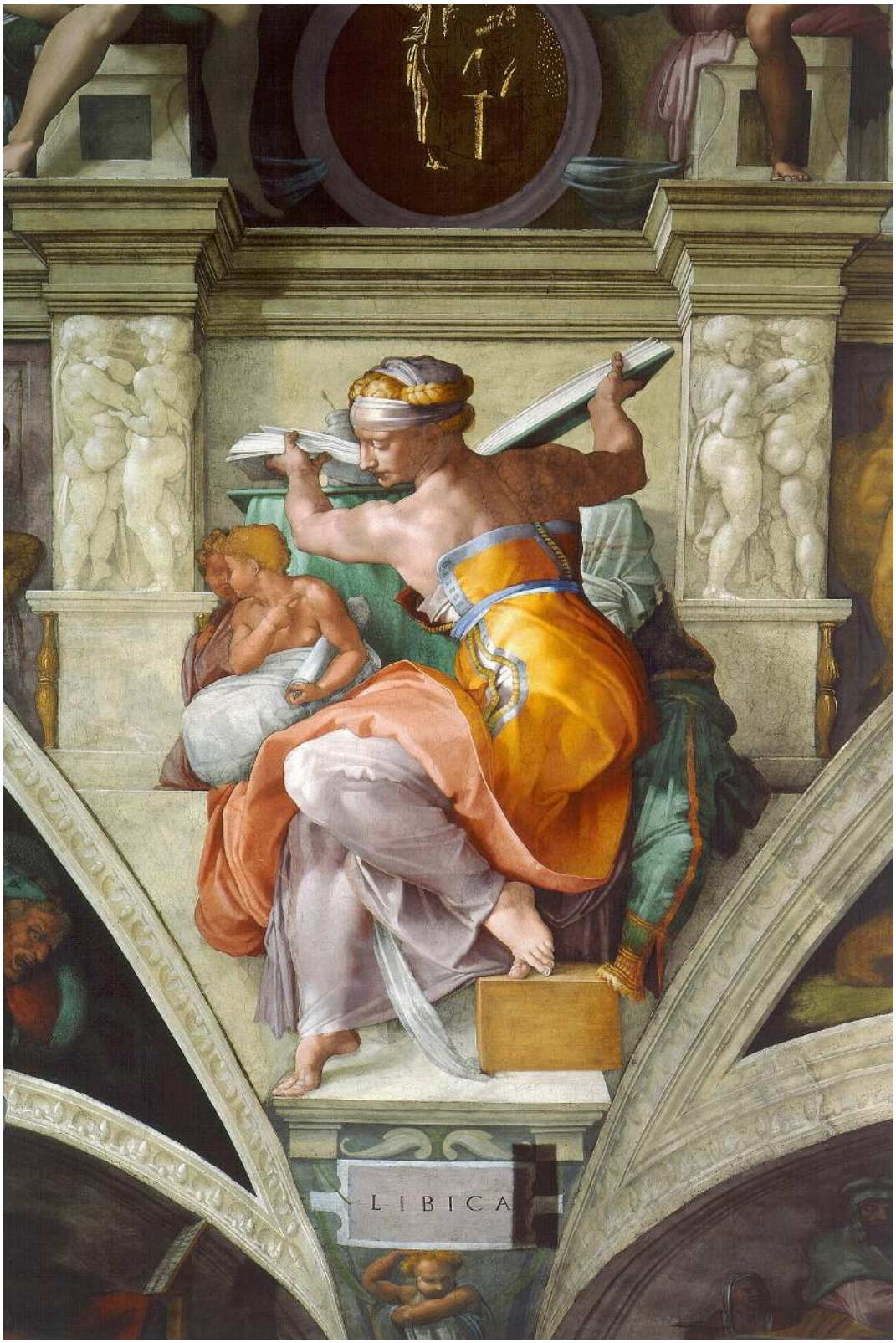


Figure \(\PageIndex{7}\): *Libyan Sibyl* (Public Domain)

To create the **fresco** style, Michelangelo covered a small section of the ceiling in wet **plaster** and then painted directly onto it before it dried. Because the plaster hardened within a few days, Michelangelo had to work quickly and carefully to complete each section. Day after day, he slowly moved across the massive ceiling, spending four long years standing on **scaffolding** with his neck

craned upward. Through this demanding process, he completed what would become the most iconic ceiling fresco in the world inside the **Sistine Chapel**.

In **1979**, a major **restoration** project began in the Sistine Chapel to clean and repair the ceiling frescoes and restore them to their original brilliance as first seen during the **Renaissance**. The restoration officially started in **1980** and involved removing over 500 years of accumulated soot, smoke, and dirt while also repairing cracks in the plaster. The delicate process continued until **1994**. Images of the prophet **Daniel** (8.3.8) before and after restoration dramatically reveal the difference between the darkened surface caused by centuries of grime and the vibrant colors Michelangelo originally painted. The restoration allowed viewers to rediscover Michelangelo's brilliant use of color, detail, and light, reaffirming his reputation as one of the greatest masters in the history of **Western art**. His artistic legacy extends far beyond the Renaissance, and his works continue to inspire artists, scholars, and visitors from around the world.

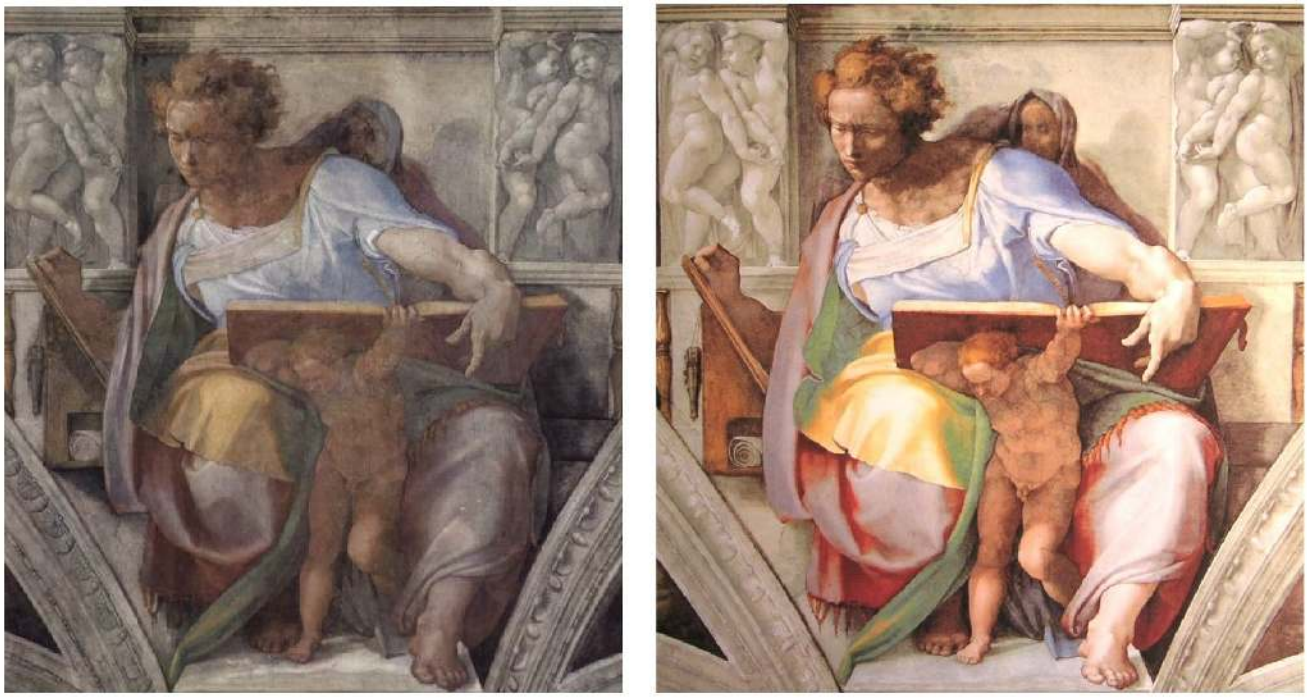
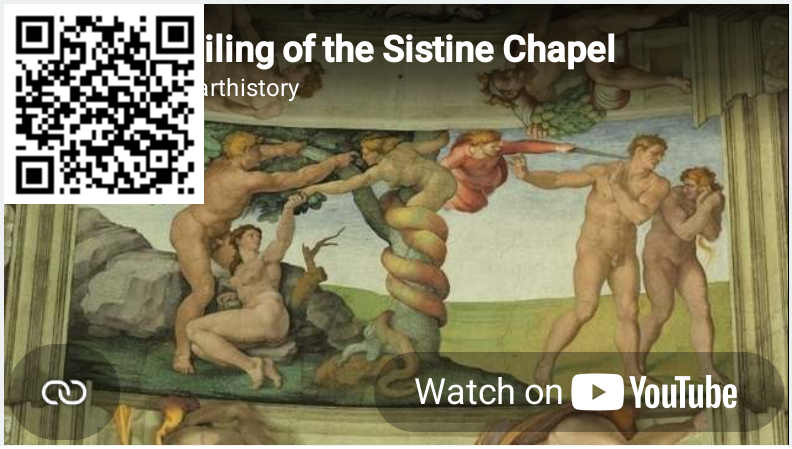


Figure \(\PageIndex{8}\): *Daniel before and after* (Public Domain)

Ceiling of the Sistine Chapel

The ceiling of the Sistine Chapel is one of Michelangelo's most famous works. Learn more about the history of this masterpiece. 1508-12, fresco (Vatican, Rome)



Raffaello Sanzio da Urbino

Raffaello Sanzio da Urbino (also known as Raphael) (1483-1520) was an Italian painter living in Florence, a contemporary of Leonardo da Vinci and Michelangelo. Although he died at the early age of thirty-seven, he left a sizeable body of work. Raphael was commissioned to paint the walls of the Vatican Library, a building adjacent to the Sistine Chapel, where Michelangelo was simultaneously painting the chapel's ceiling. The library was a small room, and Raphael painted a different allegorical fresco on each wall, representing the four branches of human knowledge: philosophy, theology, poetry, and justice, one on each wall.

Raphael, whose full name was **Raffaello Sanzio da Urbino** (1483–1520), was an important **Italian painter** of the **Renaissance** who lived in **Florence** and worked during the same period as Leonardo da Vinci and Michelangelo. Although Raphael died at the young age of thirty-seven, he produced a remarkable body of work celebrated for its balance, harmony, and clarity. Raphael was commissioned to paint the walls of the **Vatican Library**, located next to the **Sistine Chapel**, where Michelangelo was simultaneously painting the chapel ceiling.

The library room contained four walls, and Raphael painted a different **allegorical fresco** on each wall to represent the four branches of human knowledge: **philosophy**, **theology**, **poetry**, and **justice**. One of his most famous paintings is the **School of Athens**, which represents philosophy and intellectual achievement. In the center of the composition, **Aristotle** dressed in blue and brown walks beside **Plato**, who wears red and purple robes. Both philosophers hold books while moving forward in discussion, symbolizing the search for truth and knowledge. In the lower-left corner, **Pythagoras** demonstrates mathematical principles, emphasizing the importance of **mathematics** in understanding the universe. The grand architectural setting with massive arches and **coffered ceilings** reflects the influence of classical **Greek** and **Roman** architecture, linking the ideas of antiquity with the ideals of the Renaissance.

Raphael also painted **The Dispute**, the fresco representing **theology**. The composition is divided into two levels symbolizing **earthly life** and **heavenly life**. In the upper section, **Christ** sits among clouds surrounded by saints and holy figures, creating a vision of the divine realm. In the lower section, popes, priests, scholars, and church leaders gather together, representing humanity’s effort to understand spiritual truth. Through these paintings, Raphael combined classical learning with Christian belief, demonstrating the Renaissance interest in uniting faith, philosophy, science, and artistic beauty.

Raphael painted the famous *School of Athens* (8.3.9), portraying knowledge of the future on the east wall. In the center of the painting, Aristotle in blue and brown and Plato in red and purple are holding their books and appear to be walking forward. In the lower-left corner, Pythagoras demonstrates the importance of mathematics. There are statues of ancient Greek gods on either side of the great-coffered ceilings, linking antiquity with the Renaissance. The second painting on the west wall, *The Dispute* (8.3.10), represented theology divided horizontally into earthly life and heavenly life. In the top half, Christ is depicted sitting on a cloud bench, surrounded by saints. The spiritual figures in the bottom half represent popes, priests, and leaders of the church, bringing together celestial knowledge through the divine host.

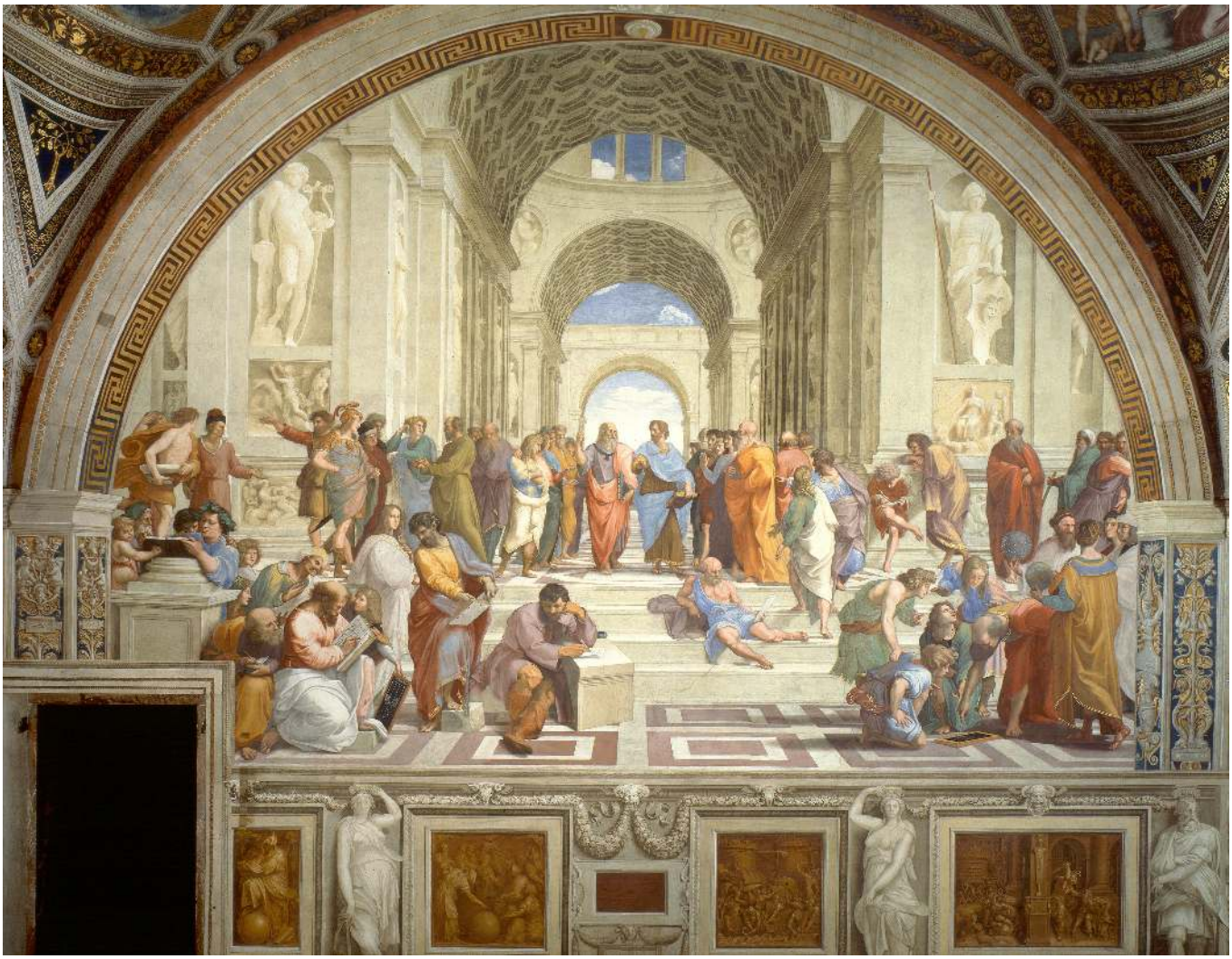


Figure \(\PageIndex{9}\): *School of Athens* (Public Domain)

Figure \(\PageIndex{10}\): *The Dispute* (Public Domain)

The third painting on the south wall, *The Cardinal and Theological Virtues*, (8.3.11) illustrates the important moral qualities known as the cardinal virtues through the personification of three women: **Fortitude**, **Prudence**, and **Temperance**. **Fortitude** holds a branch from an oak tree while the cupid Charity shakes the tree, symbolizing strength and endurance. **Prudence** gazes into a mirror reflecting two faces, representing wisdom and self-knowledge, while the cupid Hope carries a torch beside her. **Temperance** stands calmly near the cupid Faith, symbolizing balance, moderation, and spiritual control. Through these symbolic figures, Raphael demonstrated the Renaissance fascination with combining classical philosophy, Christian theology, and human morality.

The fourth painting on the north wall, *The Parnassus*, (8.3.12) represents **Mount Parnassus**, the mythical home of **Apollo** and the Muses in ancient Greek mythology. Apollo stands in the center beneath a laurel tree, playing a musical instrument and symbolizing harmony, poetry, and artistic inspiration. Surrounding Apollo are twenty-seven figures from ancient and contemporary culture. The composition includes the **nine muses**, along with poets from antiquity and contemporary Renaissance poets. By bringing together figures from the ancient world and his own time, Raphael connected the artistic achievements of classical Greece with the ideals of the **Italian Renaissance**.

Figure \(\PageIndex{11}\): *The Cardinal and Theological Virtues* (CC BY 4.0)

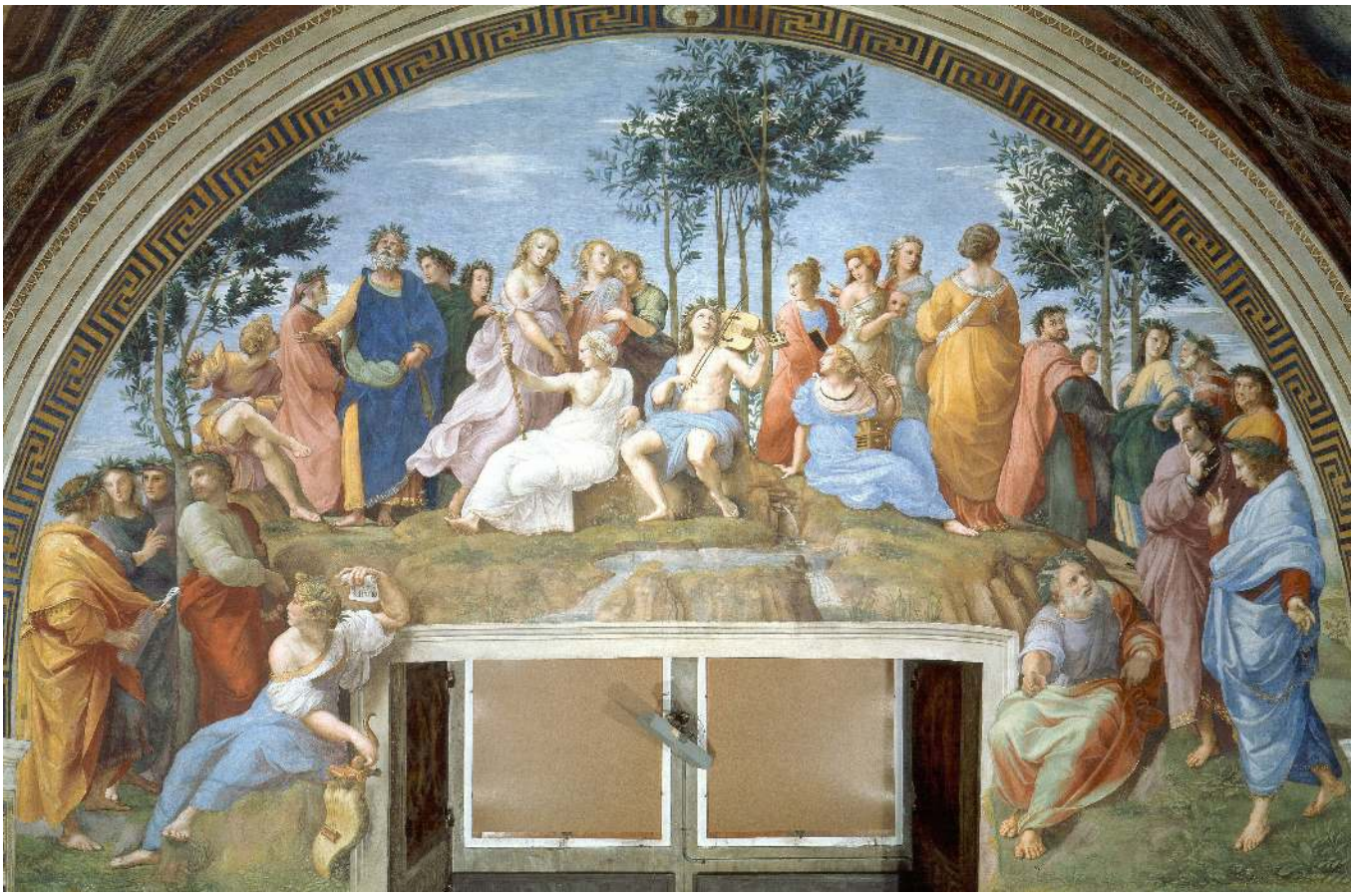


Figure \(\PageIndex{12}\): *The Parnassus* (Public Domain)

Together, the four paintings create a visual representation of the intellectual and cultural ideals of the Renaissance. Each fresco symbolizes one of the major branches of human knowledge—philosophy, theology, poetry, and law—demonstrating the Renaissance belief that wisdom could be achieved through the balanced study of many disciplines. Raphael organized each composition with remarkable harmony, carefully arranging the figures, architecture, and movement to guide the viewer's eye throughout the scene. The visual counterpoint created by the different groups of people adds energy and complexity while still maintaining a sense of balance and order.

In each painting, Raphael successfully combines classical influences from ancient Greece and Rome with Christian humanist ideals that were central to Renaissance thought. The figures appear natural and expressive, interacting with one another through gestures, movement, and conversation, which gives the scenes a lifelike quality. Raphael's mastery of perspective, proportion, and spatial depth further enhances the realism of the frescoes and creates the illusion of grand architectural spaces.

The paintings also reveal Raphael's ability to synthesize the artistic achievements of his contemporaries, including the anatomical power of Michelangelo and the compositional balance of Leonardo da Vinci, while maintaining his own elegant and refined style. Through these frescoes, Raphael presents the Renaissance as a period of intellectual rebirth, artistic innovation, and human potential. The unity, clarity, and beauty of the works demonstrate his unique and highly illustrative approach to painting, making the frescoes some of the greatest achievements of High Renaissance art.

Raphael, School of Athens

Raphael, School of Athens, fresco, 1509-1511 (Stanza della Segnatura, Papal Palace, Vatican)

Properzia de Rossi

Properzia de Rossi (1490-1530) was an Italian sculptor whose talent emerged at an early age. Because it was difficult for young girls to find any training except in managing a household, de Rossi learned to carve peach and apricot pits, an unusual material to use for anyone. The small sculptures were generally based on religious themes, and after carving her intricate scene of the crucifixion on a peach pit, her talent was acknowledged. De Rossi finally received training in marble at the university. She acquired a commission for a bas-relief panel and sculpted *Joseph and Potiphar's Wife* (8.3.13), displaying her talent for carving marble. Her talent was not well received by other artists, who frequently discredited her.

Figure \(\PageIndex{13}\): *Joseph and Potiphar's Wife* (Public Domain)

Suor Plautilla Nelli

Suor Plautilla Nelli (1524–1588) was a Florentine painter often referred to as “the nun artist” because of her deeply spiritual life and the religious paintings she created while living in the convent of Santa Caterina da Siena in Florence. Although women during

the Renaissance rarely had access to formal artistic training, Nelli learned to draw within the convent and eventually established an art studio composed of eight nuns. Her workshop became an important creative center where women could develop artistic skills that were normally reserved for men. Some historians believe Nelli was one of the most significant female artists of the Renaissance despite the limitations imposed on her because of her gender and cloistered life.

Recent scholarship has revealed that Renaissance convents were not isolated places of silence alone, but thriving centers of artistic, musical, and literary production. Within these convents, nuns created paintings, manuscripts, embroidery, and devotional objects that enriched the spiritual atmosphere of their communities while also providing an outlet for intellectual and artistic expression. Nelli's work reflects this environment, combining deep religious devotion with emotional sensitivity and strong visual storytelling.

One of her important paintings, *Lamentation of the Saints* (8.3.14), portrays the grieving figures surrounding Christ after his death. The Italian term *compianto*, meaning "grieving together," emphasizes the shared sorrow of the women gathered around the body. In the painting, the four women actively participate in preparing Christ for burial through prayer, mourning, and physical care. Their emotional expressions and gestures create an intimate and compassionate scene that highlights the importance of female experience and spiritual devotion. Unlike many Renaissance paintings in which male figures dominate the composition, Nelli places women at the emotional and narrative center of the work. The men positioned in the background appear primarily as observers, an unusual perspective during the Renaissance and one that reveals Nelli's distinct viewpoint as a female artist living within a religious community.

Figure \(\PageIndex{14}\): *Lamentation of the Saints* (16th century, oil on canvas, 288 x 192 cm) (Public Domain)

Nelli painted the *Last Supper* (8.3.15), which the Advancing Women Artists recently restored (8.3.16). Most art historians question the challenging work by Nelli, as the composition and anatomy of the people in the painting place her work at the forefront of Renaissance artists. They believe she would not have access to nude models.[5] Other artwork by Nelli has been discovered, and some pieces have also been restored, ensuring her place as an artist. The Last Supper hung on a wall in a Florence Monastery until it was removed from the stretchers, rolled up, and stored in a warehouse for decades. "The Florentine nonprofit's all-woman team of curators, restorers, and scientists then began the restoration process, performing tasks including removing a thick layer of yellow varnish, treating flaking paint, and conducting an analysis of the pigments' chemical composition." [6]

Before the restoration began, conservators used **reflectography** to examine the painting and identify any underdrawings hidden beneath the surface. The results suggested that Suor Plautilla Nelli may not have fully understood the enormous scale and complexity of the project she was undertaking. During the Renaissance, works of this size typically required a large workshop of trained assistants, scaffolding, and significant financial support to complete such a monumental task successfully. The painting also provides important insight into daily life and dining culture in 16th-century Florence. The elaborate table is carefully arranged with fine china, multiple glasses of wine, plates of bread, and a whole roasted lamb, foods commonly associated with Florentine meals of the period. These details not only demonstrate Nelli's attention to realism and material culture but also help ground the religious scene in the familiar environment of Renaissance Italy.

Figure \(\PageIndex{15}\): *The Last Supper – before restoration* (1550s, oil on canvas 6.4 x 1.82 meters) Public Domain

Figure \(\PageIndex{16}\): *The Last Supper* – after restoration (Public Domain)

Plautilla Nelli - Renaissance Rush

Plautilla Nelli rose to prominence in the 16th century as a self-made female artist. As a nun, she learned manuscript miniature painting, but took it upon herself to learn how to paint on a monumental scale, an occupation typically reserved for men in the Renaissance period. Her 1560 masterpiece, Last Supper, shows Nelli's keen awareness of the history of painting, especially of the Florentine tradition, as well as an acute skill in expressing color and emotion.

Catharina van Hemessen

Catharina van Hemessen (1528–1588) was a Northern European Renaissance painter and is considered one of the earliest female artists to whom multiple surviving works can confidently be attributed. She trained in the studio of her father, a respected Mannerist painter, where she developed strong technical skills in portraiture and religious painting. Van Hemessen became especially known for her small-scale portraits, which demonstrated careful attention to facial expression, realism, and detail. Her works reflect the Northern Renaissance interest in precise observation and the use of depth and texture to create lifelike images.

In addition to portraiture, van Hemessen painted religious scenes that combined emotional intensity with realistic spatial settings. In *Christ Carrying the Cross* (8.3.17), Veronica appears prominently in the foreground holding a cloth imprinted with the image of Christ's face. The composition emphasizes Veronica's compassion and devotion while drawing the viewer's attention directly to the suffering of Christ. Van Hemessen's careful use of realism, depth of field, and emotional expression helps create a deeply personal and spiritual scene characteristic of Northern Renaissance painting. The implied story depicts Christ as Veronica hands him a veil to wipe his forehead. When he returned the fabric to Veronica, his face was miraculously captured and known as Veronica's relic. [7] The painting represents how Renaissance artists captured an audience.

Catharina van Hemessen also worked in the **Mannerist** style, as seen in *Young Women Playing a Virginal* (8.3.18). The portrait is believed to depict her sister, Christina, seated against a dark background while wearing an elegant dark velvet dress. The composition creates a dramatic contrast between the deep shadows of the background and the illuminated features of the young woman's face and golden headdress. This strong contrast draws the viewer's attention to her expression and the richly decorated **virginal**, an early keyboard instrument similar to a spinet.

Van Hemessen carefully rendered the textures and details of the scene. The dark velvet dress contains subtle patterns that become visible upon closer observation, while touches of yellow and orange highlight the folds and sleeves of the garment. The decorative scrolling along the side panels of the virginal demonstrates the Northern Renaissance fascination with craftsmanship and ornamentation. The young woman's delicate hands appear suspended in motion, as though captured in the middle of performing a song, giving the painting a sense of quiet elegance and immediacy. Although van Hemessen was clearly a highly talented and accomplished artist, no surviving works are known after 1554, the year she married. Like many female artists of the Renaissance, marriage often ended a woman's professional artistic career because societal expectations shifted her role toward domestic responsibilities rather than independent artistic production.

Figure \(\PageIndex{17}\): *Christ Carrying the Cross* (1541-1560, oil on panel, 38 x 28 cm) (Public Domain)

Figure \(\PageIndex{18}\): *Young Woman Playing a Virginal* (1548, oil on oak wood, 30.5 x 24 cm) (Public Domain)

Sofonisba Anguissola

Sofonisba Anguissola (1532–1625) was one of the most accomplished female artists of the Renaissance and was fortunate to be born into a noble family that valued education and artistic training for women. During the Renaissance, most women were excluded from formal apprenticeships with master artists and could only learn artistic skills through family connections. Anguissola's father, however, actively encouraged her artistic development and arranged for her to study with professional painters, where she learned painting techniques as well as the importance of **design** and composition.

A letter written by her father describes how fortunate Sofonisba was to have encountered and possibly studied with Michelangelo, whose influence helped shape her understanding of anatomy, expression, and artistic refinement. Anguissola became especially known for her **portraits** and painted more than twelve **self-portraits** throughout her lifetime, an unusual achievement for a woman artist of the period. These self-portraits not only displayed her technical skill but also established her professional identity as an intellectual and accomplished painter.

In an early self-portrait from 1556 (8.3.19), Anguissola portrays herself painting the **Madonna and Child**. She appears to pause in the middle of a brushstroke and turns toward the viewer as though interrupted while working. The image emphasizes both her artistic talent and her role as a devout and educated woman. Her later *Self-Portrait* from 1610 (8.3.20), painted when she was seventy-eight years old, demonstrates her continued mastery of **portraiture** late in life. The painting reflects her remarkable longevity as an artist and her ability to capture personality, dignity, and realism with subtle elegance.

Figure \(\PageIndex{19}\): *Self-portrait at the Easel* 1556 (Public Domain)

Figure \(\PageIndex{20}\): *Self-portrait* 1610 (Public Domain)

As a female artist, Sofonisba Anguissola did not have access to male models for studying anatomy, a restriction that limited many women artists during the Renaissance. Instead, she often used members of her own family as models for her paintings and group portraits. In *The Chess Game* (8.3.21), she portrayed her sisters gathered around a chessboard in an intimate domestic scene. One sister looks directly outward toward the viewer with a subtle smile that seems to suggest she has just won the game. The painting reflects Anguissola's ability to capture personality, emotion, and interaction in a natural and lively way.

Anguissola's careful attention to **detail** is evident throughout the work. She skillfully rendered the rich textures of the **brocade** clothing, the delicate patterns of the **lace**, and the intricate braids of the women's hair. Her emphasis on elegance, refinement, and realistic facial expressions became defining characteristics of her **portraiture**. These family portraits, along with her numerous **self-portraits**, helped establish her growing reputation as a talented and sophisticated painter.

At the age of twenty-six, Anguissola was invited to join the **Spanish Court**, where she spent several years painting official portraits of royalty and important dignitaries. Her position at court was a remarkable achievement for a woman artist during the Renaissance. In her official portrait of Philip II of Spain (8.3.22), Anguissola used muted and darker colors to create an atmosphere of dignity and authority. The painting demonstrates her extraordinary precision in depicting the delicate lace around the king's neck and the carefully detailed buttons on his gown. The refinement and realism of the portrait reflect both her technical mastery and the success she achieved during her distinguished career.

Figure \(\PageIndex{21}\): *The Chess Game* (Lucia, Minerva, Elena) (Public Domain)

Figure \(\PageIndex{22}\): *Phillip II of Spain* (Public Domain)

Sofonisba Anguissola - Life, works and painting style

Sofonisba Anguissola was an Italian painter and one of the first women of the Renaissance to establish herself as a portrait painter in particular.

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8.4: Conclusion

During the **Renaissance**, artists developed innovative artistic styles and techniques that continue to influence art today. Leonardo da Vinci, Tintoretto, and Suor Plautilla Nelli each painted the iconic *Last Supper*, (8.4.1) portraying the well-known biblical moment when Christ announces that one of his disciples will betray him. Although the artists lived and worked nearly one hundred years apart, each painting reflects a very different artistic style, composition, and interpretation of the scene.

In Leonardo da Vinci's version, the apostles are carefully arranged along one side of the table in a balanced composition that emphasizes **linear perspective** and harmony. The figures react emotionally to Christ's announcement, creating a sense of psychological drama while maintaining order and symmetry. Nelli (8.4.3) followed a similar arrangement by placing most of the figures on one side of the table; however, she separated Judas, the betrayer, by positioning him alone on the opposite side. This decision visually reinforces his isolation and betrayal while adding a unique interpretation to the traditional composition.

Tintoretto's *Last Supper* (8.4.2) differs dramatically from both earlier works. Instead of focusing solely on the apostles, Tintoretto filled the room with ordinary people, servants, and bustling activity, creating a more crowded and energetic atmosphere. His dramatic use of **chiaroscuro**, strong contrasts between light and dark, and diagonal composition gives the painting movement and spiritual intensity characteristic of the late Renaissance and **Mannerist** style. Together, these three paintings demonstrate how Renaissance artists could interpret the same subject in highly individual ways while advancing new artistic techniques and ideas.

Figure \(\PageIndex{1}\): Last Supper by Da Vinci (CC BY-SA 4.0)

Figure \(\PageIndex{2}\): Last Supper by Tintoretto (CC BY 3.0)

Figure \(\PageIndex{3}\): *Last Supper* – after restoration by Nelli (Public Domain)

	Da Vinci	**Tintoretto**	**Nelli**
Linear perspective	One-point perspective with focal point in the center, light from the window gives a halo effect to Jesus head. A horizontal line with a large table as foreground with figures behind.	One-point perspective with the focal point to the side from the lamp giving Jesus the halo effect. Figures throughout the room.	One-point perspective with a minimal focal point in the center, light source not visible. Horizontal line with a large table in the foreground with figures behind.
Color	Muted colors, white cloth for contrast	Strong colors, Chiaroscuro style, deep shadows, dramatic lighting.	Bright colors, white cloth for contrast.

Material	Secco, oil, tempera paint	Oil on canvas	Oil on canvas
Expression and emotion	Simple symbolic figures With minimal emotion. Only traditional apostles	Realistic figures, apostles as well as ordinary people working.	Realistic figures, general conversations occurring.

During the **Renaissance**, **oil painting** became one of the most important artistic mediums, allowing artists to achieve greater realism, richer colors, and more subtle details than earlier painting methods. The unique qualities of oil paint made it possible to blend colors smoothly and create gradual transitions between light and shadow. Because oil paint dried slowly, artists could continually refine their work and produce highly detailed and lifelike images. These characteristics also supported the development of the **sfumato** technique, in which edges and outlines appear softened and almost invisible, creating smoky transitions and atmospheric depth. This technique allowed artists to create deep, dark, and vibrant colors while giving figures a more natural appearance.

During this period, portrait styles also changed significantly. Earlier portraits often depicted individuals in rigid profile or side views, but Renaissance artists increasingly adopted the **three-quarter pose**, in which the subject turns partially toward the viewer. This position created a greater sense of depth, realism, and psychological presence. Sofonisba Anguissola, Leonardo da Vinci, and Catharina van Hemessen all painted women using similar poses characterized by subtle, enigmatic facial expressions. The women gaze outward toward the viewer while revealing very little emotion, creating a sense of mystery and quiet dignity.

The artists also employed comparable deep and dark color palettes that enhanced the mood and realism of their portraits. Through their careful use of light, shadow, and composition, the paintings demonstrate the Renaissance fascination with human individuality, beauty, and psychological complexity. Although each artist had a distinct style, the similarities among these works reflect the shared artistic innovations and cultural ideals of the Renaissance period.

	Anguissola	**Da Vinci**	**Van Hemessen**
Color	Chiaroscuro, dark	Strong sfumato	Chiaroscuro, dark
Materials	Oil on canvas	Oil on wood	Oil on wood
Expression/ Emotion	Stern, gazing directly at the viewer	Slight smile, looking forward	Posed to play, she seems to look at someone in the room.

CHAPTER OVERVIEW

9: The Beginning of Colonization (1550 CE – 1750 CE)

The beginning of Colonization was dominated by the superpowers in Europe, changing the world and local culture forever, decimating indigenous populations. The stylistic, complex art of the Baroque and Rococo period was a depiction of the broader cultural and intellectual divides in Europe. Although the art methods of the Baroque and Rococo may have traveled to other continents through imperialism, it is not always apparent in the art produced in other countries. Art outside of Europe was thriving in Asia, North America, Japan, and Africa in other forms with a different look and feel than the Baroque art in Europe; art designed to fit the culture and materials of the country where the artist resided. This chapter, The Beginning of Colonization, is divided into the Baroque/Rococo Art periods in Europe, the influence colonization had in Mexico, and the art other parts of the world painted, sculpted, or built.

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Proxy Error

The proxy server received an invalid response from an upstream server.
The proxy server could not handle the request
GET /Courses/Gavilan_College/A_World_Perspective_of_Art_Appreciation_(Gustlin_and_Gustlin)_2.0/09:_The_Beginning_of_Colonization_(1550_CE__1750

Reason: **DNS lookup failure for: mindtouch-release-20260521-libre-mindtouch-web.default.svc.cluster.local**

9.2: Northern European Baroque (1580s– early 1700)

Definition: Term

- **Baroque:** A dramatic and emotional style of art and architecture from the 17th century characterized by movement, rich detail, and strong contrasts of light and shadow.
- **Realism:** An artistic approach focused on depicting subjects as they appear in everyday life with accuracy and natural detail.
- **Naturalistic composition:** An arrangement of figures and objects designed to appear realistic and lifelike, often based on direct observation of nature.
- **Classicism:** A style inspired by the art and ideals of ancient Greece and Rome, emphasizing balance, harmony, proportion, and order.
- **Still life:** A painting or artwork depicting inanimate objects such as flowers, food, books, or household items.
- **Genre painting:** Artwork representing scenes from everyday life, including domestic activities, markets, or ordinary people at work or leisure.
- **Baroque:** A dramatic artistic style of the 17th century characterized by movement, emotion, rich detail, and strong contrasts of light and shadow.
- **Chiaroscuro:** A technique using strong contrasts between light and dark to create depth, drama, and three-dimensional form.
- **Self-portrait:** A portrait an artist creates of themselves.
- **Illusionism:** An artistic technique that creates the impression that painted objects or figures exist in real three-dimensional space.
- **Ultramarine:** A deep blue pigment made from the mineral **lapis lazuli**, prized during the Renaissance and Baroque periods for its brilliance and expense.
- **Lapis lazuli:** A semi-precious blue stone used to create the ultramarine pigment.
- **Umber:** A natural brown earth pigment commonly used in painting.
- **Ochre:** A natural earth pigment ranging in color from yellow to reddish-brown, frequently used in painting.

In contrast to artists working in Catholic countries, **Baroque** artists in the Protestant regions of Northern Europe often focused on realistic depictions of everyday life rather than dramatic religious imagery. These artists created highly detailed **still life**, landscape, portrait, and genre paintings that reflected ordinary people, domestic interiors, and scenes from nature. A stronger sense of **realism** and naturalistic composition developed, influenced in part by the renewed interest in the balanced forms and ideals of ancient Greek and Roman art. This approach contributed to a new type of **classicism** that emphasized clarity, observation, and lifelike representation.

For the first time in European history, many artists were no longer entirely dependent on commissions from the Church or aristocracy. The growth of prosperous merchant and middle-class communities created a new market for art. Wealthy citizens purchased paintings to decorate their homes, increasing demand for smaller-scale works that reflected personal taste and everyday experience rather than exclusively religious subjects. As a result, artists produced large quantities of high-quality non-religious art, including still lifes, landscapes, portraits, and scenes of daily life. This shift greatly expanded the role of art in society and allowed artists greater creative freedom in both subject matter and style.

Pieter Breughel

Pieter Bruegel the Elder (1525–1569) was a Dutch painter and draftsman best known for his detailed landscapes and scenes of peasant life. Four generations of his family became artists, making the Bruegel family one of the most influential artistic dynasties in Northern Europe. Bruegel created a famous series of paintings representing the **seasons**, although only five of the original works survive today.

One of his most celebrated paintings, *Hunters in the Snow (Winter)* (x.x), is part of this seasonal series. The painting portrays a typical winter scene in the Netherlands and demonstrates Bruegel's mastery of **landscape** composition. He organized the image into a large foreground, middle ground, and expansive background, creating a convincing sense of depth and distance. In the foreground, weary hunters and their dogs slowly return home through the snow carrying little game, suggesting the hardship and difficulty of winter life.

The background is filled with ordinary people engaged in daily activities such as skating, gathering wood, and working to survive during the cold season. Bruegel's attention to everyday labor and common people reflects his interest in **genre painting**, artworks depicting scenes from ordinary life. Rather than focusing on religious or royal subjects, Bruegel portrayed the experiences of peasants and rural communities with realism and careful observation, making his paintings important records of life in the Netherlands during the 16th century.

Figure \(\PageIndex{1}\): *Hunters in the Snow (Winter)* (Public Domain)

Video Title

Pieter Bruegel the Elder, Hunters in the Snow (Winter), 1565, oil on wood, 118 x 161 cm (Kunsthistorisches Museum, Vienna)

Rembrandt van Rijn

Rembrandt (1606–1669) was one of the most renowned painters of the Dutch **Baroque** period and became famous for his masterful use of light and shadow to create emotional intensity and realistic depth. Born in Leiden, Rembrandt came from a prosperous

family; his father was a miller wealthy enough to send him to both Latin school and university. However, Rembrandt disliked academic study and left after only one year to pursue artistic training as a painter's apprentice. Rembrandt's paintings are especially admired for their dramatic use of **chiaroscuro**, the strong contrast between light and dark that creates the illusion of volume, movement, and atmosphere. He used focused light to direct the viewer's attention toward important figures or moments within a composition while surrounding areas receded into shadow.

Rembrandt painted only one known seascape, *The Storm on the Sea of Galilee* (x.x), completed in 1633. The painting portrays a violent storm tossing a small boat across dangerous waves, emphasizing the vulnerability of humans against the overwhelming power of nature. The terrified crew struggles desperately to control the ship while towering waves crash against the stern. The dramatic lighting intensifies the tension, with bright illumination sharply contrasted against dark storm clouds and shadowed areas of the sea. This contrast creates a convincing illusion of depth and movement while heightening the emotional drama of the scene.

In *The Abduction of Europa* (x.x), Rembrandt again demonstrated his skill with texture, lighting, and storytelling. He carefully painted the luxurious textures of the figures' elegant clothing while placing them against a muted sky and dark, foreboding trees. The contrast between the illuminated figures and the shadowy landscape builds suspense and drama, encouraging viewers to imagine what might happen next. Through his use of light, texture, and emotional realism, Rembrandt transformed ordinary paintings into deeply expressive narratives.

Figure \(\PageIndex{1}\): *The Storm on the Sea of Galilee* (Public Domain)

Figure \(\PageIndex{1}\): *The Abduction of Europa* (Public Domain)

A frequent subject in the work of Rembrandt was himself, and he created nearly eighty **self-portraits** throughout his lifetime. Each portrait is unique and records a different stage of his life, from a confident young man in his twenties to an aging artist marked by hardship and experience. These self-portraits provide an extraordinary visual autobiography and demonstrate Rembrandt's continuing exploration of human emotion, aging, and identity.

Rembrandt used layers of thick paint and carefully blended color to create highly realistic facial features and textures. His technique allowed him to portray imperfections such as wrinkles, scars, and warts with remarkable honesty and detail. Rather than idealizing himself, he emphasized realism and psychological depth. Through his dramatic use of **chiaroscuro**, focused light illuminated parts of the face while deep shadows concealed other areas, creating a powerful sense of volume, mood, and introspection. The contrast between light and dark not only enhanced the realism of the portraits but also revealed the emotional and physical changes that occurred throughout his life.

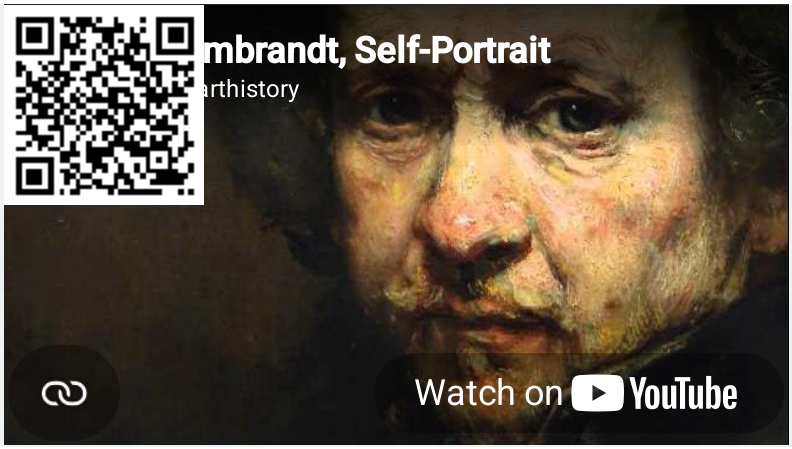
Kenneth Clark stated that Rembrandt is "with the possible exceptions of Van Gogh, the only artist who has made the self-portrait a major means of artistic self-expression, and he is absolutely the one who has turned self-portraiture into an autobiography."[1] The first image (x.x) is a portrait of Rembrandt from when he was twenty-three years old. The second portrait (x.x) is Rembrandt when he was sixty-three, shortly before his death.

Figure \(\PageIndex{1}\): Self-Portrait in a Gorget (c. 1629, oil on oak wood, 382 × 31 cm) (Public Domain)

Figure \(\PageIndex{1}\): Self-Portrait (1669, oil on canvas, 63.5 x 57.5 cm) (Public Domain)

Rembrandt, Self-Portrait

Rembrandt van Rijn, Self-Portrait, 1659, oil on canvas, 84.5 x 66 cm (National Gallery of Art)



Girl in a Picture Frame (x.x) is one of the most innovative portraits painted by Rembrandt. The painting depicts a young girl dressed in a rich dark red gown and soft black beret, leaning forward with her hands resting on what appears to be the edge of the frame. Rembrandt skillfully created the illusion that the figure is extending outward into the viewer's space, making the portrait appear almost three-dimensional. This use of **illusionism** demonstrates his mastery of perspective and visual realism.

The painting also reveals Rembrandt's extraordinary control of texture and light. Delicate brushstrokes define the folds and shimmer of the elegant red dress, while softer strokes create the velvety appearance of the beret and the smooth texture of the girl's skin. His use of focused lighting against a dark background emphasizes the figure and heightens the sense of realism. The portrait possesses an almost photographic quality, allowing the viewer to feel as though the young girl is physically present beyond the boundaries of the painting.

Figure \(\PageIndex{1}\): *Girl in a Picture Frame* (Public Domain)

Johannes Vermeer

Johannes Vermeer (1632–1675) was a Dutch artist who created some of the most celebrated paintings of the **Baroque** period. Unlike many Baroque painters who focused on dramatic religious or historical scenes, Vermeer specialized in quiet scenes from everyday life. His paintings are known for their sense of timelessness, dignity, and serenity, often portraying ordinary people engaged in simple domestic activities. Vermeer became especially admired for his masterful use of **light and shadow**, which gave his interiors a calm and realistic atmosphere. Vermeer was also famous for his use of the color **ultramarine**, an extremely expensive blue pigment made from the semi-precious stone **lapis lazuli**. Because of its high cost, ultramarine was often reserved for important details in paintings. Vermeer combined ultramarine with earthy pigments such as **umber** and **ochre** to create subtle

blended colors and natural tonal variations. These combinations allowed him to produce luminous surfaces and delicate transitions between light and shadow.

In *The Milkmaid* (x.x), Vermeer demonstrates his extraordinary ability to capture the effects of light within an interior space. The painting portrays a maid quietly pouring milk while soft light enters from a nearby window. Vermeer carefully used his favorite colors to model the shapes and contours of the room, creating realistic textures on the bread, pottery, fabric, and wall surfaces. The balance between illuminated areas and shadowed spaces gives the scene depth and tranquility, transforming an ordinary domestic moment into a work of remarkable beauty and realism. "A low vantage point and a pyramidal buildup of forms from the left foreground to the woman's head lend the figure monumentality and perhaps a sense of dignity. And yet, like milkmaids and kitchen maids in earlier Netherlandish art, and like other young women in Vermeer's oeuvre, this figure was meant to attract the male viewer and to have her thoughts of romance."[2]

Figure \(\PageIndex{1}\): *The Milkmaid* (1660, oil on canvas, 45.5 x 41 cm) (Public Domain)

Girl with the Pearl Earring (x.x) by Johannes Vermeer is often called the “Mona Lisa of the North” because of the young woman’s mysterious expression and captivating gaze. The painting is considered one of the finest examples of **chiaroscuro**, the artistic technique that uses strong contrasts between light and dark to emphasize a figure and create depth. Vermeer illuminated the girl’s face, lips, and pearl earring against a nearly black background, causing her features to appear luminous and lifelike.

The soft light gently models the contours of her face and highlights the smooth textures of her skin, while the shadows add dimension and realism. Vermeer’s careful blending of colors and subtle transitions between light and dark create a calm, intimate atmosphere. The glowing pearl earring becomes the focal point of the composition, reflecting light and enhancing the painting’s sense of elegance and mystery.

Figure \(\PageIndex{1}\): *Girl with a Pearl Earring* (Public Domain)

When comparing two **Baroque** portraits, one painted by Rembrandt and the other by Johannes Vermeer in *Girl with a Pearl Earring*, the treatment of light and facial expression differs significantly. Rembrandt often used dramatic **chiaroscuro** to partially conceal his subjects within deep shadows. In his portrait, the face is hidden beneath the shadow cast by a large beret, softening and obscuring some of the facial features. The shadows create a sense of mystery and psychological depth while directing attention toward selected illuminated areas of the painting.

In contrast, Vermeer positioned the young girl's face directly within the light, making her features appear soft, luminous, and highly visible. Although slight shadows fall along the side of her cheek and ear, the glowing pearl earring is strongly highlighted, immediately attracting the viewer's attention. Vermeer's mastery of light and shadow is especially evident in his use of a nearly black background, which isolates and illuminates the girl, making her appear to emerge forward from the darkness.

The backgrounds of the two paintings also reveal different artistic approaches. Vermeer used a smooth dark background to create simplicity and clarity, emphasizing the serenity and elegance of the figure. Rembrandt, however, employed a mottled background of subdued medium and dark colors that creates a richer atmospheric effect. In his portrait, the contrast between the dark beret and the illuminated red dress establishes the focal points of the composition while enhancing the emotional intensity characteristic of Baroque art.

Maria van Oosterwijck

Maria van Oosterwijck (1630–1693) was one of the leading Dutch painters of the seventeenth century and became especially known for her highly detailed floral **still life** paintings. Born in Nootdorp in the Netherlands, she was the daughter of a minister and trained under several master painters before moving to Amsterdam to establish herself as a professional artist. Although Oosterwijck gained international recognition and wealthy patrons collected her work, she was not allowed to join the painters' guild because she was a woman, reflecting the limitations female artists faced during the period.

Her painting *Vanitas Still Life* (x.x), created with oil on canvas, demonstrates her extraordinary skill in realism, symbolism, and texture. Oosterwijck used rare and highly patterned tulips as the focal point of the composition. During the seventeenth century, tulips were extremely valuable in the Netherlands and symbolized wealth and luxury. One flower in the painting has already begun to wilt and fall apart, symbolizing the temporary and fragile nature of human life. Small insects crawling among the flowers further reinforce the idea that life is fleeting and constantly changing.

Oosterwijck also incorporated symbolic objects such as skulls, hourglasses, books, and extinguished candles to communicate themes about mortality and the passage of time. These symbols connect the painting to the tradition of **vanitas**, artworks designed to remind viewers that earthly pleasures, wealth, and beauty are temporary. The theme of vanitas encouraged viewers to reflect on the inevitability of death and the shortness of human life.

Vanitas paintings are closely related to **memento mori** still lifes. The Latin phrase *memento mori* means "remember you must die," and artworks in this tradition often include symbols such as skulls, dying flowers, or extinguished candles to emphasize the fragility and impermanence of life. Through these symbolic compositions, Oosterwijck transformed ordinary objects into powerful reflections on mortality, spirituality, and the passing of time. However, vanitas still-life also includes other symbols such as musical instruments, wine, and books to remind us explicitly of the vanity (in the sense of worthlessness) of worldly pleasures and goods." [3]

Figure \(\PageIndex{1}\): *Vanitas Still Life* (1668, oil on canvas, 73 x 88.5 cm) (Public Domain)

Pieter Hooch

Pieter de Hooch (1629–1684) was a Dutch painter associated with the **Delft School**, a group of artists known for carefully composed scenes of domestic life and remarkable treatment of natural light. De Hooch specialized in small-scale paintings depicting ordinary people engaged in everyday activities. His works are admired for their sense of order, balance, and realism, as well as for his masterful use of indoor and outdoor lighting.

In *Woman Peeling Apples* (x.x), de Hooch portrays a quiet domestic moment in which a woman sits near a window peeling apples while a child remains nearby. The window serves as the primary **light source**, softly illuminating the wall, the woman's clothing, and the surrounding interior. The bright red skirt becomes a strong focal point within the composition, visually connecting the woman, the child, and the warmth of the domestic setting. De Hooch paid close attention to texture and detail, carefully rendering the fireplace, floor tiles, and furnishings with remarkable precision. Although a fire burns in the background, the layered clothing worn by the figures suggests the cool temperature of the room, adding realism and atmosphere to the scene.

In *The Courtyard of a House in Delft* (x.x), de Hooch expanded his interest in domestic environments by focusing on architecture and outdoor space. A maid gently leads a child from a doorway while another woman walks toward the main house, creating a calm and orderly scene of everyday life. The painting demonstrates de Hooch's extraordinary attention to architectural detail. Individual bricks and their textures are clearly visible, with some appearing worn and crumbling while others remain intact. These details give the courtyard a sense of realism and age. The work marked the development of a new **genre painting** style among Dutch artists, one that emphasized carefully observed homes, courtyards, and natural light as important subjects worthy of artistic attention.

Figure \(\PageIndex{1}\): *The Woman Peeling Apples* (Public Domain)

Figure \(\PageIndex{1}\): *The Courtyard of a House in Delft* (1658, 74 x 60 cm) (Public Domain)

Judith Leyster

Judith Leyster (1609-1660) was a talented artist who had her workshop (unusual for a female artist), painted her works, and taught others. She was also the first female admitted to the Painters' Guild. Most of her paintings were created between 1629 and 1635, before she married and had children, which reduced her time as an artist. She was known as an exceptional artist in her era, but remained largely unknown to history until modern times. A writer from the period said, "There have also been many experienced women in the field of painting who are still renowned in our time, and who could compete with men. Among them, one excels exceptionally, Judith Leyster…"[4]

Judith Leyster was known for her lively **genre paintings** that depicted musicians, children, and scenes of everyday domestic life. In *The Carousing Couple* (x.x), Leyster portrays two figures enjoying music and wine in a cheerful and intimate setting. The man appears deeply absorbed in playing music while the woman watches him with admiration and affection. The brightly illuminated faces and white clothing form the focal point of the composition, standing out sharply against the dark upper background. This dramatic use of **chiaroscuro** draws the viewer's attention directly toward the couple and heightens the warmth and energy of the scene.

Leyster also demonstrated remarkable technical skill in her rendering of textures and details. She carefully painted the delicate lace, fabric folds, and decorative tassels on the man's clothing, giving the fabrics a realistic appearance. One detail that appears less naturalistic is the awkward manner in which the man holds the violin, suggesting that musical accuracy was less important than conveying the lively mood and interaction between the figures.

Leyster frequently painted children and musicians, as seen in *Young Flute Player* (x.x). In this work, a young boy gazes toward a bright unseen light source that strongly illuminates the right side of his face while deep shadows cover the opposite side. The dramatic contrast between light and dark creates emotional depth and emphasizes the boy's thoughtful expression. Although the painting relies heavily on subdued browns and grays, Leyster carefully defines each object in the composition, including the chair, the folds of the boy's clothing, and the musical instruments. Her ability to combine realism, light, and atmosphere made her one of the most important female painters of the Dutch Golden Age. "The beautifully depicted violin and recorder (symbols of harmony and peace respectively) together with the boy's radiant, angelic gaze allude to music's‘ capacity to inspire'. The patched coat, broken chair, and sparse surroundings hint at financial hardship with which the artist herself was very familiar."[5]

Figure \(\PageIndex{1}\): *Carousing Couple* (1630, oil on panel, 68 x 54 cm) (Public Domain)

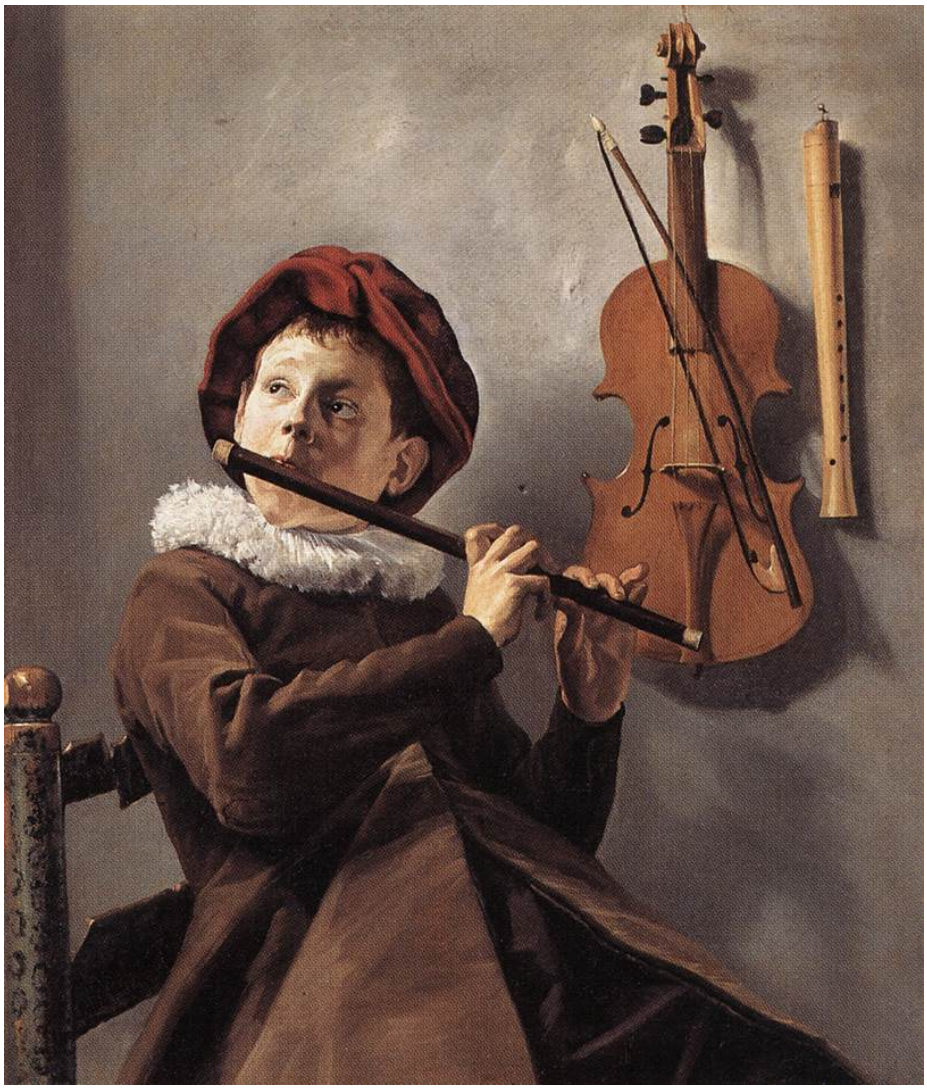


Figure \(\PageIndex{1}\): Young Flute Player (1630s, oil on canvas, 73 x 62 cm) (Public Domain)

[1] Retrieved from https://www.artworkarchive.com/profi...st-collections

[2] Retrieved from https://www.metmuseum.org/exhibition...s/2009/vermeer

[3] Retrieved from https://www.tate.org.uk/art/art-terms/v/vanitas

[4] Smith, D. (2016). *The Paris Review*, Daughters of the Guild. Retrieved from https://www.theparisreview.org/blog/2016/04/04/daughters-of-the-guild/.

[5] Mike McKiernan, Judith Leyster *The Young Flute Player* 1635, *Occupational Medicine*, Volume 62, Issue 8, December 2012, Pages 592–594, https://doi.org/10.1093/occmed/kqs194

9.3: Italian Baroque (1580s– early 1700)

Definition: Term

- **Protestant Reformation:** A 16th-century religious movement that challenged the authority and practices of the Roman Catholic Church and led to the creation of Protestant churches.
- **Treaty of Westphalia:** A series of agreements signed in 1648 that ended major religious wars in Europe and established new political boundaries and religious freedoms.
- **Counter-Reformation:** The Roman Catholic Church's response to the Protestant Reformation, focused on reforming the church and strengthening Catholic faith through education, art, and religious devotion.
- **Baroque:** A dramatic artistic style of the 17th century characterized by movement, emotion, elaborate detail, and strong contrasts of light and shadow.
- **Mannerism:** An artistic style that developed after the Renaissance, emphasizing exaggerated poses, unusual proportions, and dramatic compositions.
- **Papacy:** The office and authority of the Pope and the leadership of the Roman Catholic Church.
- **Emotional realism:** An artistic approach that emphasizes believable human emotion and dramatic expression to engage the viewer emotionally.
- **Baroque art:** A dramatic artistic style of the 17th century characterized by emotion, movement, realism, and strong contrasts of light and shadow.
- **Chiaroscuro:** A technique using strong contrasts between light and dark to create depth, drama, and three-dimensional form.
- **Tenebrism:** An extreme use of chiaroscuro in which large areas of darkness sharply contrast with intensely illuminated figures or objects.
- **Realism:** An artistic approach focused on portraying people and objects as they appear in everyday life, including natural imperfections.
- **Diagonal composition:** An arrangement of figures or objects along diagonal lines to create movement, tension, and dramatic energy in an artwork.
- **Secularizing religious art:** Presenting religious subjects in a more ordinary or human way by depicting realistic people, settings, and everyday details rather than idealized figures.
- **Live models:** Real people who pose for artists while creating paintings or sculptures.

The religious and political conflicts that spread across Europe during the 16th and 17th centuries deeply influenced the development of **Baroque** art. Reformers such as Martin Luther challenged the authority of the Roman Catholic Church, leading to the **Protestant Reformation** and a series of violent military and religious conflicts throughout Europe. These struggles eventually eased in 1648 with the signing of the **Treaty of Westphalia**, which helped establish political and religious boundaries among European states.

In response to the growing influence of Protestantism, the Catholic Church launched the **Counter-Reformation**, an effort to strengthen Catholic faith and authority through education, reform, and the arts. The Church entered a period of lavish artistic spending, commissioning monumental architecture, sculptures, and paintings designed to inspire devotion and encourage virtuous Catholic behavior. The papacy sponsored enormous churches and richly decorated interiors filled with emotional religious imagery intended to move viewers spiritually and emotionally. Monarchs in Spain, Portugal, and France also embraced elaborate decoration and supported artists and architects as a demonstration of political power and religious loyalty.

Italy became the birthplace and center of the **Baroque period**, where artists combined the balanced naturalism of the **Renaissance** with the emotional intensity and dramatic movement of **Mannerism**. From Italy, the Baroque style spread throughout Europe and dominated artistic production for more than two centuries. Influential artists such as Caravaggio, Artemisia Gentileschi, and Gian Lorenzo Bernini helped define the movement through their emotionally charged paintings and sculptures. Their works emphasized realism, dramatic lighting, movement, and intense human emotion, establishing the Baroque style as one of the most powerful artistic movements in European history.

Michelangelo Merisi da Caravaggio

One of the most influential figures of **Baroque art** was Caravaggio (1571–1610), born Michelangelo Merisi in Milan, Italy. His father worked for a marquess, but tragedy struck when the plague devastated Milan, killing both his father and grandfather. The

remaining family fled to the town of Caravaggio, from which the artist later took his name. Caravaggio became famous for painting directly from live models rather than relying on idealized sketches or traditional formulas. His works often portrayed scenes of violence, suffering, death, and intense emotion with remarkable realism.

Caravaggio revolutionized painting through his dramatic use of **chiaroscuro**, creating striking contrasts between illuminated figures and deep shadows. He developed an even more intense lighting technique known as **tenebrism**, in which darkness dominates most of the composition while bright light sharply illuminates selected figures or objects. This technique created powerful emotional drama and made the human forms appear to emerge suddenly from darkness. Tenebrism became one of the defining characteristics of Italian Baroque painting.

Unlike earlier artists who idealized religious figures, Caravaggio painted ordinary people from the streets as his models. He portrayed saints and biblical characters with dirty feet, wrinkled faces, and realistic imperfections, bringing sacred stories into the world of everyday life. In *The Crucifixion of Saint Peter* (x.x), Caravaggio depicts the brutal raising of Saint Peter's cross directly in front of the viewer. Saint Peter hangs upside down as laborers struggle to lift the heavy wooden cross into position. The painting is filled with strong **diagonal lines** that intensify the sense of physical strain and movement. One figure in the background appears uncertain or disturbed by his participation in the execution, adding psychological complexity to the scene.

Caravaggio's realistic approach shocked many viewers because it rejected the polished idealism traditionally associated with religious art. However, this raw realism and emotional intensity also made his paintings deeply compelling and influential, helping define the dramatic style of the Baroque period.

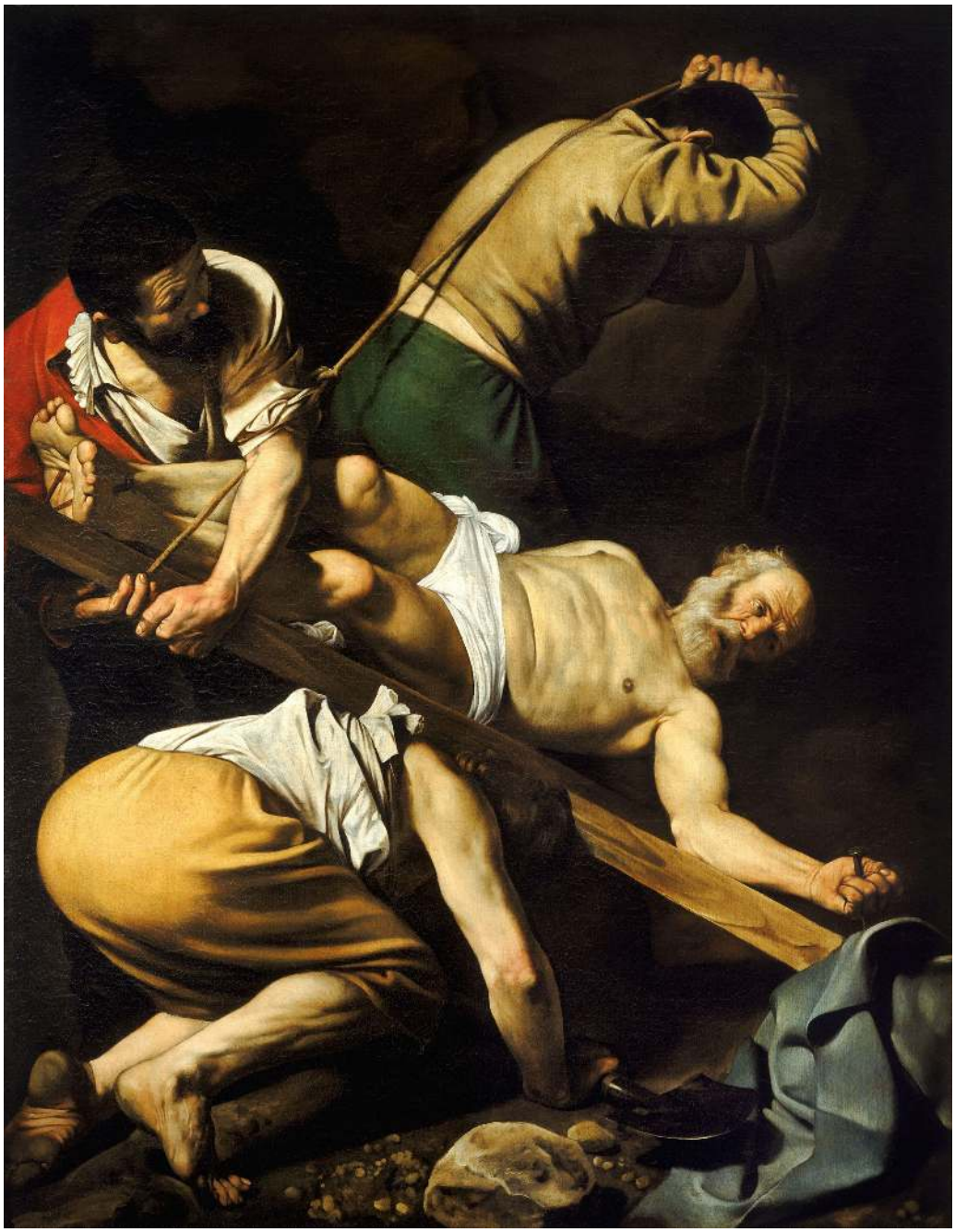
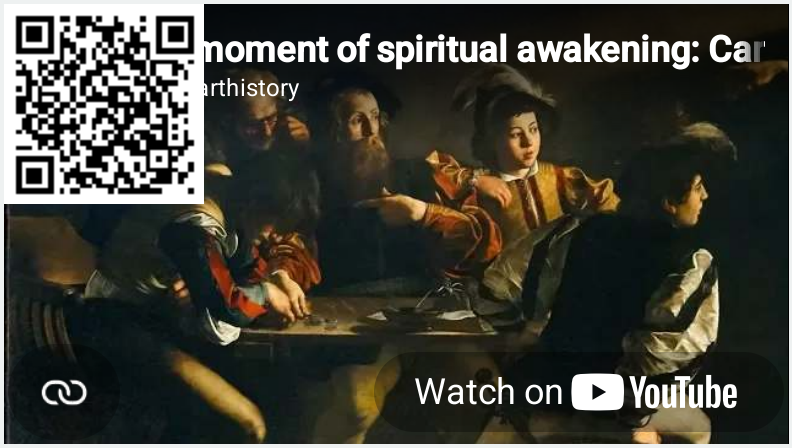


Figure \(\PageIndex{1}\): *The Crucifixion of Saint Peter* (Public Domain)

Figure \(\PageIndex{1}\): *Calling of Saint Matthew* (Public Domain)

Carvaggio's Calling of Saint Matthew

Caravaggio, Calling of Saint Matthew, 1599-1600, oil on canvas (Contarelli Chapel, San Luigi dei Francesi, Rome)



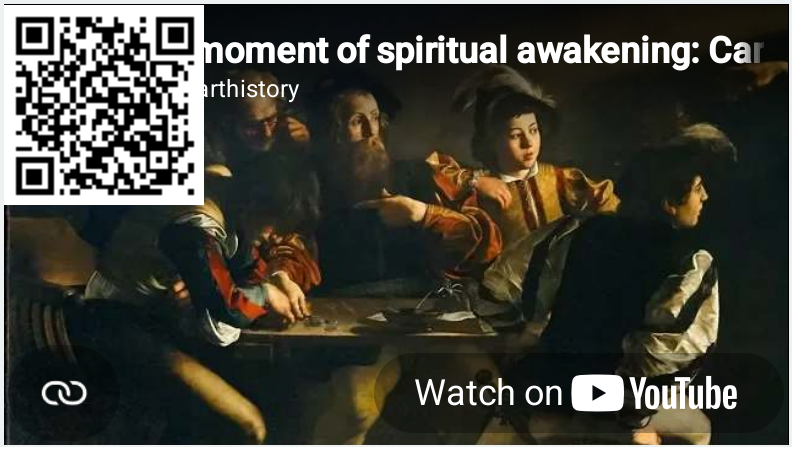
The Calling of Saint Matthew (x.x) by Caravaggio captures the dramatic moment when Christ calls Matthew to become one of his disciples. Across the dark interior, Christ and Matthew glance toward one another as a powerful shaft of light cuts through the

room, visually connecting the two figures. The light appears to originate from outside the picture frame, creating a striking contrast between illuminated faces and deep shadows. Caravaggio used intense **tenebrism** and **chiaroscuro** to direct the viewer's attention to the most important elements of the composition. The beam of light highlights Christ's outstretched hand as it points toward Matthew, emphasizing the spiritual significance of the moment. Matthew's surprised gesture suggests uncertainty and disbelief as he realizes Christ is speaking to him. Other figures seated at the table remain partially hidden in darkness, making the illuminated figures stand out even more dramatically.

The painting demonstrates Caravaggio's ability to combine realism with emotional intensity. Rather than portraying biblical figures as distant or idealized, he dressed them in ordinary contemporary clothing and placed them in a simple tavern-like setting. The dramatic lighting, strong contrasts, and realistic details create a bold and theatrical scene that captures the exact moment Christ is believed to have said, "Follow me."

A moment of spiritual awakening: Caravaggio's Calling of Saint Matthew

Caravaggio, Calling of Saint Matthew, 1599-1600, oil on canvas (Contarelli Chapel, San Luigi dei Francesi, Rome)



Artemisia Gentileschi

Artemisia Gentileschi (1593–1653) is often considered one of the first major feminist painters in Western art history. Working during the **Baroque** period, Gentileschi adopted the dramatic style and theatrical lighting techniques developed by Caravaggio. She combined the **chiaroscuro** traditions of the **Renaissance** with Caravaggio's intense use of light and shadow to create emotionally powerful and highly dramatic paintings. Unlike many artists of her time, Gentileschi frequently depicted strong female figures from biblical and historical narratives, emphasizing themes of courage, justice, and female power.

One of her most famous works, *Judith Beheading Holofernes* (x.x), portrays the biblical heroine Judith and her servant forcefully restraining Holofernes while Judith cuts through his throat with a sword. The painting is extraordinarily intense and realistic. Blood spills across the stark white sheets, creating a shocking visual contrast against the surrounding darkness. Holofernes' eyes remain open in terror and helplessness, heightening the emotional drama of the scene. Gentileschi's use of tenebrism focuses bright light directly on the violent action while the background disappears into shadow, intensifying the tension and realism.

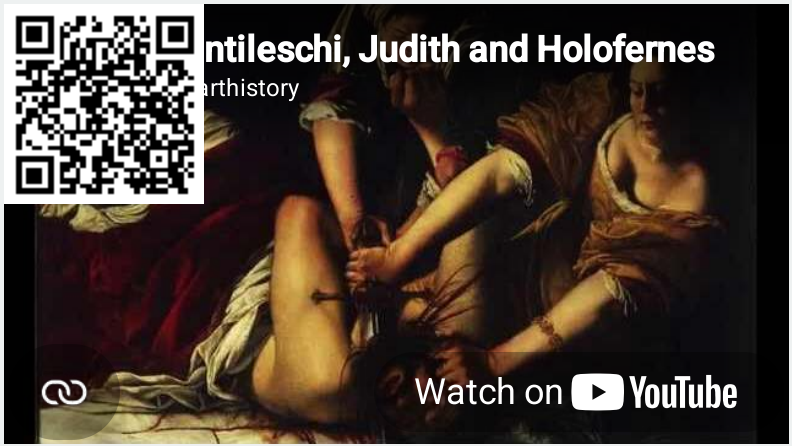
In *Judith and Her Maidservant* (x.x), the two women are shown immediately after the murder of Holofernes. His severed head is concealed within a basket carried by the maidservant as the women pause cautiously in the darkness. Although danger surrounds them, Judith and her servant appear composed, determined, and fearless. The dramatic lighting, strong shadows, and concentrated expressions create suspense and psychological depth. Through these paintings, Gentileschi transformed biblical stories into powerful statements about female strength, resilience, and agency, making her one of the most important artists of the Baroque era.

Figure \(\PageIndex{1}\): *Judith Slaying Holofernes* (1614-1620, oil on canvas, 199 x 162.5 cm) (Public Domain)

Figure \(\PageIndex{1}\): *Judith and Her Maidservant* (Public Domain)

Gentileschi, Judith and Holofernes

Artemisia Gentileschi, Judith and Holofernes, 1620-21, oil on canvas, 162.5 x 199 cm (Uffizi Gallery, Florence)



In many of her paintings, Artemisia Gentileschi portrayed women as strong and active protagonists rather than passive or timid figures. Her female subjects are often courageous, intelligent, and determined, challenging the traditional portrayal of women as weak or submissive in much of earlier European art. Gentileschi emphasized emotional strength, resilience, and the ability of women to take decisive action, making her work especially distinctive during the **Baroque** period.

Esther before Ahasuerus (x.x) continues this theme of female courage and sacrifice. The painting depicts the biblical heroine Esther appearing before King Ahasuerus to plead for the safety of the Jewish people. According to the story, approaching the king without permission could result in death, making Esther's actions extremely dangerous. Overcome by fear, stress, and emotion, Esther faints before the king as attendants attempt to support her. Ahasuerus appears sympathetic and begins rising from his throne to assist her, revealing his compassion and concern.

Gentileschi used dramatic **chiaroscuro** and emotional realism to heighten the tension and importance of the moment. The lighting focuses attention on Esther's pale figure and flowing garments, contrasting sharply with the darker background and richly decorated court setting. The scene emphasizes Esther's bravery and willingness to risk her own life to save her people from extermination. Through works such as this, Gentileschi continued to present women as heroic figures capable of leadership, sacrifice, and moral strength.

Figure \(\PageIndex{1}\): *Esther before Ahasuerus* (Public Domain)

Gian Lorenzo Bernini

Gian Lorenzo Bernini (1598-1680) was born in Naples, one of thirteen children. His father, a sculptor, recognized Bernini's talent as a child. "His precocity earned him the admiration and favour of powerful patrons who hailed him as 'the Michelangelo of his century'."[1] Gian Lorenzo Bernini was one of the greatest sculptors and architects of the **Baroque** period. His father, a sculptor, received important commissions from the pope, prompting the family to move to Rome, where Bernini trained and worked alongside him. Bernini quickly gained fame for his extraordinary talent and eventually became one of the leading artistic figures of

17th-century Rome. He designed sculptures, fountains, chapels, and architectural elements for many churches throughout the city, including major works for Saint Peter's Basilica in the Vatican.

Bernini transformed sculpture by introducing unprecedented levels of emotion, movement, and theatrical drama. Unlike earlier Renaissance sculptures that often appeared calm and balanced, Bernini's figures seem alive and caught in the middle of dramatic action. He developed a highly expressive and almost cinematic style in which the sculpture unfolds like a narrative as viewers walk around it. His works were designed to be experienced from multiple angles, allowing the story and emotional intensity to emerge gradually —a true "story told in stone."

Strongly influenced by ancient Greek and Roman marble sculptures, Bernini studied classical ideals of anatomy and movement but pushed them further by adding intense emotion and dynamic motion. One of his most famous architectural sculptures is the **baldacchino** (x.x), the monumental canopy above the main altar of Saint Peter's Basilica. A **baldacchino**is a ceremonial canopy supported by columns, and Bernini's version rises dramatically over the altar with four enormous twisted and fluted bronze columns.

The columns appear to spiral upward energetically and are richly decorated with cherubs, twisting olive and bay branches, and ornate details characteristic of the Baroque style. At the top of each column, carved angels hold garlands, while the structure culminates in a cross and golden globe symbolizing the authority and universality of the Catholic Church. Through the combination of sculpture, architecture, symbolism, and movement, Bernini created one of the most iconic masterpieces of Baroque art and architecture.

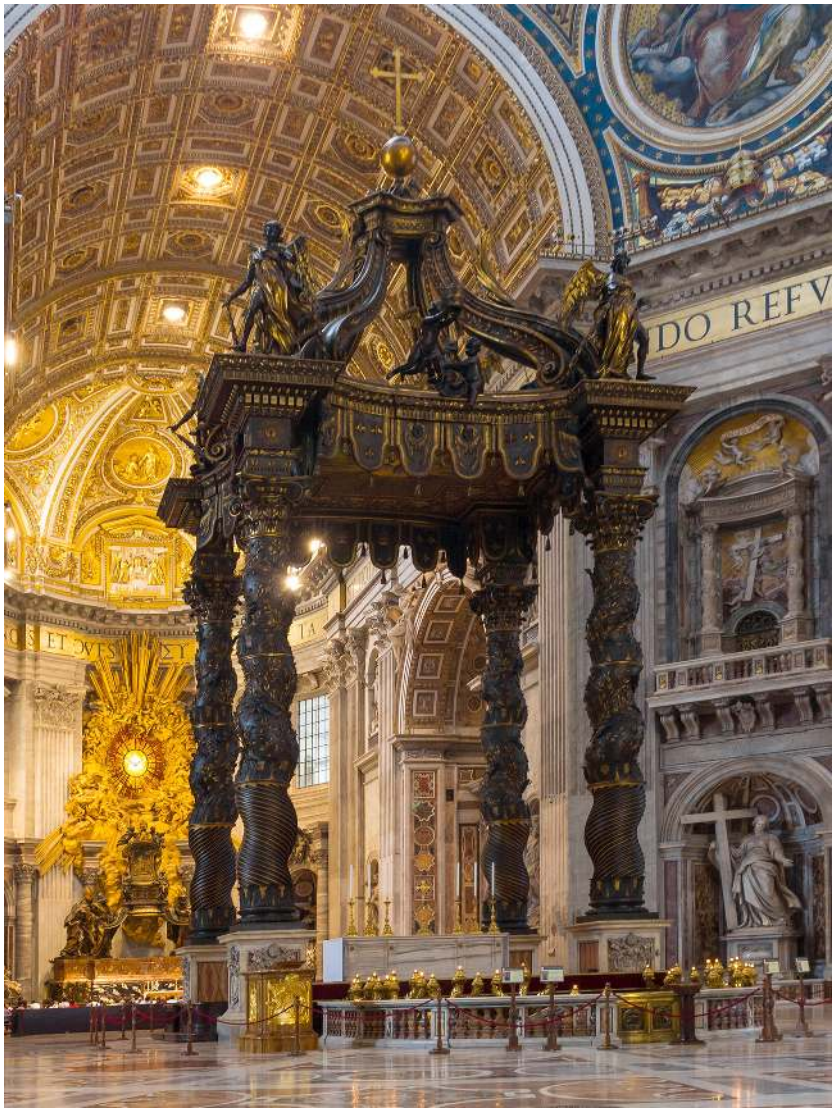


Figure \(\PageIndex{1}\): Bernini's *Baldacchino* (Public Domain)

One of the greatest achievements of Gian Lorenzo Bernini is found in the Cornaro Chapel of Santa Maria della Vittoria. His masterpiece, *The Ecstasy of Saint Teresa* (x.x), demonstrates Bernini's extraordinary ability to combine **architecture**, **sculpture**, and theatrical design into a single dramatic experience. Rather than creating a simple sculpture, Bernini designed the entire chapel to function like a stage set constructed from marble, bronze, and colored stone.

The sculpture depicts Saint Teresa in a moment of intense spiritual vision as an angel prepares to pierce her heart with a golden arrow, symbolizing divine love and religious ecstasy. Teresa's flowing drapery twists dramatically around her body, creating a powerful sense of movement and emotion characteristic of the **Baroque** style. The figures appear almost weightless as they rest upon clouds beneath hidden lighting that streams downward like heavenly rays.

Bernini carefully integrated every part of the chapel into the composition. Marble columns, decorative architecture, and hidden windows direct light onto the sculpture, heightening its theatrical and emotional impact. On the side walls, members of the Cornaro family are sculpted in balcony-like spaces as though they are audience members watching the sacred event unfold. Through this innovative blending of sculpture, architecture, light, and theater, Bernini transformed the chapel into a complete immersive experience, making *The Ecstasy of Saint Teresa* one of the defining masterpieces of Baroque art.

Figure \(\PageIndex{1}\): *Ecstasy of Saint Teresa* (CC BY-SA 4.0)

The stage-like setting of *The Ecstasy of Saint Teresa* (x.x) by Gian Lorenzo Bernini features Saint Teresa reclining upon a sculpted cloud that appears to float weightlessly in space. Carved from brilliant white marble, the saint is captured at the exact moment before she is pierced by the angel's golden dart of divine love. Bernini masterfully freezes this emotional and spiritual climax,

emphasizing both physical movement and intense religious ecstasy. The angel gently holds the arrow while Saint Teresa's expression and flowing drapery convey overwhelming spiritual emotion. The deeply carved folds of her robes twist and swirl dramatically, creating a sense of motion and energy characteristic of the **Baroque** style. Behind the figures, long gilded rays of gold descend from above, symbolizing heavenly light and divine presence.

Bernini enhanced the theatrical effect by concealing a window above the sculpture. Natural light streams through the hidden opening and illuminates the golden rays, creating the illusion that heavenly light is shining directly onto the figures. This careful combination of sculpture, architecture, and lighting transforms the scene into a powerful spiritual experience and demonstrates Bernini's genius for creating dramatic religious art.

Figure \(\PageIndex{1}\): Santa Teresa (CC BY-SA 2.5)

Figure \(\PageIndex{1}\): Saint Teresa (CC BY 2.5)

Figure \(\PageIndex{1}\): Side boxes (Public Domain)

Gian Lorenzo Bernini enhanced the theatrical experience of *The Ecstasy of Saint Teresa* by designing marble “opera boxes” along each side of the chapel. Inside these balcony-like spaces, members of the Cornaro family are sculpted in lifelike poses as though they are spectators attending a dramatic performance. Some figures appear engaged in deep conversation, while others pray, observe quietly, or read from books, creating the impression of an audience witnessing a sacred event unfold before them.

This innovative arrangement transforms the chapel into an immersive theatrical setting characteristic of the **Baroque** style. Bernini carefully combined architecture, sculpture, light, and emotion to blur the boundary between the viewer’s world and the spiritual vision of Saint Teresa. The Cornaro family members act as intermediaries between the sacred scene and the audience standing within the chapel, encouraging viewers to become emotionally and spiritually involved in the experience. The complex composition revives the emotional intensity associated with Christ’s passion and Catholic devotional imagery during the **Counter-Reformation**. By drawing the viewer directly into the scene, Bernini created not only a sculpture but a complete spiritual drama designed to inspire awe, devotion, and emotional connection.

Bernini, The Ecstasy of Saint Teresa

Gian Lorenzo Bernini, Ecstasy of Saint Teresa, 1647–52 (Cornaro Chapel, Santa Maria della Vittoria, Rome)

[1] Posèq, Avigdor W. G. (2006). "On Physiognomic Communication in Bernini". *Artibus et Historiae*. **27** (54): 161–190. Retrieved from https://en.wikipedia.org/wiki/Gian_Lorenzo_Bernini#CITEREFPos%C3%A8q2006

9.4: Spanish Baroque (1580s– early 1700)

Definition: Term

- **Spanish Baroque:** A style of Baroque art in Spain characterized by realism, dramatic lighting, earthy colors, and emotionally intense religious imagery.
- **Realism:** An artistic approach focused on portraying people, objects, and scenes as they appear in everyday life.
- **Chiaroscuro:** A technique using strong contrasts between light and dark to create depth, drama, and three-dimensional form.
- **Still life:** An artwork depicting arranged inanimate objects such as food, dishes, flowers, or household items.
- **Ochres:** Natural earth pigments ranging from yellow to reddish-brown commonly used in painting.
- **Court painter:** An artist employed by a royal court to create portraits and official artworks for monarchs and nobility.
- **Apprentice:** A person who learns a trade or artistic skill by working under an experienced master artist.
- **Crinoline:** A stiff petticoat or framework of fabric and hoops worn under skirts to give dresses a wide, structured shape, especially popular in elite European fashion.
- **Inquisition:** A series of institutions established by the Roman Catholic Church to identify, investigate, and punish heresy or opposition to church doctrine
- **Tenebrism:** An extreme form of chiaroscuro in which large dark areas sharply contrast with brightly illuminated figures.
- **Ascetic:** Practicing strict self-discipline and simplicity, often for religious reasons.
- **Memento mori:** A symbolic reminder of death and the temporary nature of human life.
- **Contrapposto:** A pose in which a figure stands with most of the weight placed on one leg, creating a natural and relaxed appearance.
- **Cherubs:** Small angelic child-like figures commonly used in religious art.
- **Immaculate Conception:** A Catholic doctrine referring to the Virgin Mary being conceived without original sin.
- **Haberdasher:** A merchant who sells small sewing items, clothing accessories, or men's furnishings.
- **Monastery:** A religious community or building where monks or nuns live and worship.

The **Spanish Baroque** developed a distinctive style of visual **realism** that differed from the more elaborate and theatrical Baroque art found in Italy. Spanish artists often used fluid brushstrokes and soft transitions between forms, avoiding sharply defined outlines. Their paintings were frequently characterized by somber, restrained, and sometimes gloomy tones that reflected the political and religious climate of Spain during the 17th century. Spain's economic struggles also influenced its artistic culture. Costly wars with the Netherlands and England weakened the country financially, while the authority of the Catholic Church and the **Inquisition** shaped both artistic subject matter and religious expression. Spanish Baroque artists created works designed to inspire devotion, humility, and spiritual reflection rather than overwhelming displays of luxury and grandeur.

Unlike the highly ornate style of the Italian Baroque, Spanish painters favored simplicity and earthy color palettes. They often used symbolic and allegorical imagery connected to Catholic beliefs while emphasizing emotional realism and spiritual seriousness. Religious paintings portrayed saints, martyrs, and biblical figures with raw human emotion and physical realism rather than idealized beauty. These works frequently highlighted suffering, sacrifice, and devotion in a direct and powerful way. In Spain, **landscape painting** was considered a less important genre and was generally viewed as suitable mainly for decorating country homes rather than churches or royal commissions. As a result, Spanish Baroque art focused primarily on religious subjects, portraits, and scenes emphasizing moral and spiritual themes. The author Francisco Pacheco wrote that landscapes were essential and should not be neglected; however, landscapes had "little glory and respect by the greats."[1]

Diego Velázquez

Diego Velázquez (1599–1660) is considered the most important painter of the Spanish **Baroque** period. Born in Seville, Velázquez demonstrated extraordinary artistic talent at a very young age. His father worked as a notary, and although the family lived modestly, they recognized his abilities and arranged for him to become an apprentice in 1611 when he was only twelve years old. By the age of eighteen, Velázquez was already regarded as a master painter, and he later served as the official court painter to the Spanish monarchy for more than thirty years.

Velázquez's early works often focused on scenes from everyday domestic life, especially kitchen interiors that combined figures with detailed **still life** objects. One of his earliest masterpieces, *An Old Woman Cooking Eggs* (9.4.1), was painted when he was

only nineteen years old. The painting demonstrates his exceptional command of **chiaroscuro**, using dramatic contrasts between light and shadow to create realism and depth. Most of the background and surrounding figures disappear into deep darkness, while focused light illuminates the old woman's face, the cooking utensils, and the eggs in the foreground.

Velázquez carefully used multiple shades of **ochres** and browns to develop rich dark tones and subtle variations of color. The arrangement of bowls, pots, and dishes reflects the influence of still life painting common in scenes of domestic life. Every object is rendered with remarkable detail and realism, from the smooth surface of the eggs to the reflective metal cookware and textured pottery. Through his attention to light, texture, and ordinary subjects, Velázquez transformed a simple kitchen scene into a powerful and highly realistic work of art.

Figure \(\PageIndex{1}\): *An Old Woman Cooking Eggs* (1618, oil on canvas,100.5 x 119.5 cm) (Public Domain)

Around 1650, Diego Velázquez traveled to Italy, where he painted the celebrated *Portrait of Pope Innocent X* (9.4.2), a work many historians consider one of the greatest **portraits** ever created. The painting demonstrates Velázquez's extraordinary ability to capture **realism**, texture, and psychological presence. The rich red silk cape worn by the pope reflects subtle highlights and variations of color, creating a striking focal point within the composition. Velázquez masterfully repeated different tones of red throughout the painting, producing harmony and dramatic visual intensity.

The crisp white linen garments contrast sharply with the deep reds surrounding the pope, emphasizing his authority and dignity as he sits on the throne. The pose appears natural and immediate, as though the pope is about to rise from his chair while extending a note in his left hand toward the viewer. This sense of movement and realism gives the portrait an almost lifelike presence.

Unlike many formal **court portraits** that idealized rulers and religious leaders, Velázquez painted people as they truly appeared. Rather than softening features or concealing imperfections, he portrayed Pope Innocent X with honesty and psychological depth, capturing both his intelligence and stern personality. The portrait helped establish a new direction for formal court painting in which subjects were represented realistically and placed in more natural poses rather than stiff, idealized arrangements. Through this approach, Velázquez transformed portraiture into a deeply human and psychologically compelling art form.

Figure \(\PageIndex{2}\): *Portrait of Pope Innocent X* (Public Domain)

Las Meninas (*The Maids of Honor*) (9.4.3) by Diego Velázquez is widely considered one of the greatest paintings in the history of Western art. At first glance, the painting appears to be a portrait of the young Princess Margarita Theresa surrounded by her attendants and members of the Spanish court. However, Velázquez transformed the scene into a highly complex and illusionistic composition filled with mystery, unusual viewpoints, and uncertain relationships between the figures. The painting was nearly destroyed in a fire and survived only after damaged portions along the edges were trimmed away. The central **focal point** of the painting is the five-year-old princess, illuminated brightly in the foreground and surrounded by her **ladies-in-waiting**, court dwarfs, a chaperone, and a bodyguard —all figures commonly found within the royal court. Toward the back of the room stands the queen's chamberlain in a doorway flooded with light, creating a strong sense of depth and perspective. His uncertain movement — whether entering or leaving the room— adds to the mysterious atmosphere of the composition.

Velázquez also included himself within the painting, standing beside a massive canvas (9.4.5) that appears even larger than *Las Meninas* itself. This self-insertion blurs the line between artist, subject, and viewer. At the rear of the room, a mirror reflects the images of the king and queen, though their actual location within the space remains unclear. Art historians continue to debate whether Velázquez was painting the royal couple, the princess, or perhaps even the viewer standing where the king and queen would be positioned. The figures throughout the composition interact in different ways: some converse with one another while others gaze directly outward toward the viewer. This arrangement creates extraordinary psychological and spatial complexity. Through his use of **illusionism**, light, perspective, and realism, Velázquez transformed *Las Meninas* into a sophisticated exploration of perception, representation, and the relationship between art and reality.

Figure \(\PageIndex{3}\): *Las Meninas* (Public Domain)

Figure \(\PageIndex{4}\): Las Meninas key (CC BY-SA 3.0)

Figure \(\PageIndex{5}\): Velázquez by the easel (Public Domain)

Diego Velázquez created some of his finest **portraits** through his paintings of the royal children of Spain, especially the young Princess Margarita Teresa. Among these works, *Infanta Margarita Teresa in a Blue Dress* (9.4.6) is considered one of his greatest achievements. The painting demonstrates Velázquez's extraordinary mastery of texture, light, and realism, particularly in his depiction of the princess's elaborate gown. The shimmering blue silk dress appears remarkably soft and luxurious, covered with intricate silver braid and decorative details that catch the light across the surface of the fabric. Velázquez carefully used contrasts of light and dark to create depth and realism, making the folds, textures, and reflective surfaces appear almost tangible. His brushwork gives the material a luminous quality while preserving the delicate elegance of the clothing.

The portrait also reflects the formal fashion traditions of the Spanish royal court. Beneath the gown, a wide structure of **crinoline** and stiff underskirts forces the dress into a rigid and unnatural shape, even for a very young child. Although the princess is richly dressed in symbols of wealth and status, her pale complexion and solemn expression create a sense of seriousness and restraint. Rather than portraying a carefree child, Velázquez presents a young girl shaped by the strict expectations and ceremonial life of the royal court, encouraging viewers to reflect on the reality of her life beneath the elaborate costume.

Figure \(\PageIndex{7}\): *Infanta Margarita Teresa in a Blue Dress* (1659, oil on canvas, 127 x 107 cm) (Public Domain)

Las Meninas Best Painting in History

View the best painting in history by Diego Velasquez

Bartolome Murillo

Bartolomé Esteban Murillo (1618–1682) was one of the most popular religious painters of the Spanish **Baroque** period. His work combined elements of **Mannerism**, **Realism**, and Baroque drama to create emotionally engaging and highly naturalistic scenes. Born in Seville, Murillo lost both of his parents at a young age, and little is known about his early childhood. Historians believe his uncle, who was also an artist, helped influence and guide his artistic development. Inspired by Caravaggio and the dramatic technique of **tenebrism**, Murillo frequently painted scenes from everyday Spanish life alongside traditional religious subjects. His paintings are known for their soft lighting, warm atmosphere, and realistic portrayals of ordinary people. In works such as *Holy Family with Dog* (9.4.8) and *Two Women at a Window* (9.4.9), Murillo used light entering from one side of the composition to illuminate the figures while the background recedes into darkness.

In *Holy Family with Dog*, Murillo portrays the Holy Family not as distant sacred icons but as an ordinary working-class family. Joseph appears as a carpenter, and Mary wears simple everyday clothing rather than elaborate royal garments. Unlike many earlier religious paintings, Murillo omitted traditional halos, emphasizing realism and humanity instead. The child becomes the focal point of the composition as light shines directly upon him and the nearby dog, creating warmth and tenderness against the dark background. *Two Women at a Window* presents a more mysterious and ambiguous scene. An older woman partially hides her face behind a scarf while peering out the window, while a younger woman leans forward with curiosity and amusement as she looks outside. Historians continue to debate the meaning of the painting. The women may simply be observing everyday street life, or they may be prostitutes attempting to attract customers from the window. Murillo's use of soft illumination, expressive faces, and psychological uncertainty gives the work a lively and engaging quality that continues to intrigue viewers today.

Figure \(\PageIndex{8}\): *The Holy Family with Dog* (Public Domain)

Figure \(\PageIndex{9}\): *Two Women at a Window* (Public Domain)

The religious theme of the **Immaculate Conception** (9.4.10) became one of the most important subjects in Spanish **Baroque**art and appeared frequently in the paintings of Bartolomé Esteban Murillo. Murillo created nearly two dozen images of the Virgin Mary, helping establish the visual style most closely associated with this subject in Spain. In these paintings, Murillo followed the traditional iconography of the Virgin Mary by depicting her in a flowing white dress symbolizing purity and a blue mantle representing heaven and devotion. Her figure is arranged in a graceful **contrapposto** pose, with one knee bent and the body's weight resting primarily on one leg, giving the figure a sense of elegance and natural movement.

The Virgin is typically shown floating among soft clouds and surrounded by small **cherubs**, angelic child-like figures commonly included in depictions of heavenly scenes. Murillo masterfully used light to create the illusion of upward spiritual movement, guiding the viewer's eye from the darker lower portion of the composition toward the illuminated figure above. The soft glowing light and delicate transitions between shadow and brightness give the painting a serene, ethereal quality that reflects the spiritual ideals of the Catholic Church during the Counter-Reformation.

Figure \(\PageIndex{10}\): *Immaculate Conception* (1678, oil on canvas, 274 x 190 cm) (Public Domain)

Francisco de Zurbarán

Francisco de Zurbarán (1598–1664) was a major painter of the Spanish **Baroque** period, known for his deeply spiritual and dramatic religious works. Born in Fuente de Cantos, his father worked as a haberdasher, and as a child Zurbarán showed artistic talent by sketching nearby objects with charcoal. Recognizing his abilities, his father arranged for him to apprentice with a local painter. Although his early life included personal tragedy, including the death of his first wife after the birth of their third child, Zurbarán later established himself as a respected artist through important commissions for monasteries and religious institutions. Zurbarán's style was strongly influenced by Caravaggio, especially through his use of **chiaroscuro** and **tenebrism**. He specialized in dramatic lighting and carefully painted draped fabrics that appear highly realistic and sculptural. Many of his figures are portrayed as solemn, austere, or **ascetic**, reflecting themes of religious devotion, sacrifice, and contemplation. His compositions often feature extremely dark backgrounds with few distractions, causing the illuminated foreground figures to stand out with powerful intensity.

In *Saint Francis in Meditation* (9.4.11), Zurbarán portrays Saint Francis kneeling in deep prayer while holding a skull in his hands. The hooded robe partially conceals the saint's face, increasing the sense of humility and spiritual isolation. Saint Francis belonged to a religious order committed to poverty, a condition reflected in the worn and tattered fabric visible on the sleeve of his robe. The skull serves as a **memento mori**, a symbolic reminder of death and the temporary nature of earthly life, while also referring to Christ's crucifixion and sacrifice. Although Zurbarán became famous for religious imagery, he also painted historical and secular scenes. In *Defense of Cadiz against the English* (9.4.12), he depicts the governor issuing military orders in preparation for an English invasion. In the distance, a fleet of English ships fills the harbor, carrying thousands of soldiers ready to attack. Unlike the dark backgrounds typical of Zurbarán's religious paintings, this composition includes an illuminated blue sky and bright sea that

create a more open and expansive atmosphere. However, he still incorporated dramatic **chiaroscuro** on the left side of the painting, maintaining the strong contrasts of light and shadow that defined his artistic style.

Figure \(\PageIndex{11}\): *Saint Francis in Meditation* (bet. 1635-1639, oil on canvas, 152 x 99 cm) (Public Domain)

Figure \(\PageIndex{12}\): *Defense of Cadiz against the English* (bet. 1634-1635, oil on canvas, 302 x 323 cm) (Public Domain)

[1] Retrieved from https://rar.rutgers.edu/wp-content/u...ol.-5-1984.pdf

9.5: Mexican Baroque (1640 – mid 1700s)

Definition: Term

- **Mexican Baroque:** A highly decorative style of art and architecture in colonial Mexico that blended Spanish Baroque traditions with Indigenous Mexican artistic influences.
- **Churrigueresque:** An extremely ornate form of Baroque architecture characterized by elaborate decoration, sculptural details, and richly covered surfaces.
- **Gold leaf:** Very thin sheets of gold applied to surfaces for decoration and brilliance.
- **Nave:** The central aisle or main interior section of a church.
- **Corinthian capitals:** Decorative tops of columns featuring carved acanthus leaves and elaborate ornamentation, originating in ancient Greek architecture.
- **Façade:** The front exterior face of a building, often highly decorated.
- **Relief sculpture:** A sculptural technique in which figures project outward from a flat background surface.
- **Stucco:** A fine plaster material used to coat and decorate walls and ceilings.
- **Gilded:** Covered or decorated with a thin layer of gold.
- **New Spain:** The Spanish colonial territory in the Americas that included present-day Mexico and other regions controlled by Spain.

The **Mexican Baroque** period developed as Spanish artistic traditions blended with Indigenous Mexican cultures after colonization. Spanish immigrants brought European **Baroque** architecture, sculpture, and painting styles to New Spain, where Indigenous artists and craftspeople adapted these forms using local materials, colors, and decorative traditions. This fusion created a unique artistic style distinct from European Baroque art. Mexico, the wealthiest province of New Spain, became especially known for its highly elaborate architectural style called **Churrigueresque**, sometimes referred to as "ultra-Baroque."

Mexican **Churrigueresque** architecture emphasized overwhelming decoration and the filling of nearly every available surface with ornamentation. Brightly colored tiles, gold leaf, carved stonework, floral patterns, angels, vines, and elaborate relief sculptures covered church interiors and façades. Unlike many European Baroque buildings that balanced decoration with open space, Mexican Baroque artists focused on creating richly layered surfaces filled with visual complexity. The style reflected both Spanish Catholic influences and Indigenous artistic traditions, producing vibrant and highly ornate sacred spaces.

One of the finest examples of Mexican Baroque architecture is the cathedral in Zacatecas (9.5.1, 9.5.2). The original church began in 1550, but after multiple fires and renovations, the present cathedral was constructed beginning in 1732. Designed in the shape of a cross with three **naves**, the cathedral is celebrated for its extraordinary façade. Three grouped columns with **Corinthian capitals** rise on each side while vines, angels, and statues of saints fill the spaces between them. The entrance is richly decorated with relief carvings of floral motifs and angelic figures. As sunlight moves across the stone façade, the color changes to a brilliant pink, enhancing the dramatic visual effect. The building is considered one of the greatest examples of **Churrigueresque** architecture in Mexico.

Another masterpiece of Mexican Baroque is the Chapel of the Rosario, located within the Church of Santo Domingo in Puebla, Mexico. Built between 1650 and 1690, the chapel became famous as the "House of Gold" because of its extensive use of gold leaf decoration. Visitors often described it as the "eighth wonder of the world" because nearly every surface of the interior is covered with gilded ornament and religious imagery. Six paintings illustrating the life of Jesus decorate the walls, while the dome above is richly gilded and adorned with sixty angelic figures. Sculptural representations of Mary, saints, and the Archangel Gabriel rise upward through the chapel's levels, creating a dramatic sense of heavenly ascent. The original 23-carat gold leaf still remains attached to many surfaces, demonstrating the remarkable craftsmanship and enduring brilliance of Mexican Baroque art.

The Golden Chapel

The Capilla del Rosario is renowned for its stunning Baroque architecture. Built in the 17th century (1650-1690), it is a prime example of Mexican Baroque style, characterized by its elaborate ornamentation, intricate details, and a rich combination of indigenous and European artistic influences. One of the most distinctive features of the chapel is its lavish use of gold leaf. The interior is adorned with intricate gold leaf designs covering the walls, ceilings, and altars. This opulence reflects the wealth and artistic exuberance of the Baroque period. The chapel is a showcase of masterful craftsmanship and artistry. The altars,

sculptures, and embellishing elements were created by skilled indigenous and mestizo craftsmen, including the renowned sculptor Pedro Márquez.

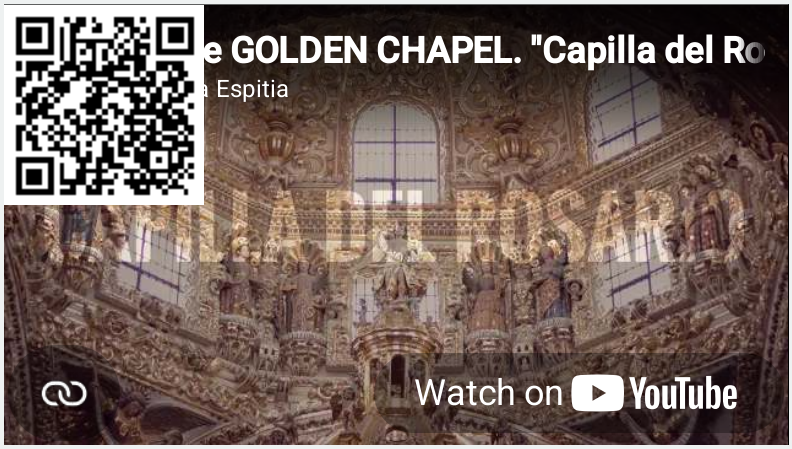


Figure \(\PageIndex{1}\): Cathedral of Zacatecas (CC BY-SA 3.0)

Figure \(\PageIndex{2}\): Interior (CC BY-SA 2.5)

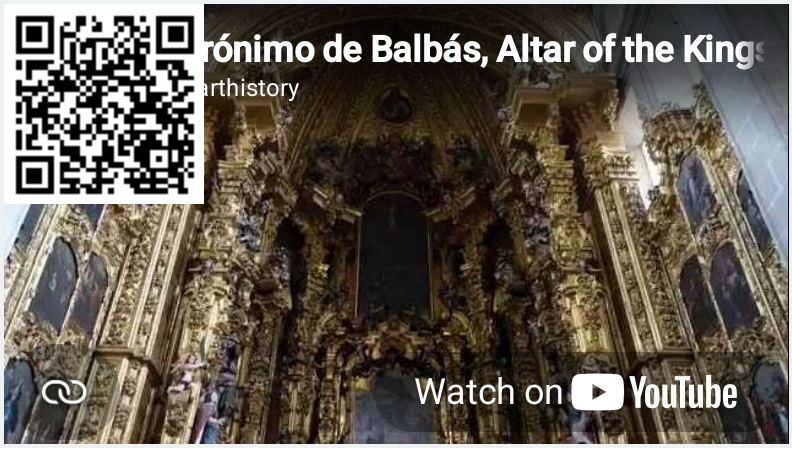
Jerónimo de Balbás

Jerónimo de Balbás (1680–1748) was an architect and sculptor born in Spain who later moved to Mexico, where he became one of the most influential designers of the Mexican **Baroque** style. Balbás was especially famous for introducing the **estípite column**, a distinctive architectural feature shaped like an inverted cone or tapered pedestal and covered with elaborate ornamentation. These highly decorative columns became one of the defining characteristics of **Churrigueresque** architecture in colonial Mexico. One of Balbás's most celebrated works is the **Altar of the Kings** located inside the Catedral Metropolitana de México, the central cathedral of Mexico City. The altar resembles a magnificent gold-covered grotto overflowing with decoration and religious symbolism. The enormous structure is divided into sections framed by the unusual estípite columns, which are richly decorated and surrounded by statues, carvings, and paintings illustrating biblical stories and Catholic saints. Balbás used gold leaf, sculpture, painting, and architecture together to create a dramatic and immersive religious environment typical of Mexican Baroque art. The overwhelming ornamentation and theatrical arrangement were intended to inspire awe and devotion among worshippers. The success and popularity of the Altar of the Kings influenced church design throughout Mexico, and Balbás's architectural style quickly became a model for later Baroque altars across New Spain.

Figure \(\PageIndex{3}\): Altar of the Kings (CC BY-SA 4.0)

Jeronimo de Balbas, Altar of the Kings

Jerónimo de Balbás, Altar of the Kings (Altar de los Reyes), 1718-37, Metropolitan Cathedral of the Assumption of the Most Blessed Virgin Mary (Mexico City)



Lorenzo Rodríguez

Lorenzo Rodríguez (1704–1774) was another important architect of the Mexican **Baroque** period and is closely associated with the development of the highly decorative **Churrigueresque** style in New Spain. Rodríguez became known for designing buildings filled with extraordinary complexity, elaborate ornamentation, and richly layered decorative details that transformed church architecture into dramatic visual experiences. One of his most famous works is the Sagrario Metropolitano, also known as the Metropolitan Tabernacle, a smaller church structure built adjacent to the main cathedral in Mexico City. Rodríguez designed the building with an intensely ornate façade that demonstrates the distinctive features of Mexican Churrigueresque architecture. The exterior is covered with intricate carvings, sculptural reliefs, and symbolic decorations that nearly fill every available surface.

Rodríguez incorporated numerous **zoomorphic reliefs**, decorative carvings of animal forms such as lions and eagles, along with **anthropomorphic** figures and the coat of arms of Mexico. He also filled the façade with detailed carvings of fruits, flowers, and pomegranates, many of which carried symbolic meanings connected to the Catholic faith. These decorative elements not only reflected religious devotion but also demonstrated the artistic fusion of European Baroque traditions with local Mexican creativity and craftsmanship. Through his emphasis on abundance, complexity, and symbolism, Rodríguez helped define the distinctive visual identity of Mexican Baroque architecture.

Figure \(\PageIndex{4}\): Catedral Metropolitana (CC BY-SA 4.0)

Sebastián López de Arreaga

Sebastián López de Arteaga (1610–1652) was born in Spain and later moved to Mexico, where he became an important painter of the Mexican **Baroque** period. His work reflected strong influences from both **Mannerism** and the dramatic lighting techniques developed during the Baroque era. Like Caravaggio, Arteaga adopted the use of **tenebrism** and **chiaroscuro**, employing sharp contrasts between light and dark to emphasize important figures and create emotional intensity within his paintings. Unlike Caravaggio, however, Arteaga generally portrayed idealized religious subjects rather than ordinary people drawn from everyday

life. His paintings retained many traditional qualities associated with earlier Renaissance and Mannerist art, including elongated figures, graceful poses, and carefully arranged compositions.

In *The Betrothal of the Virgin* (x.x), Arteaga painted elegant and idealized figures in a richly decorated Baroque setting. The composition includes flattened and elongated forms similar to those seen in many **Renaissance** and **Mannerist** paintings, while the ornate details and dramatic lighting reflect Baroque influences. Small floating angels fill the upper portion of the composition, adding movement, spirituality, and decorative richness to the scene. Through the combination of idealized beauty, dramatic illumination, and religious symbolism, Arteaga helped adapt European Baroque traditions to the artistic culture of colonial Mexico.

Figure \(\PageIndex{5}\): *The Betrothal of the Virgin* (bef. 1652, oil on canvas, 223.5 x 170 cm) (Public Domain)

Joseph, Mary, and the representation of marriage in New Spain

Sebastian Lopez de Arteaga, Marriage of the Virgin (Los Desposorios de la Virgen), before 1652, oil on canvas, 223.5 x 170 cm (Museo Nacional de Arte, INBA, Mexico City)

Cristóbal de Villalpando

Cristóbal de Villalpando (1649–1714) was born in New Spain (Mexico) and became one of the leading painters of the Mexican **Baroque** period. He was especially known for his luminous, richly ornamented paintings created for churches and cathedrals. Villalpando combined dramatic lighting, vivid color, and intricate decorative detail to produce emotionally powerful religious imagery. His paintings often appear highly theatrical, filled with movement, glowing light, and complex compositions.

Villalpando frequently used artificial or unseen **light sources** to illuminate important figures and symbolic elements within his paintings. Through careful and meticulous brushwork, he created shimmering surfaces and dramatic contrasts that enhanced the spiritual atmosphere of his scenes. In *Lady of Sorrows* (9.5.6), a semicircle of angels dressed in brilliant red and gold surrounds the central figure of Mary, who is clothed in dark garments symbolizing mourning and sorrow. The contrast between the glowing angels and the solemn central figure intensifies the emotional impact of the composition. Villalpando also illuminated faces from multiple directions, demonstrating his imaginative use of light originating from unseen locations.

One of his most ambitious works, *Moses and the Brazen Serpent and the Transfiguration of Jesus* (9.5.7), was painted for a chapel in the Puebla Cathedral. The enormous canvas represented a major achievement in large-scale religious painting in colonial Mexico. Villalpando combined two separate biblical narratives into one unified composition: the lower section depicts Moses and the brazen serpent, while the upper section portrays the transfiguration of Jesus. He filled the vast canvas with life-sized figures arranged in dramatic poses and gestures, creating movement and complexity throughout the painting. Villalpando's unusual handling of color and light produced shimmering visual effects that gave the painting a radiant and almost supernatural appearance. By blending dramatic Baroque lighting with richly decorative surfaces and monumental scale, he became one of the most important religious painters of colonial Mexico.

Figure \(\PageIndex{6}\): *Lady of Sorrows* (Copyright; author via source)

Figure \(\PageIndex{7}\): *Moses and the Brazen Serpent and the Transfiguration of Jesus* (1683, oil on canvas, 865 x 550.1 cm) (Public Domain)

Juan Correa

Juan Correa (1646–1739) was born in Mexico during the colonial period of New Spain. His father was a physician from Spain, and his mother was a formerly enslaved Black woman. Correa became one of the most important painters in New Spain and was especially recognized for his large-scale religious paintings created for churches and cathedrals. His work reflects the rich cultural blending that characterized colonial Mexican society and the strong influence of the Catholic Church on artistic production. Like many painters of the Mexican **Baroque** period, Correa frequently focused on images of the Virgin Mary, who became one of the most important spiritual and cultural symbols in New Spain. The Virgin was viewed as a compassionate intermediary between God and humanity and played a central role in religious devotion throughout colonial Mexico.

In *The Woman of the Apocalypse* (9.5.8), Correa depicts the Virgin Mary according to the traditional **iconography** described in the Book of Revelation: “clothed with the sun, with the moon under her feet and on her head a crown of twelve stars” (Revelation 12:1). Mary appears radiant and heavenly, surrounded by symbolic elements emphasizing her divine role. Beside her stands the Archangel Michael, prepared for battle against evil, while two angels carry the infant Jesus above the scene. Correa combined dramatic **Baroque** lighting, flowing movement, and rich decorative detail to create an emotionally powerful and spiritually uplifting image. The composition reflects the deep religious devotion of colonial Mexico while also demonstrating the grandeur and theatrical qualities characteristic of Mexican Baroque art.

Figure \(\PageIndex{8}\): *The Virgin of the Apocalypse* (c. 1689, oil on canvas) (Public Domain)

9.6: Rococo (1730 – 1760)

Definition: Term

- **Rococo:** An 18th-century European artistic style characterized by elegance, pastel colors, playful themes, curving forms, and elaborate decoration.
- **Baroque:** A dramatic artistic style emphasizing movement, emotion, realism, and strong contrasts of light and shadow.
- **Pastel colors:** Soft, light colors often used in Rococo painting and decoration.
- **Fresco:** A painting technique in which pigments are applied to wet plaster walls or ceilings.
- **Ornamentation:** Decorative details added to architecture, furniture, clothing, or artworks.
- **Rocaille:** A French term meaning rock or stone decoration, associated with shell-like ornamental forms in Rococo art.
- **Coquilles:** The French word for shells, commonly used as decorative motifs in Rococo design.
- **Versailles:** The grand French palace associated with the monarchy of Louis XIV and Louis XV and a major center of Rococo culture and design.

The **Rococo** period developed in Europe during the early 18th century as a lighter and more playful continuation of the late **Baroque** style. While Baroque art emphasized drama, emotional intensity, and deep shadows, Rococo art favored elegance, movement, intimacy, and decorative beauty. Artists used brilliant pastel colors, delicate brushwork, and graceful compositions that contrasted sharply with the darker and more serious tone of Baroque painting. The Rococo style is closely associated with the reign of Louis XV and the luxurious atmosphere surrounding the French court at Versailles. During this time, the artistic center of Europe gradually shifted from Italy to France, where aristocrats and wealthy patrons commissioned elaborate palaces, salons, frescoes, sculptures, and decorative interiors. Rococo art celebrated pleasure, romance, leisure, and refined aristocratic life rather than religious drama or heroic themes.

Rococo artists and designers filled interiors with elaborate ornamentation, curving lines, gilded surfaces, mirrors, and highly decorative furniture and clothing. Beauty and elegance became more important than practicality, creating richly decorated environments designed to impress and entertain. The style extended beyond painting into architecture, sculpture, interior decoration, fashion, and furniture design, transforming nearly every aspect of elite European culture. The term **Rococo** comes from the French words **rocaille** (stone or rock decoration) and **coquilles** (shells), referring to the shell-like curves and ornamental patterns frequently used in Rococo decoration.

François Boucher

François Boucher (1703–1770) was one of the most important painters of the **Rococo** period and became famous for his elegant, sensual, and highly decorative paintings. Born in Paris, Boucher first learned artistic techniques from his father, who was also an artist. As his career developed, he became known for creating romantic and theatrical scenes filled with passion, fantasy, and playful eroticism. His paintings often depicted mythological subjects, aristocratic leisure, and dreamlike landscapes characteristic of the Rococo style.

In *The Secret Message* (9.6.1), Boucher created an imaginative and idealized setting filled with twisting vines, flowering plants, lush green grass, and fragments of ancient Greek sculpture partially covered by overgrown vegetation. The background appears almost theatrical or fantasy-like rather than realistic, emphasizing the Rococo fascination with beauty, pleasure, and escape from ordinary life. Small **cherubs**, a common decorative element in Rococo art, are carved into the nearby column and contribute to the playful and romantic atmosphere.

The elegantly dressed woman retreats into a secluded garden space to read a letter, her dreamy expression suggesting romance and private emotion. Boucher carefully used delicate **pastel colors**, especially soft pinks, blues, and greens, throughout the vegetation, clothing, and sky to create a light and graceful mood. The flowing forms, decorative details, and sensual atmosphere exemplify the luxurious and ornamental qualities that defined Rococo painting.

Figure \(\PageIndex{1}\): *The Secret Message* (Public Domain)

Jean-Honoré Fragonard

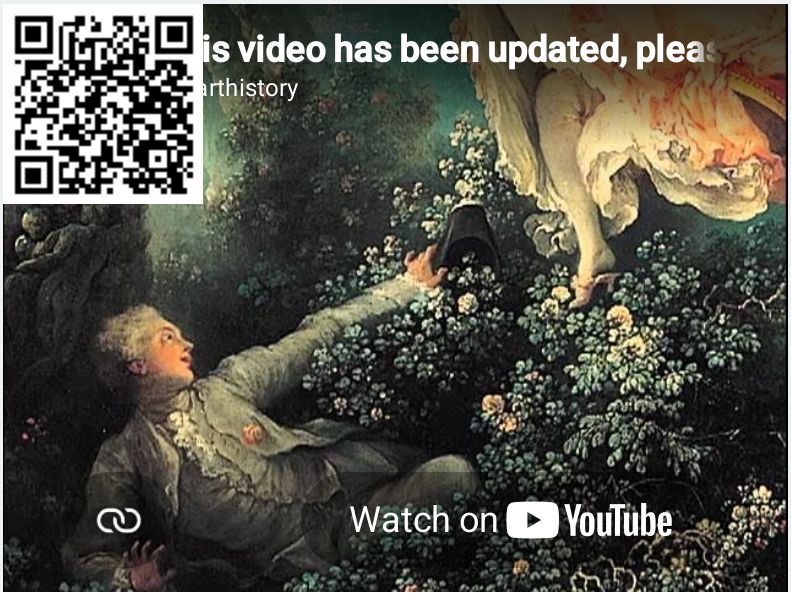
Jean-Honoré Fragonard (1732–1806) was one of the leading painters of the **Rococo** period and became famous throughout Europe for his luxurious and playful paintings filled with romance, fantasy, and allegorical themes. Born in Grasse, France, Fragonard moved with his family to Paris as a child, where his artistic talent quickly became apparent. His paintings captured the elegance and pleasure-loving atmosphere of French aristocratic society during the 18th century. The lavish clothing, flirtation, and carefree entertainment associated with Rococo culture are perfectly illustrated in *The Swing* (9.6.2), Fragonard's most famous work. In the painting, a young woman wearing a swirling pink silk dress swings high through a lush garden while her husband, barely visible in the background, pushes her unknowingly. Hidden in the foreground, her lover looks upward as she swings forward, allowing him a playful glimpse beneath her dress as one of her shoes flies through the air.

Fragonard used the woman's brilliant pink satin dress as the central **focal point** of the composition. The soft blue sky and glowing light surrounding her suggest innocence and fantasy, even while the painting's subject is playful and suggestive. Her dress twists and billows dramatically as she sits upon a luxurious red velvet swing, creating movement and energy throughout the scene. The painting is filled with dense trees, bushes, flowers, and sculptural decorations that nearly overwhelm the canvas, reflecting the Rococo love of elaborate ornamentation and natural fantasy settings. The playful subject matter, pastel colors, romantic atmosphere, and decorative richness make *The Swing* one of the defining masterpieces of Rococo art.

Figure \(\PageIndex{2}\): *The Swing* (CC BY-SA 4.0)

Fragonard, The Swing

Jean-Honoré Fragonard, The Swing, oil on canvas, 1767 (Wallace Collection, London)



Élisabeth Louise Vigée-Le Brun

Élisabeth Louise Vigée Le Brun (1755–1842) was one of the most successful female painters of the **Rococo** period and became especially famous for her portraits of French royalty and aristocratic society. Born in Paris, she was the daughter of a painter and member of the Académie, and from an early age she showed exceptional artistic talent. Her father and his artist friends encouraged her education in art, and even after her father died when she was twelve, she continued studying and began painting professionally as a teenager. Le Brun became the official portrait painter to Marie Antoinette and created many elegant images of the queen intended to present her with grace, beauty, and refinement. In *Marie-Antoinette with the Rose* (9.6.3), Le Brun painted the queen in the luxurious and decorative style typical of **Rococo** art. Marie Antoinette wears an elaborate silk gown richly decorated with lace, ribbons, and an oversized bow across the front of the dress. The shimmering fabrics and delicate textures demonstrate Le Brun's remarkable ability to portray clothing and surface detail realistically.

The queen's powdered hairstyle and feathered hat further emphasize aristocratic fashion and elegance. The feathers are carefully arranged asymmetrically to balance the elaborate structure of her hairstyle, a reflection of the refined and theatrical fashion culture of the French court. At the center of the painting, Marie Antoinette gently holds a pink cabbage rose, one of her favorite flowers. The rose symbolizes beauty, delicacy, and femininity while also softening the formal image of the queen. Le Brun used soft **pastel colors**, graceful brushwork, and delicate lighting to create a portrait that reflects the luxury and refinement associated with the Rococo period. Through her portraits, she helped shape the public image of Marie Antoinette and became one of the most important female artists of 18th-century Europe.

Figure \(\PageIndex{3}\): *Marie-Antoinette with the Rose* (Public Domain)

Adélaïde Labille-Guiard

Adélaïde Labille-Guiard (1749–1803) was an important female artist of the late **Rococo** period who pursued a professional artistic career despite the many obstacles facing women artists in 18th-century France. Although she married at a young age, she later separated from her husband in order to continue her artistic education and career, an unusual and difficult decision for women of her time. Labille-Guiard first trained as a painter of miniatures before expanding her work into large-scale portraiture using both **pastels** and oil paints. She achieved significant recognition and was admitted into the prestigious **Académie Royale de Peinture et de Sculpture** at the same time as Élisabeth Louise Vigée Le Brun. Her admission marked an important achievement for female artists in a profession largely dominated by men.

Self-Portrait with Two Pupils (9.6.4) is considered Labille-Guiard's masterpiece and serves as both a self-portrait and a statement about women's artistic education. In the life-sized painting, the artist sits confidently before her easel while two young female students stand behind her, attentively observing and learning. The composition emphasizes her role not only as a successful painter but also as a mentor to other women artists. Labille-Guiard's elegant light blue satin dress and matching ribboned hat symbolize professionalism, refinement, and artistic success, while the students' simpler clothing creates a visual contrast that highlights her accomplished status. The faces of all three women are brightly illuminated against a dark background, demonstrating her skillful use of color, light, and contrast. Through this painting, Labille-Guiard presented herself as an intelligent and respected professional artist while also advocating for the education and advancement of women in the arts.

Figure \(\PageIndex{4}\): *Self-portrait with Two Pupils* (1785, oil on canvas, 210.8 x 151.1 cm) (Public Domain)

Princess Marie Adélaïde of France was one of the daughters of Louis XV and lived during a period when royal daughters were often expected to marry foreign rulers in order to strengthen political alliances and expand royal influence. The king's eldest daughter married at the age of twelve; however, because much of Europe had become Protestant, there were few suitable Catholic royal matches available for the remaining daughters. As a result, Princess Marie Adélaïde never married and spent much of her life at Versailles. When her nephew later became king and married Marie Antoinette, tensions reportedly developed between the princess and the new queen.

In *Princess Marie Adélaïde of France* (9.6.5), Adélaïde Labille-Guiard portrayed the princess later in life while she paints a medallion honoring her deceased parents and brother. The princess holds a brush in one hand and a towel in the other, emphasizing her participation in artistic and intellectual pursuits. Labille-Guiard placed the richly colored red robe at the center of the composition, making it the primary **focal point** of the portrait. The deep green chair behind her creates a striking complementary contrast that enhances the richness of the scene.

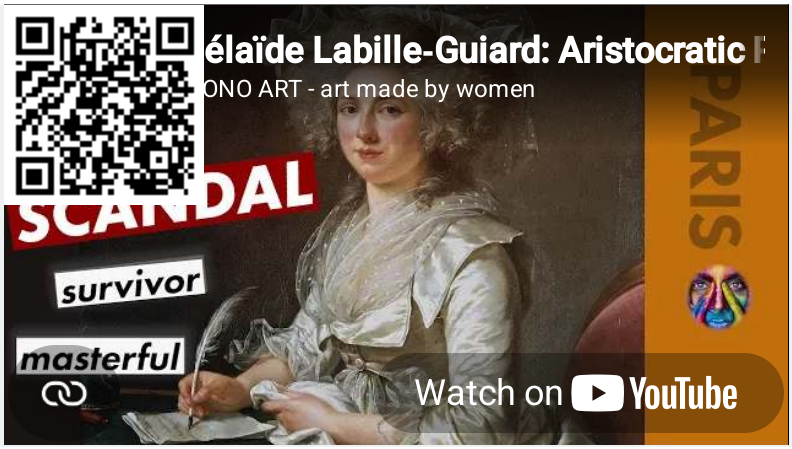
Labille-Guiard demonstrated exceptional precision in her rendering of fabrics and decorative details. The silver and gold embroidery of the gown, combined with the delicate white lace, reflects her remarkable technical skill and attention to texture. Unlike many darker Rococo portraits, the lighter background allows the architectural details of the walls and columns to remain

visible, adding depth and elegance to the composition. Through this portrait, Labille-Guiard presented Princess Marie Adélaïde as both aristocratic and thoughtful, emphasizing dignity, refinement, and artistic cultivation.

Figure \(\PageIndex{5}\): *Princess Marie Adélaïde of France* (1787, oil on canvas, 271 x 194 cm) (Public Domain)

Adelaide Labille-Guiard

Trolling and slandering is common on social media today but this human phenomena is nothing new. Adélaïde Labille-Guiard, (1749 – 1803), a French artist active in 18th century, was accused of having no less than 2000 lovers. As a woman artists, she was an easy target but depsite the gossip still she persevered and was voted into the Royal Academy in 1783.


élaïde Labille-Guiard: Aristocratic
ONO ART - art made by women
SCANDAL
survivor
masterful
PARIS
Watch on YouTube

9.7: Benin Kingdom (1100 – 1897)

Definition: Term

- **Kingdom of Benin:** A powerful West African kingdom located in present-day Nigeria, known for its advanced political system and remarkable bronze and ivory artworks.
- **Oba:** The hereditary king and spiritual ruler of the Kingdom of Benin.
- **Bas-relief:** A sculptural technique in which figures project slightly from a flat background surface.
- **Lost-wax casting:** A metal casting process in which a wax model is melted away and replaced with molten metal to create a detailed sculpture.
- **Bronze casting:** The process of creating sculptures or objects by pouring molten bronze into a mold.
- **Igun eronmwon:** The prestigious guild of brass casters in the Kingdom of Benin known for producing royal bronze artworks.
- **Oral tradition:** The passing of stories, history, and cultural knowledge through spoken word from one generation to another.
- **Commemorative plaque:** A sculpted or engraved panel created to honor, record, or remember important people or events.
- **Hereditary succession:** The passing of leadership or titles from parent to child within a ruling family.
- **Atlantic slave trade:** The forced transportation and sale of enslaved Africans across the Atlantic Ocean to the Americas.
- **Iyoba:** The queen mother in the Kingdom of Benin, honored with special political and spiritual status.
- **Lost-wax casting:** A metal casting technique in which a wax model is melted away and replaced with molten metal to create a sculpture.
- **Metal casting:** The process of shaping metal by pouring molten metal into a mold.
- **Coral beads:** Precious decorative beads symbolizing royalty, wealth, and sacred authority in Benin culture.
- **Idealized representation:** An artistic depiction that emphasizes perfection, dignity, or symbolic qualities rather than exact realism.
- **Lineage:** A line of ancestry or descent within a family or royal dynasty.
- **Commemorative sculpture:** A sculpture created to honor or remember an important person or event.
- **Royal regalia:** The ceremonial clothing, jewelry, and symbols associated with kingship or royalty.

The historic **Kingdom of Benin** was one of the oldest and most sophisticated kingdoms in West Africa and should not be confused with the modern Republic of Benin. Located in present-day Nigeria, the kingdom reached its height during the 15th and 16th centuries, when European traders and explorers established commercial relationships with the region. The kingdom traded highly valued goods such as cast bronze objects, iron, ivory carvings, pepper, and other natural resources. Like many kingdoms during this period, Benin also became involved in the tragic Atlantic slave trade, exchanging captured rival peoples with European and American traders.

The Kingdom of Benin was located within a rich rainforest environment filled with natural resources that supported economic and artistic growth. Leadership was hereditary, with succession usually passing to the eldest son of the **Oba**, or king. However, succession required the son to complete complex burial rituals for his father correctly. Failure to follow these sacred traditions properly could result in disqualification from inheriting the throne.

Art played a central role in Benin society and reflected the kingdom's political, spiritual, and cultural values. Artists in Benin became internationally renowned for their sophisticated bronze casting, ivory carving, and wood sculpture. Much of the royal artwork centered on the divine authority of the Oba, who was believed to maintain connections with ancestors and supernatural powers. Materials such as brass, ivory, and wood were considered spiritually powerful, strengthening the sacred meaning of the artworks themselves.

Benin artists created detailed **bas-relief** sculptures, commemorative plaques, ceremonial objects, and life-sized royal heads. Oral traditions were passed from generation to generation, and artworks helped preserve historical events, rituals, and cultural memory. One example is the bronze plaque of *Two Benin Warriors* (9.7.1), which depicts warriors carrying ceremonial swords. These works were produced by the prestigious brass casters' guild known as the **igun eronmwon**, whose members were highly respected for their technical skill and innovation.

The artists used the **lost-wax casting** (9.7.2) method to create bronze sculptures. First, an original model was sculpted in clay and then coated with a thin layer of wax. Additional clay was placed around the wax-covered form to create a mold. When heated, the

wax melted away, leaving an empty cavity into which molten bronze was poured. Once the bronze cooled, the mold was broken open to reveal an exact metal replica of the original sculpture. This highly advanced technique allowed Benin artists to produce intricate and remarkably realistic works of art that remain among the greatest achievements of African art history.

Figure \(\PageIndex{1}\): Benin warriors (Public Domain)

Figure \(\PageIndex{2}\): Liquid bronze (CC BY-SA 4.0)

The bronze **head of the Oba** (9.7.3) was commissioned by a newly crowned king to honor his deceased father, and the sculpture became both a commemorative object and an object of spiritual reverence. In the Kingdom of Benin, the Oba was regarded as both a political and divine ruler, and these bronze heads symbolized royal authority, ancestry, and continuity of leadership. Rather than serving as exact portraits, the heads were idealized representations that emphasized the power and dignity of the king and his lineage. The sculpture also demonstrates the extraordinary technical skill of Benin artists in **metal casting**. Unlike many cultures that portrayed rulers or deities as complete figures, Benin artists frequently focused on the head alone. The Benin people believed the head was the seat of intelligence, wisdom, and decision-making, making it the most spiritually important part of the body. As a result, the bronze heads became powerful symbols of memory, authority, and ancestral presence.

The elaborate cap and coral-bead collar identify the sculpture as royal. Coral beads were precious symbols of wealth, sacred power, and kingship within Benin society. The highly respected brass-casting guilds used the sophisticated **lost-wax casting** process to create these sculptures, producing intricate details and smooth surfaces with remarkable precision. When a new king ascended to the throne, he also bestowed the title of **Iyoba** upon his mother. The Iyoba, (9.7.4) or queen mother, was honored with her own palace outside the city because the newly crowned Oba was considered a divine ruler whom she could no longer see directly. Sculptures of the Iyoba were also created to honor her status and importance. These images often emphasized elaborate headdresses and richly detailed coral-bead adornments. Both the Oba and Iyoba sculptures feature deep, almond-shaped eyes that create a sense of spiritual awareness and authority. Their intricate headdresses and decorative coral beadwork reflect the importance of royal regalia in Benin culture and demonstrate the extraordinary craftsmanship of Benin artists.

Figure \(\PageIndex{3}\): Ancestral head of an Oba (Public Domain)

Figure \(\PageIndex{4}\): Bronze head of a queen mother (early 16th century, bronze) (Public Domain)

In the Kingdom of Benin, the **Oba** was regarded not only as the king but also as a sacred and spiritual figure connected to the origins and stability of society. Because of this divine authority, the Oba controlled the production of important royal and ideological art created by palace craftsmen. Artists worked under the supervision of the royal court, producing sculptures, plaques, jewelry, and ceremonial objects that reinforced the power, history, and spiritual significance of the kingdom. Among the most remarkable artworks created in Benin were finely carved ivory objects. Benin artists transformed large sections of ivory into delicate ceremonial pendants and masks worn by the king during important rituals and state ceremonies. Ivory was considered a precious and spiritually powerful material, associated with purity, wealth, and royal authority.

One famous ivory pendant mask (9.7.5) depicts the **Iyoba**, or queen mother, who held an important position of political and spiritual influence within Benin society. The mask demonstrates the extraordinary skill of Benin master carvers, especially in the intricate rendering of the elaborate headdress and layered necklaces. In real life, these adornments were made from precious **coral beads**, symbols of royalty and sacred power, and the artist carefully recreated the beadwork in ivory with astonishing detail and precision. The pendant combines realism with idealized beauty, emphasizing the dignity, wisdom, and authority of the Iyoba. Through such works, Benin artists demonstrated both exceptional craftsmanship and the close relationship between art, spirituality, and royal power within the kingdom.

Figure \(\PageIndex{5}\): Pendant mask, lyoba (Public Domain)

A Lesson from the Kingdom of Benin

Benin Plaques, Edo peoples, Benin kingdom, Nigeria c. 1530-1570, Edo peoples, Benin kingdom, Nigeria (Museum of Fine Arts, Boston)

The double **gong** (9.7.6) was a ceremonial object used by the **Oba** during important rituals such as the **Emobo** ceremony, which was intended to drive away evil spirits and restore spiritual balance. In Benin culture, ceremonial music and sound played an important role in religious and royal practices, and the gong symbolized both spiritual authority and royal power. This ivory carving depicts a chief accompanied by two high priests, while the Oba is shown wearing elaborate **coral bead regalia**, identifying his royal and sacred status. The detailed carvings demonstrate the exceptional craftsmanship of Benin artists, who carefully decorated the background with geometric patterns and symbolic motifs. A small figure projects above the top of the object, adding further visual complexity and spiritual symbolism, although portions of the carving have been damaged or cracked over time. Made from ivory, this ceremonial object is extremely rare, with only six known examples surviving today. The object is called a **double gong** because of the additional smaller opening attached to the front of the instrument. Beyond its practical use in ceremonies, the gong also functioned as an important artistic and symbolic object that reflected the spiritual traditions, hierarchy, and royal authority of the Kingdom of Benin.

Figure \(\PageIndex{6}\): Double bell egogo (early 16th century, ivory, 35.9 x 9.5 x 5.7 cm) (CC BY 3.0)

In the Kingdom of Benin, the **leopard** was an important symbol of royal authority, strength, and military power. Leopards were sometimes captured, tamed, and kept by the **Oba** to demonstrate his mastery over both nature and the kingdom's surrounding jungle environment. Because the leopard was admired for its speed, intelligence, and strength, the animal became closely associated with the divine and political power of the king. The Oba identified himself with the leopard's qualities, viewing the animal as a symbol of courage, leadership, and control. Leopard imagery frequently appeared in Benin art, including bronze sculptures, ivory carvings, ceremonial regalia, and palace decorations. These representations reinforced the connection between the king and the animal's powerful characteristics.

The leopard was also strongly connected to military authority and elite status. Only the Oba and the highest-ranking military leaders were permitted to wear leopard skins, teeth, or other leopard accessories as symbols of rank and power. Through both real animals and artistic depictions, the leopard became one of the most important royal symbols in the Kingdom of Benin. Soldiers wore leopard-tooth necklaces as part of their military prowess. " The oba is referred to metaphorically as "the leopard of the house," and images of the beautiful, cunning, and immensely dangerous cat appeared frequently in Benin's royal arts."[1] Leopard artwork was a common part of the culture and the bronze leopard (9.7.7) was a sculpture for display. The leopard's head is stylized with exposed teeth and whiskers fanning outwards. The surface includes incised marks to represent the leopard's spotted coat.

Figure \(\PageIndex{}\): Bronze leopard (bet. 1550-1680, bronze, 39.4 x 12.7 x 39.9 cm) (Public Domain)

Unfortunately, a large portion of the artistic treasures from the Kingdom of Benin was seized by British forces during the 1897 invasion of Benin City. Thousands of bronze plaques, ivory carvings, royal sculptures, and ceremonial objects were taken from the royal palace and later distributed to museums and private collections throughout Europe and North America. As a result, many of the most important examples of Benin art are now housed in European museums rather than in Nigeria, where they were originally created and used.

Today, the removal of these artworks remains a major cultural and political issue. The Nigerian government and representatives of the Benin royal court have worked for decades to reclaim ownership of these ancestral objects, arguing that the artworks were taken through colonial violence rather than legitimate exchange. Some museums and institutions have agreed to return selected objects, while others remain involved in ongoing negotiations. Certain institutions continue to claim legal ownership based on the historical idea of “spoils of war,” although this justification has become increasingly controversial.

Since 2007, representatives from Nigeria and a coalition of European museums holding large collections of Benin art have participated in discussions about future collaboration and restitution. Current plans include sharing collections through long-term loans and exhibitions in a new museum being developed in Benin City near the royal palace grounds. These efforts represent an ongoing international debate about cultural heritage, colonialism, museum ethics, and the rightful ownership of historical artworks. The public conversation on Benin art weighs the competing ownership claims of the palace and the government, the ethical obligation to respect communities’ rights regarding their cultural patrimony, and the belief that museum collections should present world art to foster cross-cultural understanding.”[2]

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[1] Retrieved from https://archive.artic.edu/benin/leopard/

[2] Retrieved from https://www.khanacademy.org/humaniti...-controversies

9.8: Mughal Period (1526 – 1857)

Definition: Term

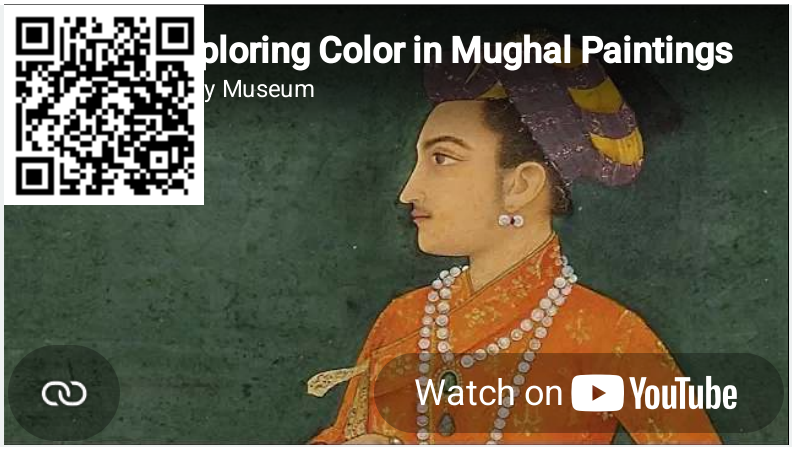
- **Mughal court** – The royal household and governing center of the Mughal Empire in India.
- **Secular** – Art or subjects not related to religion or spiritual themes.
- **Mughal painting** – A style of painting developed in the Mughal Empire that blended Persian, Indian, and European artistic influences.
- **Persian styles** – Artistic traditions from Persia (modern-day Iran), known for detailed decoration, miniature painting, and rich colors.
- **Indian styles** – Artistic traditions native to India, including vibrant colors, symbolism, and local cultural themes.
- **European styles** – Artistic influences from Europe, especially realism, shading, and perspective techniques.
- **Jahangir** – A Mughal emperor known for supporting artists and encouraging detailed paintings of nature and portraits.
- **Portraiture** – The creation of artistic representations of a person.
- **Calligraphy** – Decorative and artistic handwriting, often used in manuscripts and Islamic art.
- **Gilding** – The application of thin layers of gold to decorate artworks or objects.
- **Shah Jahan** – The Mughal emperor who commissioned the Taj Mahal and promoted formal court art and architecture.
- **Taj Mahal** – A white marble mausoleum in Agra, India, built by Shah Jahan in memory of his wife.
- **Mumtaz Mahal** – The wife of Shah Jahan for whom the Taj Mahal was built.
- **Imperial portraits** – Formal images of rulers or royal figures meant to show power and authority.
- **Court scenes** – Paintings that depict activities, ceremonies, or daily life within a royal court.
- **Court art** – Art sponsored and supported by royalty or wealthy rulers.

The Mughal Empire extended far and wide throughout much of the Indian-subcontinent, and during the golden age, art flourished. The empire covered 3.2 million square kilometers, with over 150 million people (one-quarter of the earth's population at the time). [1] Art was a cultural practice revered by the **Mughal court**, and much of the art was **secular** in subject matter. **Mughal painting** developed from illustrated manuscript traditions and was influenced by **Persian**, **Indian**, and **European** styles.

Under **Prince Jahangir's** reign, individual artists were strongly supported, and they often created works based on his favorite subjects: plants, animals, and **portraits**. Paintings from this period became more refined and observational, with careful attention to natural detail. Artists also produced lavish albums that combined paintings, **calligraphy**, decorative borders, and **gilding** into manuscript or album formats. Under the next ruler, **Shah Jahan**, the most famous architectural achievement was the **Taj Mahal**, a tomb he commissioned for his wife, **Mumtaz Mahal**. Painting during this period became more formal, often focusing on **imperial portraits** and **court scenes** rather than the more personal interests favored by Jahangir. **Mughal painting** remained primarily a **court art**, supported by the ruling elite.

Exploring Color in Mughal Paintings

Court painters from the Mughal empire in India created detailed portraits of some of the most powerful and wealthy figures of the 17th century. These paintings traveled to Europe through trade, where their fine lines and majestic subjects inspired artists like Rembrandt. Learn how the Mughal painters employed a variety of natural pigments in their brilliantly colored images of emperors and elites.



Farrukh Beg

Farrukh Beg (1545–1615) was born, trained, and first worked as an artist in **Iran** and **Central Asia**. At the age of forty, he entered the service of the **Mughal emperor** during the late sixteenth century. His early paintings followed the **Persian style**, and throughout his career he remained a conservative painter, continuing to use the artistic traditions he had learned in his youth. Popular subjects during this period included graceful young men and flowering landscapes. Farrukh Beg created paintings that blended **Persian landscapes** with **European concepts of pictorial space**. He often painted with bright colors and included large plants and richly detailed drapery in his compositions.

In **Babur Receives a Courtier** (9.8.1), Farrukh depicted a formal court scene in which all the figures are shown from the same perspective, creating a relatively flat appearance. The painting includes a gold landscape filled with birds and animals. The emperor, dressed in pink and positioned in the center, serves as the focal point of the composition. Around him are courtiers performing different duties, including musicians and guards, each arranged in clearly defined sections. Historians consider the work one of the finest paintings from the **Mughal Empire**.

Farrukh's painting **A Sufi Sage, After the European Personification of Melancholia** (9.8.2) was inspired by a European image of **Saint Jerome** but transformed into a Mughal interpretation with unusual and almost surreal color combinations. Created during his seventieth year, the painting reflects a thoughtful and introspective mood similar to that seen in one of his self-portraits. Farrukh Beg ignored even nominal elements of perspective and instead treated surface decor as paramount in his highly individualistic, singular style."[2]

Figure \(\PageIndex{1}\): *Babur Receives a Courtier* (1580-1585, watercolor and gold on paper, 41.4 x 27 cm) (Public Domain)

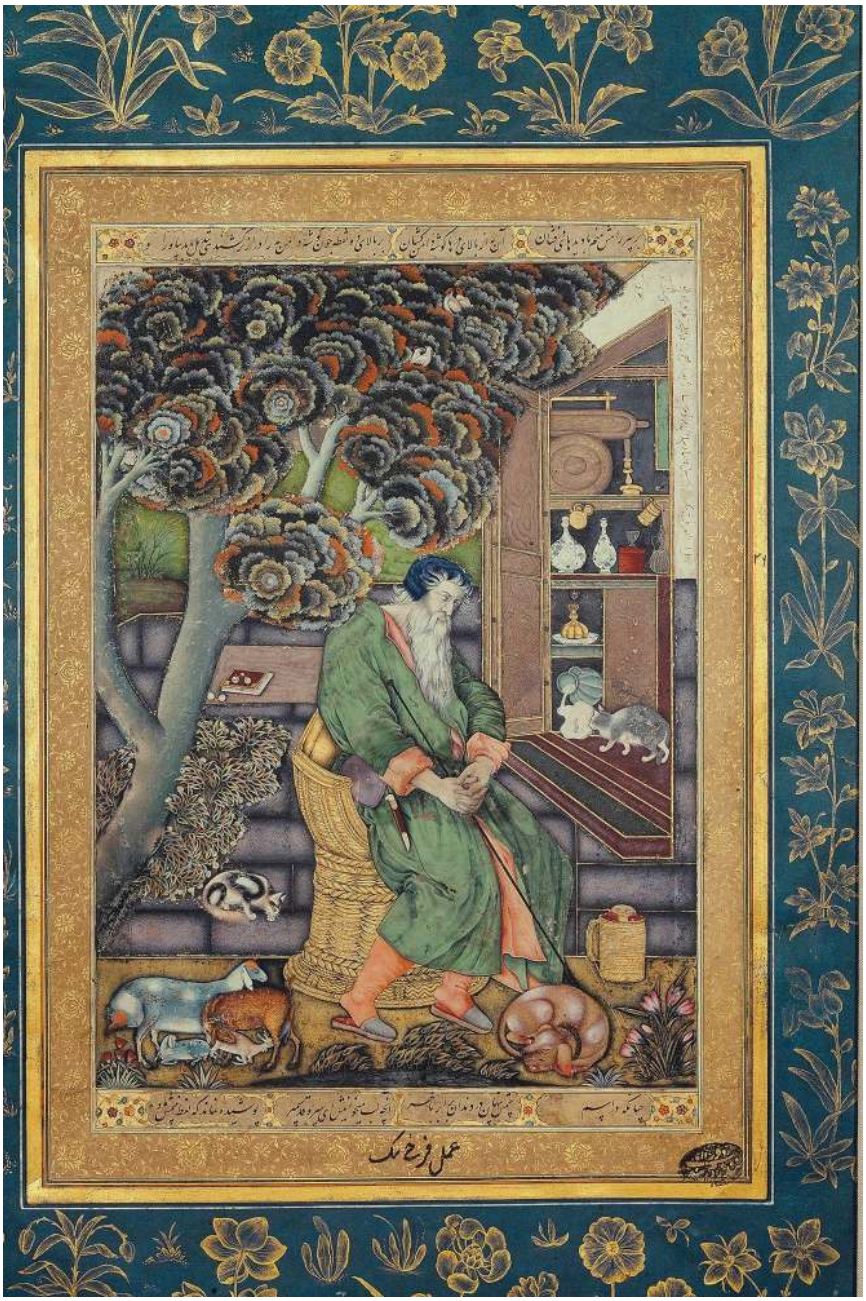


Figure \(\PageIndex{2}\): *A Sufi Sage, After the European Personification of Melancholia* (1615, paper, gouache paint, 38.2 x 25.6 cm) (Public Domain)

Ustad Mansur

Ustad Mansur (?–1624) was a celebrated **court artist** and painter of the **Mughal Empire** who specialized in detailed depictions of plants and animals. He became especially well known for his **natural history illustrations**. Mansur was one of the first artists to create a colored image of the **dodo bird** (9.8.3). Because the dodo was already rare, his painting became an important visual reference for zoologists and historians. Two live dodos were reportedly brought to India in 1660, and Mansur may have used one as his model. In the painting, he also included other birds such as a **parrot**, **western tragopan**, **bar-headed goose**, and **painted sandgrouse**. Today, the dodo is extinct, the tragopan is considered vulnerable, while the other birds remain common. Although the birds are shown together in the same field rather than their natural habitats, the painting remains an important historical document of the dodo.

Mansur traveled with **Emperor Jahangir**, painting the birds, animals, and flowers the emperor encountered. Jahangir often instructed Mansur to record unusual species in careful detail. When Jahangir discovered a **diving dipper bird**, he ordered several

birds to be captured so he could study whether they were waterfowl with webbed feet or land birds with open feet. After examining the bird, Jahangir instructed Mansur to paint it. In **Diving Dipper and Other Birds** (9.8.4), the diving dipper stands in the center of the composition against a stylized landscape. The dark feathers of the bird contrast with the lighter background, emphasizing the subject. Mansur also added decorative **floral borders**, a feature that became characteristic of **Mughal painting**.

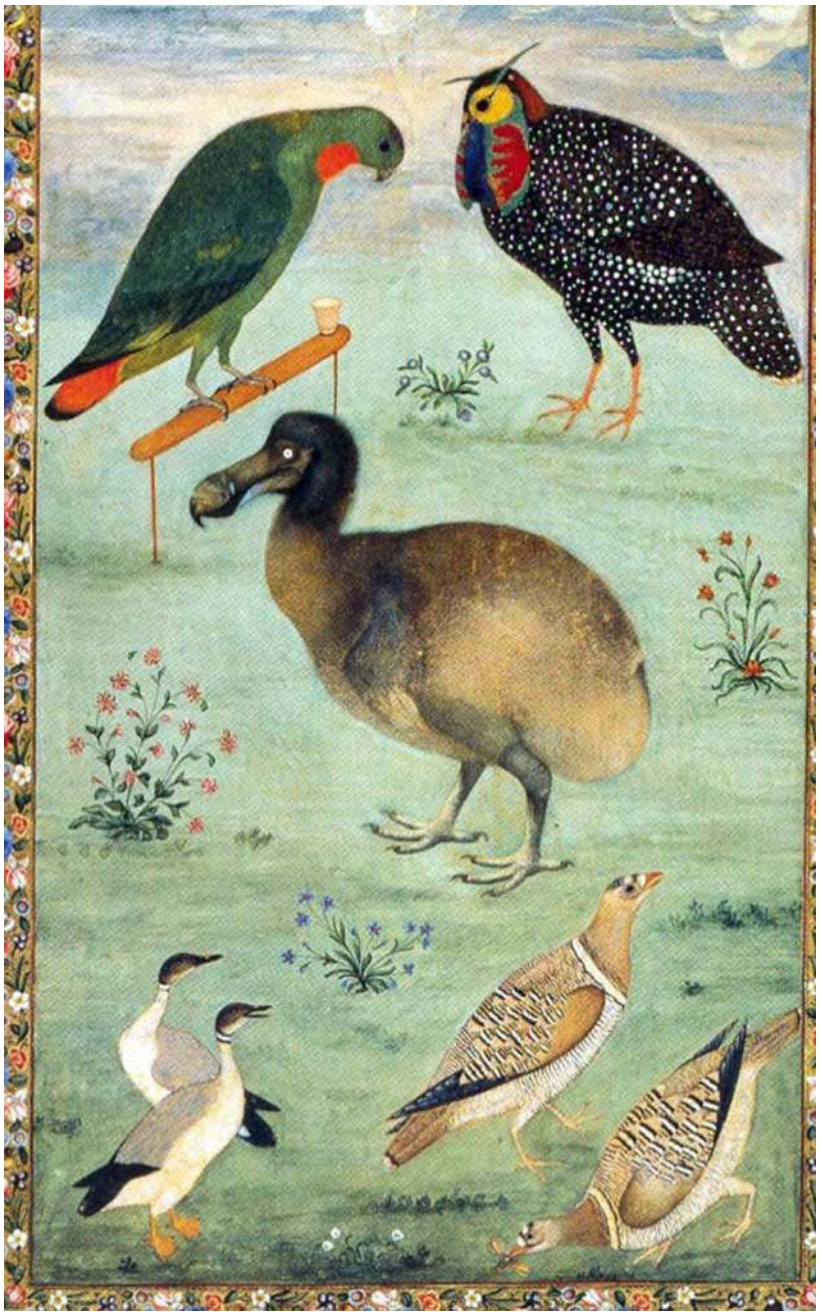


Figure \(\PageIndex{3}\): *Dodo* (Public Domain)

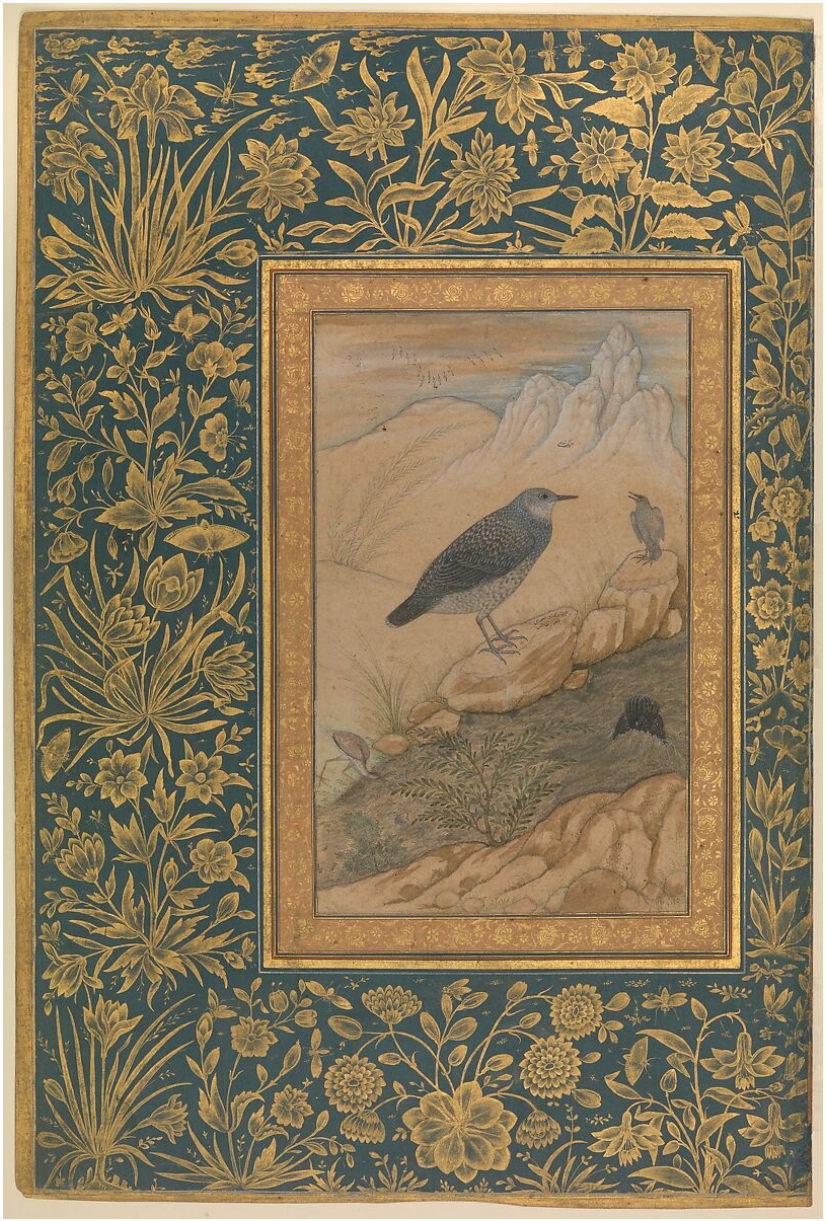


Figure \(\PageIndex{4}\): *Diving Dipper and Other Birds* (ink, opaque watercolor, gold, paper, 39.1 x 26 cm) (Public Domain)

Bichitr

Bichitr (17th century) was a painter who worked for the Mughal emperors **Jahangir** and **Shah Jahan**, both important patrons of the arts. He became well known for painting portraits of significant people of the period and for incorporating **European influences** into his work. Bichitr often included **putti** (European-style cherubs) and experimented with realistic shadows cast by figures. In **Jahangir Preferring a Sufi Shaikh to Kings** (9.8.5), Bichitr portrayed Jahangir with gold flames radiating from his head against a large golden circle symbolizing the sun. Beneath the sun is a crescent moon, representing day and night and emphasizing the emperor's divine authority and wisdom. Jahangir sits elevated above the other figures, who are arranged according to their status and importance. The **Sufi Shaikh** stands first in line, while the king is positioned last, reflecting Jahangir's preference for spiritual authority over worldly power.

Bichitr also included a self-portrait at the bottom of the painting, wearing a yellow robe that identifies him as a **Hindu** artist. He was especially admired for his detailed rendering of hands. Jahangir's hands are decorated with extravagant rings (9.8.6), contrasting with the bare hands of the Shaikh, who carefully receives a book using a cloth because direct physical contact with royalty was considered inappropriate. Another carefully posed set of hands belongs to the Sultan, whose gesture demonstrates respect toward the emperor.

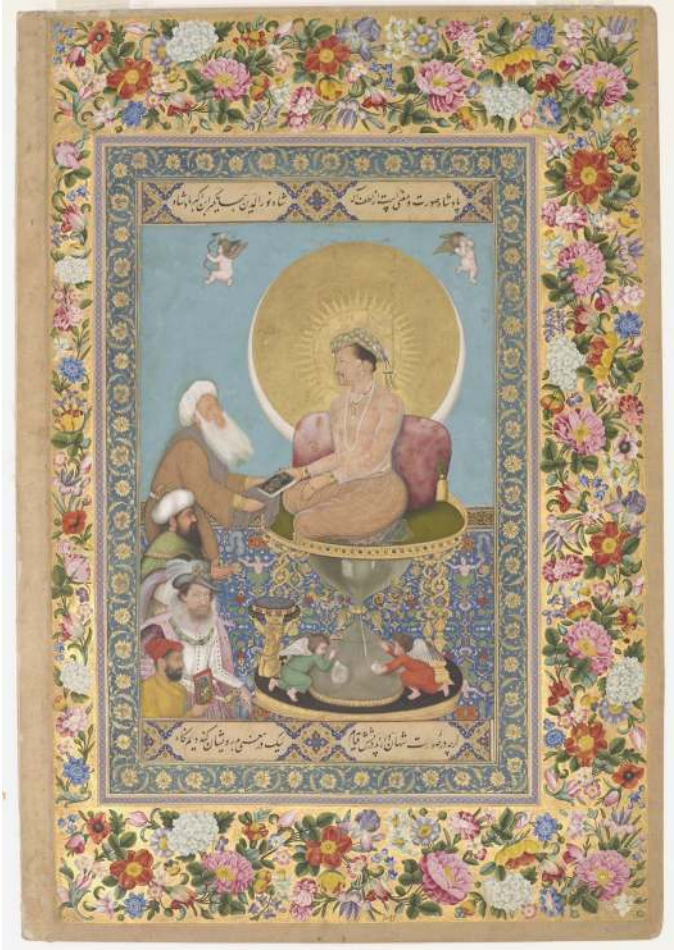


Figure \(\PageIndex{5}\): *Jahangir Preferring a Sufi Shaikh to Kings* (1615-18, opaque watercolor, gold, ink, on paper, 46.9 x 30.7 cm) (Public Domain)

Figure \(\PageIndex{6}\): Bichitr's expressive rendition of hands (Public Domain)

Lahori and Taj Mahal

Ustad Ahmad Lahori (c. 1580–c. 1649) was born in **Lahore** into a family known for its architects. Lahori became an architect himself, and his sons and grandsons continued the profession. He is considered one of the greatest architects of the **Mughal Empire**. Lahori was appointed the **chief architect** and principal designer of the **Taj Mahal** (9.8.7) in **Agra, India**, a project commissioned in 1632 by the Mughal emperor **Shah Jahan** for his wife, **Mumtaz Mahal**. Completed in 1653, the Taj Mahal is an immense **mausoleum** and is widely regarded as one of the finest examples of **Mughal architecture**. The Taj Mahal combines multiple architectural traditions, including **Indian**, **Islamic**, **Ottoman**, and **Persian** styles. While many Mughal buildings were

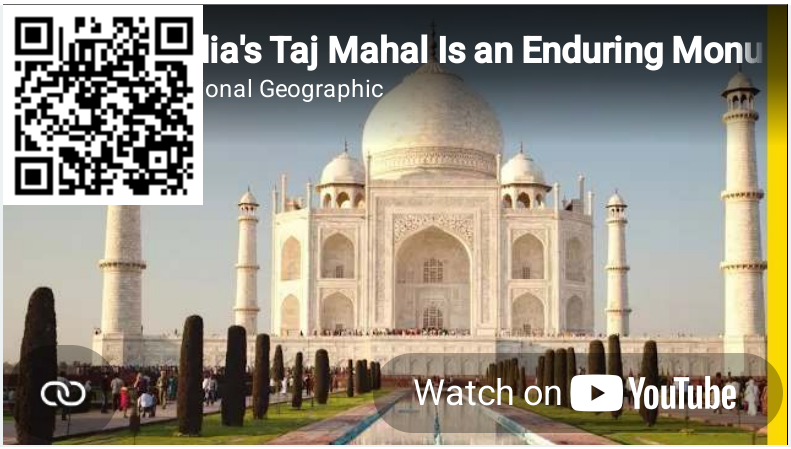
commonly constructed with **red sandstone**, Shah Jahan wanted the most luxurious materials available and ordered the Taj Mahal to be built of white marble decorated with **semi-precious stones**. Inside the structure are a set of **false tombs** (9.8.8) displayed on the main floor, while the actual tombs are located in a lower chamber beneath them.

Figure \(\PageIndex{7}\): Taj Mahal (CC BY-SA 4.0)

Figure \(\PageIndex{8}\): Crypts (CC BY-SA 3.0)

India's Taj Mahal is an Enduring Monument to Love

The Taj Mahal is widely considered one of the most beautiful buildings ever created. The exquisite marble structure in Agra, India, is an eternal testament to the artistic and scientific accomplishments of a wealthy empire.



[1] Retrieved from https://muslimmemo.com/understanding...-architecture/

[2] Retrieved from https://www.metmuseum.org/art/collection/search/76197

[3] Retrieved from https://www.metmuseum.org/art/collec.../search/451263

9.9: Kano School (Late 15th century – 1868)

Definition: Term

- **Kano Art School** – The most influential Japanese painting school, active for over 300 years and known for combining Japanese and Chinese artistic traditions.
- **Zen philosophy** – A branch of Buddhism that emphasizes meditation, simplicity, discipline, and spiritual awareness.
- **Kano Masanobu** – The founder of the Kano Art School in the 15th century.
- **Chinese painting styles** – Artistic techniques from China that used ink, brushwork, and simple compositions focused on nature and balance.
- **Brush painting** – A method of painting using brushes to create expressive lines and forms.
- **Ink painting** – A style of painting primarily using black ink, valued for expressive brushwork and simplicity.
- **Pigments** – Colored substances used to make paint.
- **Samurai class** – The military warrior class of feudal Japan.
- **Japanese artistic traditions** – Artistic practices and styles developed within Japanese culture.
- **Chinese artistic traditions** – Artistic practices and styles originating in China that influenced East Asian art.
- **Folding screens** – Decorative panels connected by hinges, often painted and used to divide interior spaces.
- **Sliding doors** – Doors that move horizontally and were commonly decorated with paintings in Japanese architecture.
- **Shoguns** – Military rulers who controlled Japan during much of its feudal history.
- **Emperors** – Traditional hereditary rulers of Japan, often considered symbolic leaders.
- **Gold leaf** – Thin sheets of gold applied to surfaces for decoration and to reflect light.
- **Chinese Lions** – Decorative guardian lion figures often used in East Asian art and architecture as symbols of strength and protection.
- **Artisans** – Skilled craftspeople who create handmade works of art or objects.
- **Aristocracy** – The wealthy and powerful upper social class.
- **Clergy** – Religious leaders or officials.

According to Japanese history, the **Kano Art School** was the most influential school of painting in Japan and existed for more than 300 years. The school shaped generations of artists and developed a wide range of styles, themes, and formats often connected to **Zen philosophy**. Founded by **Kano Masanobu**, the school was strongly influenced by **Chinese painting styles**, using brushes, ink, and limited color pigments. Artists trained in family workshops, much like European apprenticeships, before being accepted into the Kano tradition.

The Kano school primarily served the **samurai class**. Its artists became known for bold compositions featuring powerful animals, symbolic plants, and trees that blended **Japanese** and **Chinese** artistic traditions. These paintings were commonly used to decorate folding screens and sliding doors in samurai residences and official audience halls. "The Kano school, established by Kano Masanobu (1434–1530), primarily served the samurai class. Their bold designs of powerful animals and symbolic plants and trees, blending aspects of native Japanese with Chinese styles, were the perfect decoration for screens and sliding doors in the large official audience halls in samurai residences."[1]

As the school expanded, later artists introduced more color, decorative patterns, and themes connected to Japanese culture. The ruling **shoguns** and **emperors** supported Kano artists, helping the school flourish and spread to studios in many cities. In these workshops, artisans collaborated to create art for the samurai, aristocracy, and clergy. Decorative **gold leaf** became an important feature of Kano paintings and screens. In works such as **Chinese Lions** (9.9.1), the gold surfaces reflected light within the dark interiors of castles and palaces, while also displaying the wealth and power of the nobility.

Figure \(\PageIndex{1}\): *Chinese Lions* (Public Domain)

Kano Eitoku

Kano Eitoku (1543–1590) was one of the most influential leaders of the **Kano School** movement. His artistic talent was recognized at an early age, and he trained under his grandfather, who had been strongly influenced by **Chinese painting**traditions. Eitoku became highly sought after by the ruling and wealthy classes, creating painted **sliding doors**, walls, and folding screens for castles and elite residences. Eitoku was known for his lavish use of **gold leaf**, reflecting both the discovery of new gold mines in Japan and the desire of the **shoguns** to display wealth and status through art. His paintings often decorated the dark interiors of castles, where the gold surfaces reflected light and enhanced the grandeur of the spaces.

One of Eitoku's greatest contributions to the Kano School was the development of the **monumental style**, characterized by bold compositions, quick and energetic brushwork, and an emphasis on large foreground subjects. This style can be seen in **Birds and Flowers of the Four Seasons** (9.9.2). Although much of Eitoku's work was destroyed during later wars, some important works survived. **The Cypress Trees** (9.9.3) was preserved within a single family for centuries before entering the **Imperial Collection**. The work is believed to have originally been painted for sliding doors. The screen features a massive cypress tree spreading across the composition, set against a shimmering gold-leaf background that emphasizes the scale and power of nature. The dark blue waters in the pond create a counterpoint of color to the gold and the tree.
"The strong life force of the powerful tree shows the artist's passionate spirit and, at the same time, conveys the unconstrained aesthetic of Momoyama elite warriors."[2]

Figure \(\PageIndex{2}\): *Birds and Flowers of the Four Seasons* (1566, ink on paper) (Public Domain)

Figure \(\PageIndex{3}\): *Cypress Trees* (c. 1590, ink on paper with gold leaf, 169.5 x 460.5 cm) (Public Domain)

Kano Motonobu

Kano Motonobu (1476–1559) was the son of **Kano Masanobu**, the founder of the **Kano School**. Because of his family background, he began training as an artist at an early age, most likely concentrating on **Chinese-style ink painting**traditions. Motonobu was highly talented and received numerous commissions early in his career. In addition to being a skilled painter, Motonobu was also an effective businessman and manager who helped expand the influence and success of the Kano School throughout Japan. He played an important role in shaping the school's artistic direction and reputation.

Motonobu is especially known for developing the **suiboku-ga** style, which blended **Chinese** and **Japanese** artistic techniques. His paintings combined delicate ink lines with decorative elements such as **gold leaf**, patterns, and color, creating a style that balanced simplicity with rich visual detail. "Motonobu, second-generation head of the Kano School of painting, laid the groundwork for the school's centuries of dominance over mainstream Japanese painting. One of his many achievements was the adaptation of small-scale paintings (like fans and albums) associated with specific Chinese masters to large-scale painting formats such as folding screens and panels." [3] The *Four Accomplishments* (9.9.4) is a landscape with distant mountains, immense pines, and flowing waterfalls. Four critical parts of life for a gentleman are found in the image, including music, calligraphy, painting, and a game of Go. The work is on paper with a predominance of gold leaf and ink drawings. The trees form the offset trees with one side of the image serene and calm against the filled paper on the rest of the work.

Figure \(\PageIndex{4}\): *The Four Accomplishments* (mid-16th century, ink and color on paper, 170.2 x 381 cm) (Public Domain)

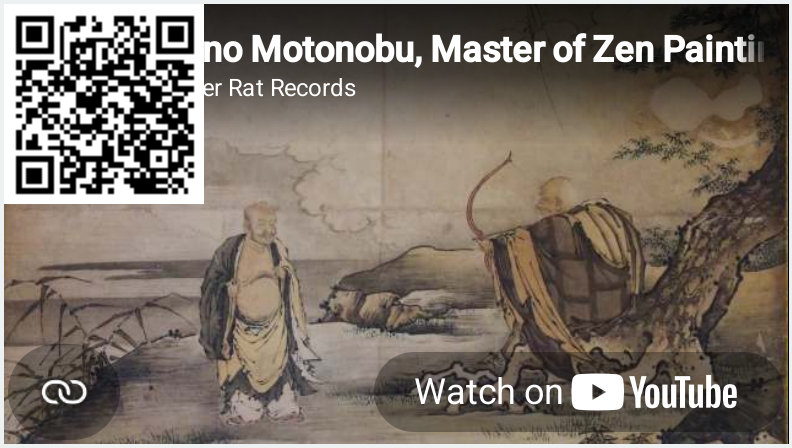
"In these legends, the ancient Japanese elevated horses into manifestations of gods who traverse the spiritual and secular worlds in horse form. A creature of higher order, horses were presented to shrines as offerings of supplication or gratitude in a custom called *kemba*. Over time, horse-shaped objects or illustrations of horses replaced live animals and the development of *ema* (9.9.5, 9.9.6) or illustrated votive plaques. Although horses dominated *ema*, especially in ancient times, images on the plaques were not restricted to horses."[4] As a votive, the wood panel was used to carry messages and wishes to add to the scrolls at the temple. The *ema* was particularly popular during floods or famines. Motonobu painted the two opposing *ema* images as votive plaques on wooden panels.

Figure \(\PageIndex{5}\): Ema (horse votive) (16th century, ink on board, 35.9 x 39.9 cm) (Public Domain)

Figure \(\PageIndex{6}\): Ema (horse votive) (16th century, ink on board, 35.9 x 39.9 cm) (Public Domain)

Kano Motonobu, Master of Zen Paintinig

A short analysis of some key pieces of art created by Kano Motonobu, of the legendary Japanese zen painting school.



Hasegawa Tohaku

Hasegawa Tohaku (1539–1610) began his career painting **Buddhist-themed** works before joining the **Kano School** to continue his artistic training. Many of his early paintings reflected the bold decorative style of the Kano School, especially his works on **folding screens**. Tohaku also studied earlier artistic traditions, particularly **ink painting**, which helped him develop a more personal and restrained style. This approach is visible in **Pine Trees** (9.9.7), where the shadowy, mist-covered trees appear almost ghostlike. The painting demonstrates the simplicity and quiet atmosphere that distinguished Tohaku's work from the more dramatic and bold methods of the Kano School.

Throughout his career, Tohaku competed with **Kano Eitoku** for important patrons and commissions. After Eitoku's death, Tohaku produced some of his finest works while working under the support of his benefactor. In **Maple** (9.9.8), Tohaku painted a monumental maple tree whose thick trunk suggests great age and strength. Autumn flowers and grasses fill the foreground, while golden water creates a decorative background. The original painting was much larger, but most of it was destroyed when the temple where it hung burned down, leaving only this surviving section. Later in life, Tohaku established the **Hasegawa School**, a smaller artistic institution devoted to a more reserved and subtle painting style.

Figure \(\PageIndex{7}\): *Pine Trees* (Public Domain)

Figure \(\PageIndex{8}\): *Maple Tree* (c. 1592, gold and color on paper, 177 x 554 cm) (Public Domain)

[1] Retrieved from https://education.asianart.org/resou...RoCkDgQAvD_BwE

[2] Retrieved from https://emuseum.nich.go.jp/detail?la...tent_pict_id=0

[3] Retrieved from https://www.metmuseum.org/art/collection/search/44673

[4] Retrieved from https://www.sainsbury-institute.org/...g-in-the-city/

9.10: Qing Period (1636 – 1911)

Definition: Term

- **Qing Dynasty** – The last imperial dynasty of China, ruling from 1644 to 1912.
- **Manchus** – The ethnic group from northeastern Asia that founded and ruled the Qing Dynasty.
- **Han Chinese** – The largest ethnic group in China and the majority population during the Qing Dynasty.
- **Golden age** – A period of great prosperity, stability, and cultural achievement.
- **Centralized control** – A system in which the main government holds authority over the entire country.
- **Han elites** – Wealthy, educated, or powerful Han Chinese individuals who served in government and military roles.
- **Trade networks** – Systems of connected trade routes used to exchange goods and resources between regions and countries.
- **Agriculture** – The cultivation of crops and raising of animals for food and resources.
- **Confucianism** – A Chinese philosophy based on moral behavior, respect, education, and social harmony, founded by Confucius.
- **Daoism** – A Chinese philosophy and religion that emphasizes living in harmony with nature and the Dao, or "the Way."
- **Buddhism** – A religion and philosophy based on the teachings of the Buddha that focuses on spiritual enlightenment and ending suffering.
- **Painting** – The art of creating images with pigment on surfaces such as paper, silk, or canvas.
- **Artistic schools** – Groups of artists who share similar styles, techniques, or philosophies.
- **Literature** – Written works such as poetry, stories, essays, and scholarly texts.
- **Encyclopedias** – Collections of organized knowledge covering many subjects.
- **Dictionaries** – Reference books that define words and explain their meanings.
- **Ceramic industry** – The production of objects made from clay, including pottery and porcelain.
- **Porcelain** – A fine, durable ceramic material known for its smooth surface and delicate appearance.

The **Qing Dynasty** was the last great imperial dynasty of China. The dynasty was established when the **Manchus** conquered the weakened **Han Chinese** government, which had been struggling with internal conflicts. The Qing rule lasted nearly 300 years and greatly expanded China's territory, population, and economic power. During this time, the population grew from about 150 million to more than 450 million people.

The most prosperous period of the Qing Dynasty is often called the **golden age**, lasting from 1683 to 1799. During this era, the emperors achieved great wealth, stability, and imperial authority. Because China was so large and culturally diverse, the government maintained centralized control by appointing representatives from different regions. The Qing rulers also strengthened their authority by incorporating **Han elites** into government and military positions. Trade networks expanded across the world, and agriculture developed on a massive scale.

The philosophies and religions of **Confucianism**, **Daoism**, and **Buddhism** all played important roles in Qing society and strongly influenced artistic production. **Painting** became one of the most important art forms of the period, and different artistic schools developed with highly individual styles and masters. **Literature** also flourished during the Qing Dynasty. Scholars produced classical literary works, encyclopedias, and dictionaries, helping preserve and expand Chinese knowledge and culture. The **ceramic industry** became another major achievement of the Qing period. Artists and craftsmen produced highly refined **porcelain**, much of which became famous throughout the world for its beauty and technical quality.

Ceramics

The **ceramic industry** became an important center of trade during the **Qing Dynasty**, exporting some of the finest **porcelain** to Europe. Ceramic production grew so large that special factories and workshops were built to create wares for the **imperial court**, ordinary people, and the international export market. One of the major innovations in ceramics was the development of **enamel pigments**, which maintained their bright colors over time without fading. Artists created these pigments by melting sand, soda, and coloring materials into a glasslike paste that became glossy and vivid after firing. New colors were introduced, including pink, which was inspired by European imported objects admired at the imperial palace. Ceramics were often decorated with colorful glazes, painted scenes, and detailed illustrations.

The **Kangxi Emperor** established multiple workshops in different regions, with each specializing in particular products. Important imperial ceramic workshops were located outside **Beijing**, while the major production center was in **Jingdezhen**, the most famous

porcelain-producing city in China. Highly skilled court painters decorated ceramics with traditional subjects, while independent artists known as **individualists** experimented with more expressive or socially focused imagery. Advances in **kiln technology** also played a major role in the success of Chinese ceramics. As early as 2000 BCE, Chinese kilns could reach temperatures of 1,000 °C. Common kiln types included the **dragon kiln** of southern China and the smaller **mantou kilns** of northern China.

Tea was a major export to Europe and was even one-third of the trade with Britain. "As a cargo, tea was accompanied by a product that was both a related commodity and a useful aid in shipping. The porcelain produced in China was shipped to Europe *with* the tea, providing additional ballast to stabilize the ships. Placed at the bottom of ship holds, it also acted as a protective layer underneath the tea, shielding it from damp and odor."[1] Both vases (9.10.1, 9.10.2) are examples of highly detailed and brightly colored **ceramic vases** produced during the **Qing Dynasty**. Floral imagery was a common decorative theme, and artists frequently painted flowers, plants, and natural scenes on porcelain surfaces.

The first vase features decorative red borders at the top and bottom, framing colorful arrangements of flowers spread across the surface. A small gold **lion** serves as both a handle and a symbol of protection and strength. The second vase has a broad, bulbous base that provides space for painted illustrations of **peaches**, leaves, and dark branches. The peaches symbolize longevity and prosperity in Chinese culture, while the flowing composition emphasizes balance and elegance.

Figure \(\PageIndex{1}\): Qing vase (mid-1800s, porcelain) (CC BY-SA 3.0)

Figure \(\PageIndex{2}\): Qing vase (1736, porcelain, 51.4 cm) (Public Domain)

Painting

Wang Hui

Wang Hui (1632–1717) was an important **landscape painter** during the **Qing Dynasty**. He came from a family of artists, following in the footsteps of his father, uncles, and grandfather, who were all influential painters in China. Wang Hui strongly believed in preserving and studying the techniques of the ancient masters and helped establish artistic traditions that later painters continued to follow. He began painting at a young age and was deeply influenced by the **Shan Shui** style, a traditional Chinese approach to landscape painting that used **ink and brushwork** rather than heavy applications of paint. His paintings focused on natural scenery such as mountains, rivers, waterfalls, and valleys, reflecting the importance of nature in classical Chinese art.

In 1691, Wang Hui was commissioned to document the journeys of the emperor. He created a monumental series of twelve hand scrolls, each ranging from 12.1 to 24.3 meters in length. Together, the complete set measured more than 225 meters long. Before painting the final works on silk, Wang Hui first prepared full-scale paper drafts. The finished scrolls included more than 30,000 figures placed throughout detailed landscapes and were considered one of the greatest artistic achievements of the period. **The Beauty of the Green Mountains and River** (9.10.3), which depicts a river canyon landscape, was one of these remarkable scrolls.

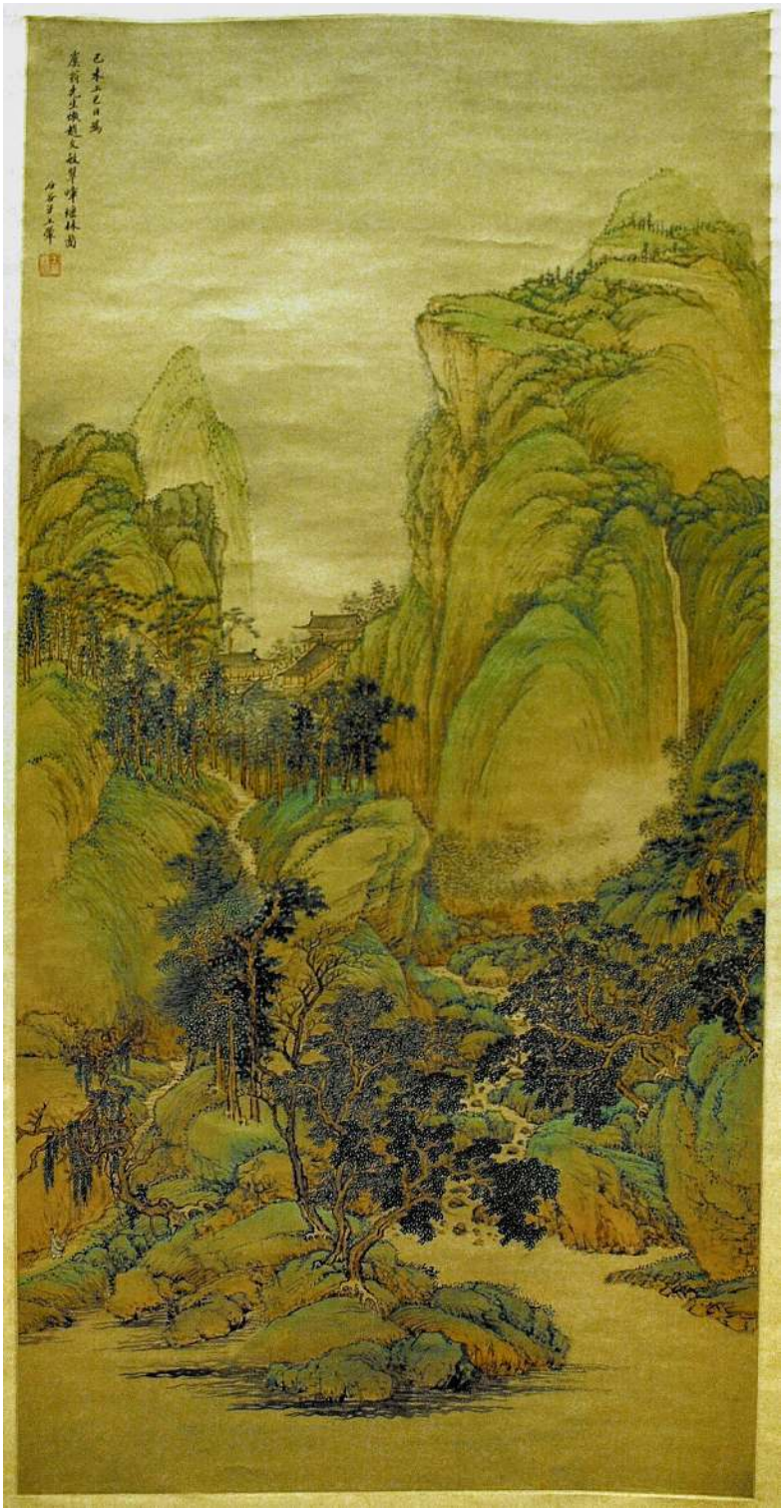


Figure \(\PageIndex{3}\): *The Beauty of Green Mountains and River* (CC BY-SA 3.0)

Wu Li

Wu Li (1632–1718) was a Chinese **landscape painter**, **calligrapher**, and **poet** during the **Qing Dynasty**. He later converted to **Catholicism** and became a **Jesuit priest**. Rather than pursuing wealth and status as a court painter, Wu Li chose the simpler life of a traveling priest. His experiences as a humble religious figure gave him time to reflect on faith, daily life, and personal emotions, which he recorded in writings later collected in the book **Kou Duo**. Wu Li became known for his landscape paintings created with

delicate **dry brush strokes** and soft, light colors. Because of his artistic skill and style, he is recognized as one of the **Six Masters of the Qing era**.

In one of his scroll paintings (9.10.4), created shortly after rainfall, Wu Li depicted a dreamlike landscape filled with bamboo, birds, trees, and rolling hills. He used small textured brush marks to create patterns throughout the composition. Different marks distinguish the hillsides, rocks, and trees, giving each natural form its own texture and visual identity. The calm water and open sky contrast with the textured elements, creating a sense of balance and tranquility. Each brushstroke varies in darkness and weight, with some appearing bold and others barely visible, demonstrating Wu Li's careful control of ink and brush techniques.

Figure \(\PageIndex{4}\): *Whirling Away the Summer at the ink-Well Thatched Hut* (1679, ink on paper, 36.4 x 268.6 cm) (Public Domain)

Shitao

Shitao (1642–1707) was one of the important **individualist painters** of the **Qing Dynasty** who became famous for breaking away from traditional artistic rules and conventions. Instead of following the carefully controlled techniques and idealized beauty valued by earlier masters, Shitao developed a more personal and expressive style. His paintings often used loose **brushstrokes**, flowing **ink washes**, and subtle **monotone colors** rather than highly detailed natural imagery. Shitao believed that painting should reflect the artist's emotions and individual experience instead of simply copying older traditions. In **Reminiscences of Qinhuai** (9.10.5), the towering mountain rises dramatically into the sky, appearing both powerful and humble at the same time. Below, a monk sits in a boat looking upward toward the mountain, suggesting respect for the spiritual and humbling power of nature. The painting reflects Shitao's interest in the emotional and philosophical relationship between humanity and the natural world.

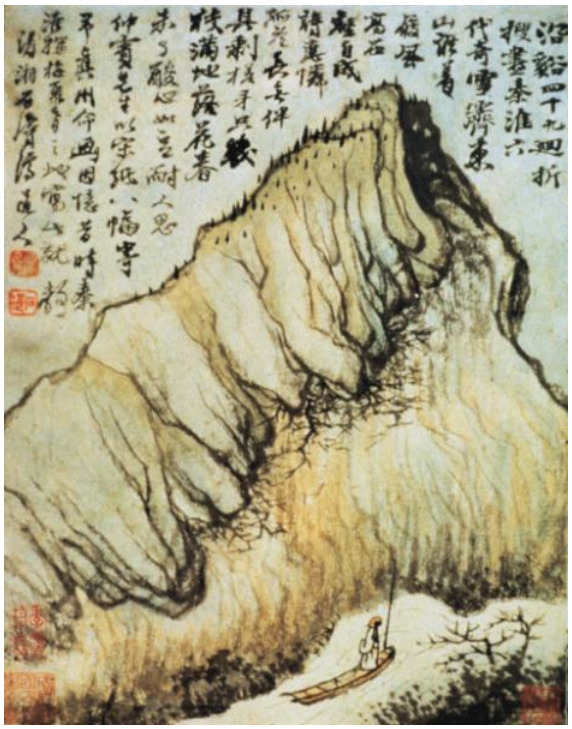
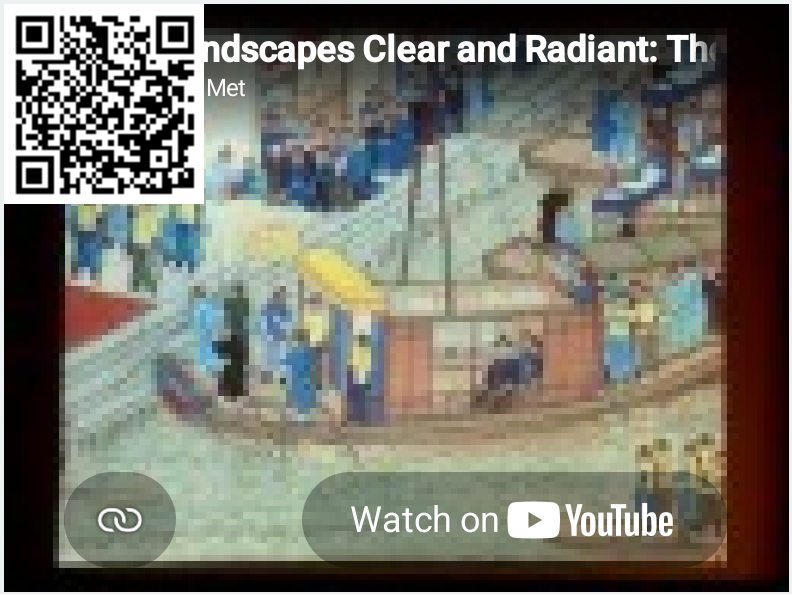


Figure \(\PageIndex{5}\): *Reminiscences of Qinhuai* (Public Domain)

Landscapes Clear and Radiant

Curator Maxwell Hearn presents an overview of the masterpieces featured in the special exhibition "Landscapes Clear and Radiant: The Art of Wang Hui (1632-1717)." Wang Hui played a key role in reinvigorating past traditions of landscape painting as well as in establishing the stylistic foundations for the imperially sponsored art of the Manchu Qing court. An artist of protean talent and immense artistic ambition, Wang developed an all-embracing synthesis of historical landscape styles that constituted one of the greatest innovations in the arts of late imperial China. The exhibition features twenty-seven masterpieces by Wang Hui from the Taipei and Beijing Palace Museums, the Shanghai Museum, and several North American collections, including five outstanding works from the Metropolitan's permanent collection. These paintings are complemented by a selection of earlier landscapes from the Song (960-1279), Yuan (1279-1368), and Ming (1368-1644) dynasties, mostly drawn from the Museum's holdings, that highlight the sources of Wang Hui's inspiration.



Calligraphy

Calligraphy is the artistic expression of **Chinese characters**, valued for both its visual beauty and literary meaning. Practiced for centuries, calligraphy is considered one of the highest and most respected forms of Chinese art, even today. More than simply a method of communication, calligraphy was believed to reflect and develop a person's character, discipline, and education. Over time, Chinese characters became carefully designed and standardized. As early as 200 BCE, about 3,300 standardized characters had been defined. By 1000 CE, the **kaishu** style, or regular script, became recognized as the standard writing form. The development of **printing technology** further stabilized the appearance of characters, and although small changes occurred over time, the basic forms remain in use today. Traditional calligraphy requires four essential tools, often called the **Four Treasures of the Study**: the **brush**, **ink**, **paper**, and **inkstone**. Calligraphers might also use additional tools such as a **water-dropper**, **paperweights**, or protective table pads to assist with the writing process.

Zheng Xie

Zheng Xie (1693–1765), also known as Zheng Banqiao, was a Chinese painter and **calligrapher** famous for his paintings of **orchids**, **bamboo**, and rocks. In Chinese art and philosophy, orchids symbolized **loyalty** and virtue, while bamboo represented the qualities of a noble or superior person because of its strength and flexibility. Chinese artists often combined **calligraphy** with painting, especially when depicting elements of nature such as mountains, rivers, rocks, orchids, and bamboo. Zheng Xie became especially admired for his delicate and expressive renderings of bamboo and orchids.

In 1748, he served as the official painter and calligrapher for the emperor. One of his paintings (9.10.6) formed part of a long hand scroll that combined poems, bamboo, orchids, and calligraphy into a unified artwork. The thin leaves of the bamboo and orchids appear to move gently in the breeze, while small orchid blossoms add subtle detail to the composition. The poem written on the left side of the scroll features loosely arranged yet carefully formed characters, demonstrating Zheng Xie's skill in calligraphy. He also invited another poet and friend to contribute writing to the scroll, adding a second layer of calligraphic text and collaboration to the artwork.

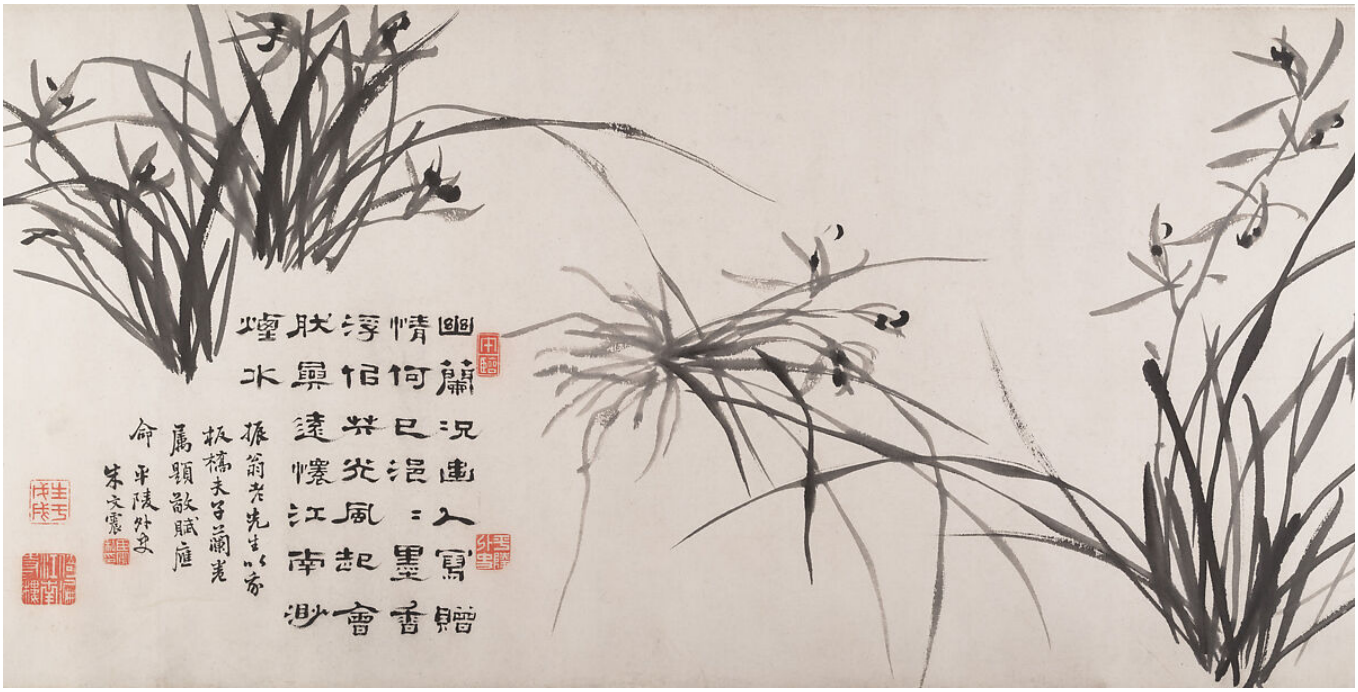


Figure \(\PageIndex{6}\): *Orchids and Bamboo* (1742, ink on paper, 34.9 x 374.7 cm) (Public Domain)

Yang Shoujing

Yang Shoujing (1839–1915) was a Chinese **historian**, **diplomat**, and **calligrapher** during the late **Qing Dynasty**. He is best known for creating a historical atlas called **Yangtu** or **Yang's Atlas**, which is considered one of the most complete historical works produced during the Qing period. As a diplomat, Yang was assigned to **Japan**, where he introduced his distinctive style of **calligraphy (**9.10.7). His techniques greatly influenced and transformed Japanese calligraphy practices. During his time in Japan, Yang also collected thousands of rare and ancient Chinese books, preserving valuable historical records and documents.

The **Yangtu** included detailed maps and historical information covering many Chinese dynasties, including the Qing era. A modern edition of the atlas was published in the 1980s, and it continues to be regarded as one of the most respected atlases documenting ancient Chinese history. Yang Shoujing was widely admired for his mastery of calligraphy and became a highly sought-after teacher whose artistic influence extended beyond China into Japan.

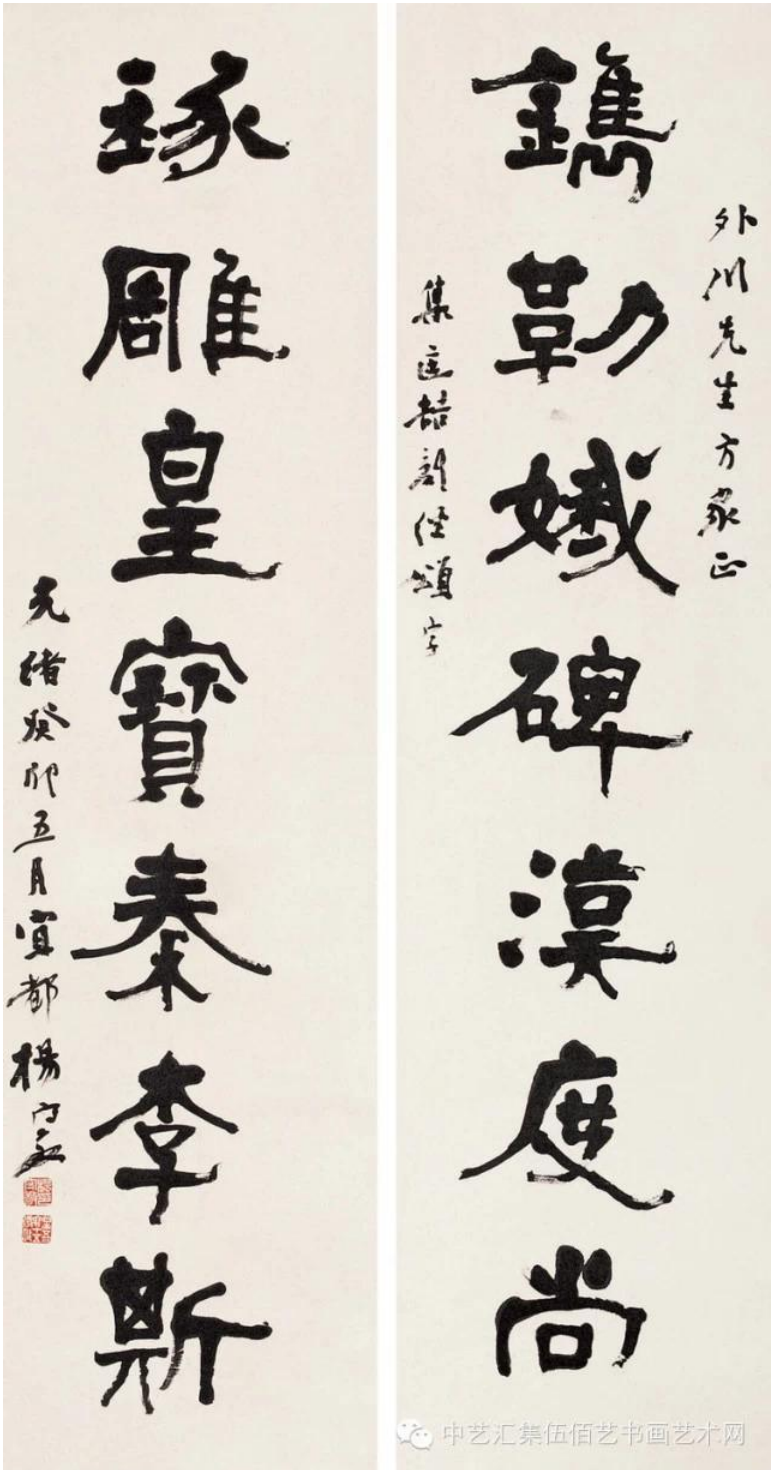


Figure \(\PageIndex{7}\): Calligraphy (Public Domain)

[1] Retrieved from https://vmfa.museum/learn/resources/...ort-porcelain/

9.11: Conclusion and Contrast

Conclusion and Contrasts

Art and individual artists flourished during this period, developing new techniques and ideas that ranged from the dark, dramatic colors of the **Baroque** in Europe to the refined and stylized landscapes of Asia. As cultures expanded beyond their traditional boundaries through trade, diplomacy, and travel, they carried their artistic traditions and methods with them. These cultural exchanges influenced local artistic styles, leading to new forms of creativity and innovation across different regions of the world.

Northern Europe Baroque	Italian Baroque	Spanish Baroque	Mexican Baroque
Christ in the Storm on the Sea of Galilee by Rembrandt	*Calling of Saint Matthew* by Caravaggio	*Two Women at a Window* by Bartolome Murillo	*The Betrothal of the Virgin* by Sebastian Lopez de Arreaga

Movement	Artist	Image
Northern European Baroque	Johannes Vermeer	
Italian Baroque	Artemisia Gentileschi	

Movement	Artist	Image
Spanish Baroque	Diego Velazquez	
Mexican Baroque	Sebastian Lopez de Arreaga	
French Rococo	Jean-Honore Fragonard	
Benin Empire	Unknown	

Movement	Artist	Image
Mughal Period	Farrukh Beg	
Qing Period	Wang Hui	
Kano School	Kano Eitoku	

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CHAPTER OVERVIEW

10: The New World Grows (1700 CE – 1800 CE)

The New World Grows as the colonized world, America, Canada, and Australia are settled under European influence. Most of the artists were born in other countries and moved to different parts of the new world to escape war, imperialism or religious persecution. Some areas of the countries were still being discovered by the colonizers while others were being settled, establishing a contentious and disastrous relationship with the indigenous populations.

10.1: Overview
10.2: Portraits (18th Century)
10.3: George Washington Portraits (18th Century)
10.4: Early American Folk Art (1650 – 1900)
10.5: New World Furniture and Crafts (18th Century)
10.6: Natural History Illustration (18th Century)
10.7: Textiles (Ongoing)
10.8: Conclusion

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10.1: Overview

10.1 Overview

When Europeans began colonizing North America, different religious groups established colonies and governments based on their own beliefs and social systems. In **New England**, strict religious communities created societies with highly controlled moral and religious practices, while the southern colonies developed systems based on **aristocracy** and large plantation estates.

One of the most important artistic traditions brought from Europe was **portraiture**, which quickly became the dominant style of painting in the colonies. Skilled artists immigrated from Europe as colonial cities grew wealthier and a prosperous upper class emerged. At the same time, England increased its control over the colonies by imposing new taxes and laws. Early colonial art closely followed **European art standards**, especially in portrait painting. Artists carefully posed subjects and emphasized fashionable clothing and status symbols. Art in the northern colonies reflected stricter religious values, while the southern colonies displayed elegant furniture, paintings, and decorative arts in large plantation homes.

Colonial art remained largely **Eurocentric**, with little influence from **Native American art traditions** despite the long presence of Indigenous peoples in North America. At the same time, **slavery** existed throughout all thirteen colonies, and enslaved Africans brought important artistic traditions and craftsmanship with them. Many worked as cabinetmakers, ironworkers, woodcarvers, and artisans on plantations and public projects.

After the colonies gained independence and the new republic formed, American artists expanded beyond portraiture into new artistic subjects and styles. Artists frequently painted images of military leaders and patriots such as **George Washington**, **Thomas Jefferson**, and **Benjamin Franklin**. Traveling painters also created portraits of ordinary citizens. In addition to painting, artists and craftspeople developed distinctive American styles in **furniture**, **silverwork**, and **architecture**, helping shape the visual identity of the new nation.

10.2: Portraits (18th Century)

Definition: Term

- **18th century painting** – Artwork created during the 1700s, reflecting the artistic styles and cultural ideas of the period.
- **Atlantic Ocean** – The ocean separating Europe, Africa, and the Americas, important for trade and cultural exchange.
- **New World** – A historical term used by Europeans to describe North and South America.
- **European art** – Artistic traditions and styles developed in Europe.
- **Portraiture** – The art of creating portraits, or representations of people.
- **Family portraits** – Paintings that depict multiple family members together.
- **Middle-class genre scenes** – Paintings showing everyday domestic life of ordinary middle-class people.
- **United States** – The independent nation formed after the American colonies separated from England.
- **National identity** – A shared sense of culture, history, and values belonging to a nation.
- **Self-taught artists** – Artists who learned their skills independently rather than through formal academic training.
- **Skin tones** – The colors and shades artists use to realistically paint human skin.
- **Highlights and shadows** – Light and dark areas in a painting used to create depth and realism.
- **Royal Academy of Art** – An important art institution in England founded to promote artistic education and exhibitions.
- **Exhibitions** – Public displays of artwork.
- **Angelica Kauffman** – A successful 18th-century painter and one of the founding female members of the Royal Academy of Art.
- **Adélaïde Labille-Guiard** – An accomplished French portrait painter and one of the few prominent female artists of the 18th century.
- **Visual communication** – The use of images and art to share ideas, messages, or information.
- **Realism** – An artistic style focused on accurate and lifelike representation of people, objects, and scenes.

Painting in the **18th century** developed differently on each side of the **Atlantic Ocean**. In England, artists followed established classical traditions, while painting in the **New World** was often created by self-taught artists adapting European styles to colonial life. Artistic traditions in the colonies were heavily influenced by **European art**, especially the artistic centers of Paris and London. For centuries, **portraiture** had primarily focused on kings, queens, religious figures, and wealthy elites. In the American colonies, however, artists increasingly painted ordinary settlers, merchants, and citizens. By the 1730s, portraits shifted away from overly idealized appearances toward more realistic and historically accurate likenesses. In addition to individual portraits, **family portraits** and domestic scenes became popular, creating visual narratives of middle-class life.

After declaring independence from England, the **United States** sought to establish a new national identity and history. Artists helped shape this identity through visual communication designed to appeal to citizens across the new republic. Many colonial painters were **self-taught** and learned by imitating English paintings and techniques. An important feature of portrait painting was the careful creation of realistic **skin tones**. Artists often began with a base layer of color, gradually adding lighter tones with white paint and darker shades to create highlights and shadows for a lifelike appearance.

In England, the **Royal Academy of Art** played a major role in promoting visual art through exhibitions, education, and artistic standards. Its influence extended into the colonies as well. Among the Academy's founding members were two important women artists, **Angelica Kauffman** and **Adélaïde Labille-Guiard**, both highly successful painters during the second half of the eighteenth century. Both women demonstrated exceptional artistic talent from an early age and became respected professional artists in a male-dominated art world.

Angelica Kauffmann

Angelica Kauffman and **Adélaïde Labille-Guiard** were admired for their **allegorical paintings**, attention to detail, and their skillful depiction of luxurious fabrics and clothing. **Kauffman** (1741–1807) was considered a child prodigy. Trained by her father, she learned painting at a young age and was also talented in music and languages. As a teenager, she had to decide between a career in opera or painting. According to tradition, she chose art after hearing negative stories about the opera world. In **Self-Portrait Hesitating Between the Arts of Music and Painting** (10.2.1), Kauffman illustrated her personal conflict between the two professions. In the painting, **Music** is represented by a woman in a silky red dress, while **Painting** appears in blue and gestures toward the artistic path. Kauffman portrays herself in white, symbolizing purity and innocence, as she stands between the two choices.

In **Family Portrait** (10.2.2), Kauffman depicted a Russian noble family in a relaxed domestic setting. The figures wear elegant but informal clothing, and each person looks in a different direction, creating little sense of interaction between them. Both paintings reflect **classical** artistic traditions, using a light blue sky to contrast against darker backgrounds. Kauffman carefully used color to guide the viewer's attention. In one painting, the figures wear the primary colors of red and blue, while in the other the clothing is dominated by warm yellow tones accented by red and blue jackets. In both works, a figure dressed in white serves as the visual focal point of the composition.

Figure \(\PageIndex{1}\): *Self-Portrait Hesitating Between the Arts of Music and Painting* (Public Domain)

Figure \(\PageIndex{2}\): *Family Portrait* (Public Domain)

Adélaïde Labille-Guiard

Adélaïde Labille-Guiard (1749–1803) was a highly respected French artist known for her mastery of **miniatures**, **pastels**, and **oil painting**. She became especially admired for her ability to render delicate textures such as lace, satin, and velvet with extraordinary realism. In **Sculptor Augustin Pajou** (10.2.3), Labille-Guiard portrayed the sculptor Augustin Pajou as he modeled his own likeness in clay. The painting demonstrates her skill in portraiture and attention to detail. Labille-Guiard was also an important advocate for **women's rights** and women's artistic education. During the eighteenth century, women faced many restrictions in the art world and were often denied opportunities to teach or study professionally. Labille-Guiard challenged these limitations by teaching young female artists and establishing opportunities for women to receive artistic training.

Her painting **Self-Portrait with Two Pupils** (10.2.4) reflects her commitment to promoting female artists. In the work, she portrays herself alongside two female students, emphasizing the importance of mentorship and education for women. The luxurious fabrics, delicate lacework, and rich velvet clothing are painted so realistically that viewers may feel tempted to reach out and touch the surfaces. The painting serves both as a self-portrait and as a statement about the abilities and potential of women artists. Teaching women was difficult when "Louis XVI had recently reiterated through his arts minister that the maximum number of women members would stand at four and that no increase would be contemplated."[1]

Figure \(\PageIndex{3}\): *The Sculptor Augustin Pajou* (Public Domain)

Figure \(\PageIndex{4}\): *Self Portrait with Two Pupils* (Public Domain)

At the **Royal Academy of Arts** in London, female artists faced significant restrictions compared to male students. Male students were expected to submit full-body figure studies as part of their artistic training, while women were only permitted to submit head studies or portraits. These limitations reflected broader social beliefs about gender and propriety during the period. By the 1890s, female art students began protesting for greater equality in artistic education, especially the right to study from nearly nude live models, which was considered essential for mastering anatomy and figure painting. Even when these requests were partially granted, male models were still required to wear cloth coverings around their waists to preserve what society considered the "modesty" and "delicacy" of female students.

As immigration increased and the art world in the **United States** expanded, particularly in **New York**, many British-born artists crossed the Atlantic in search of new opportunities. American art institutions gradually became more open to women artists. The **Pennsylvania Academy** was considered somewhat more progressive than many European academies because it allowed women to receive formal artistic training. However, restrictions still remained, including covering nude male models during classes attended by women students.

John Smybert

John Smybert and **William Berczy** were among the best-known early portrait painters who brought European artistic training and techniques to the **New World**. Their knowledge helped establish artistic traditions and art education in the American colonies. **Smybert** (1688–1751) was born in **Scotland** and became one of the first academically trained artists to work in the colonies. Before moving to America, he painted works in Britain, including **Colonel James Otaway** (10.2.5). In this portrait, a dramatic sunset glows over distant hills, creating strong contrast with the colonel's dark suit of armor. The harsh appearance of the black armor is softened by the brown shawl wrapped around his waist. Smybert carefully used light and shadow so the figure stands out clearly against the landscape.

Smybert moved to the colonies after being encouraged by his friend **Bishop Berkeley**. Settling in **Boston**, he painted **The Bermuda Group** (10.2.6), which became one of the most important early paintings in **New England**. Smybert included himself standing on the right side of the composition. The painting portrays the group with little interaction between the figures. Most appear to gaze into the distance rather than engage with one another. One man in a red coat looks toward a woman who does not return his attention, creating subtle emotional tension within the scene. The men still wear the powdered gray wigs fashionable in English society, reflecting the continuing influence of European culture in the colonies.

Figure \(\PageIndex{5}\): Colonel James Otaway (Public Domain)

Figure \(\PageIndex{6}\): *The Bermuda Group (Dean Berkely and His Entourage)* (1728-1739, oil on canvas, 176.5 x 69.4 cm) (Public Domain)

William Berczy

William Berczy (1744–1813) was a portrait painter known for creating **family portraits** that resembled **genre paintings**, showing both formal portraits and aspects of everyday family life. Born in **Germany**, Berczy later moved to the region that is now modern-day Canada. His painting of the **Ducal Family** (10.2.7) reflects the formal **classical style** he practiced while living in Europe. The family members are dressed in elegant clothing appropriate to their social rank. The duke stands beside his wife, while the children are carefully grouped according to age, with the youngest children placed near the mother. The background features a luxurious marble interior typical of elite European homes.

In **The Woolsey Family** (10.2.8), Berczy adapted traditional European portrait conventions to the colonial world. The composition is arranged hierarchically, with the father standing in a strong **patriarchal pose** while the rest of the family remains seated unless they are very young children. A dog placed in the foreground helps visually anchor the composition. Painted in the **Neoclassical style**, the portrait uses a cool color palette and balanced composition. Although the traditional arrangement of family portraits remained similar to European examples, the setting and clothing were adapted to reflect the styles of the **New World** colonies. The Woolsey family is portrayed as wealthy colonists living in a comfortable and well-furnished home.

Figure \(\PageIndex{7}\): *Portrait of the Ducal Family* (c. 1781-1782, gouache on parchment) (Public Domain)

Figure \(\PageIndex{8}\): The Woolsey Family (Public Domain)

John Singleton Copley

John Singleton Copley (1738–1815) was one of the most important American-born painters of the **18th century**. He became famous for his portraits and historical paintings and is believed to have been born in **Boston**. Copley began painting professionally as a teenager and quickly gained recognition for portraying the wealthy and influential people of the American colonies. In 1774, Copley moved to **Europe**, where he continued to achieve great success as an artist. Although he left America before the Revolutionary War, he never returned to the colonies.

One of his most famous works, **A Boy with a Flying Squirrel** (10.2.9), helped establish his reputation as a master painter. The portrait features his younger brother seated at a table with a pet squirrel attached to a delicate chain. The painting demonstrates Copley's refined technique and careful attention to detail, influenced by the rich color and smooth style of the Venetian painter **Titian**. Copley skillfully used color to unify the composition, repeating warm reds in the tablecloth, drapery, and subtle tones of the boy's skin. He also demonstrated remarkable realism in the textures of the painting, especially in the soft fur of the squirrel and the polished reflective surface of the table.

Figure \(\PageIndex{9}\): *A Boy with a Flying Squirrel* (Public Domain)

Copley, Boy with a Squirrel

John Singleton Copley, A Boy with a Flying Squirrel (Henry Pelham), 1765, 77.15 x 63.82 cm / 30-3/8 x 25-1/8 inches (Museum of Fine Arts, Boston).

The Death of Major Pierson (10.2.10) is one of **John Singleton Copley's** most famous **historical paintings**. The large oil painting depicts the failed French attempt to capture the island of **Jersey** during a battle between French and British forces. Copley portrayed the dramatic moment when **Major Pierson** becomes a heroic figure after being killed in battle. The major, dressed in white and placed at the center of the composition, serves as the painting's focal point. Surrounding him are numerous British soldiers wearing vivid red uniforms that strongly contrast with both the major's clothing and the muted background. Copley carefully used light, color, and perspective to create a sense of realism and movement. The soldiers appear to move forward out of the painting toward the viewer, giving the scene depth and dramatic intensity. Meanwhile, the softer and darker background recedes into space, further emphasizing the action in the foreground and enhancing the illusion of three-dimensional space.

Figure \(\PageIndex{10}\): The Death of Major Peirson (Public Domain)

Benjamin West

Benjamin West (1738–1820) was an important American-born painter known for his **historical** and **allegorical paintings**. In **Benjamin Franklin Drawing Electricity from the Sky** (10.2.11), West illustrated the famous story of **Benjamin Franklin's** kite experiment during a lightning storm. Although Franklin was actually in his forties at the time of the experiment, West portrayed

him as an older man because that image was more familiar and recognizable to American audiences. The painting shows Franklin receiving a spark of electricity on his knuckle as lightning travels through the kite string. West transformed the scientific experiment into an allegorical scene by surrounding Franklin with dramatic storm clouds and angelic assistants. These symbolic figures elevate Franklin's discovery into a heroic and almost divine achievement, celebrating both science and Enlightenment ideals.

Figure \(\PageIndex{11}\): *Benjamin Franklin: Drawing Electricity from the Sky* (Public Domain)

Figure \(\PageIndex{12}\): Copy and Paste Caption here. (Public Domain)

Benjamin West: Benjamin Franklin Drawing Electricity from the Sky

Discover the Museum's collection! Here, a look at Benjamin West's "Benjamin Franklin Drawing Electricity from the Sky" c. 1816

Benjamin West created a large body of artwork throughout his career, including important **historical paintings** such as **The Treaty of Penn with the Indians** (10.2.12). The painting depicts **William Penn** signing a peace treaty in 1683 with the chief of the **Lenape Turtle Clan**. Commissioned by William Penn's son, the work combines elements of history painting and landscape painting. The main action takes place at the center of the composition, where Penn and the Lenape leaders meet peacefully. West arranged the figures carefully to emphasize diplomacy and cooperation between the groups. The painting contrasts the muted and

restrained colors of the European settlers with the brighter and more vivid colors used for the Indigenous figures and surrounding landscape. West also included darkening gray clouds moving into the sky, creating a sense of tension and uncertainty. Many historians interpret the approaching storm as a symbolic suggestion of the suffering and displacement Indigenous peoples would later experience.

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[1] Retrieved from https://www.metmuseum.org/essays/ade...iard-1749-1803

10.3: George Washington Portraits (18th Century)

Definition: Term

- **Portraits** – Artistic representations of people, usually focusing on their appearance and personality.
- **New World** – A historical European term used to describe the Americas.
- **American republic** – The system of government established in the United States after independence, where citizens elect representatives instead of having a monarchy.
- **George Washington** – The first president of the United States and commander of the Continental Army during the American Revolution.
- **Photography** – The process of creating images using a camera and light-sensitive technology.
- **American Revolution** – The war (1775–1783) in which the American colonies gained independence from Britain.
- **Commander-in-chief** – The supreme leader of a nation's military forces.
- **Continental Army** – The military force organized by the American colonies during the American Revolution.
- **National identity** – A shared sense of culture, values, and history that connects citizens of a nation.
- **Patriotism** – Love, loyalty, and support for one's country.
- **Military leader** – A person who commands and directs armed forces.
- **Public perception** – The way people generally view or understand a person, event, or idea.
- **Historical portraiture** – Portrait paintings that depict important historical individuals or events.
- **Leadership** – The ability to guide, direct, and influence others.
- **National unity** – A sense of togetherness and shared purpose among the people of a nation.

Gilbert Stuart

Iconic American **portraits** played an important role in shaping the public perception of the **New World** and the new American republic. **George Washington**, the first president of the United States and the only president unanimously elected to office, became one of the most frequently painted figures in American history. Because **photography** had not yet been invented, artists were responsible for creating visual representations of the leaders of the new nation. Painters portrayed Washington in different roles throughout his life, including as a military leader during the **American Revolution**, as **commander-in-chief** of the Continental Army, and later as the first president of the United States. These portraits helped establish Washington's public image as a symbol of leadership, patriotism, and national unity, while also contributing to the creation of an American national identity.

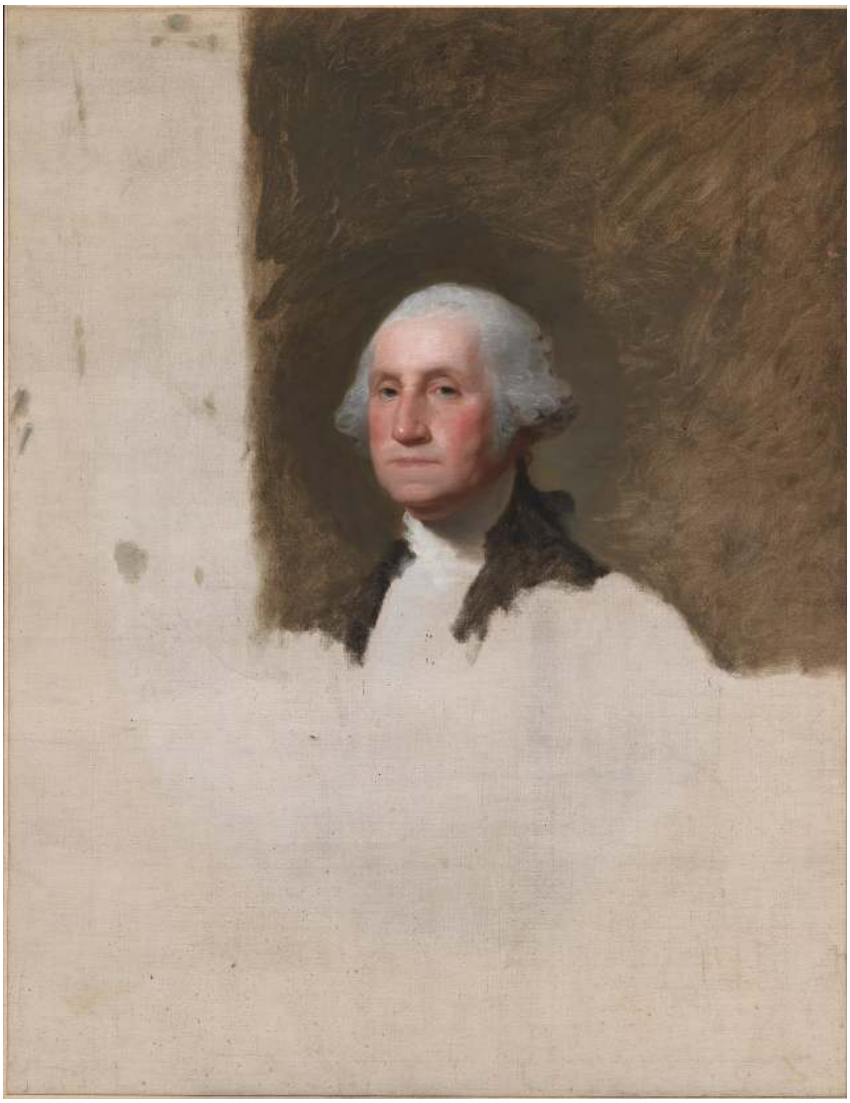


Figure \(\PageIndex{1}\): *Portrait of George Washington (The Athenaeum Portrait)* (Public Domain)

The **Lansdowne Portrait of George Washington** (10.3.1) was painted by **Gilbert Stuart** during the final year of **George Washington's** (10.3.2) presidency, when Washington was sixty-four years old. Unlike many earlier portraits that showed him in military uniform, Stuart portrayed Washington in formal civilian clothing, emphasizing his role as a statesman and president rather than a military commander. Stuart painted Washington with an aged and thoughtful expression, reflecting the burdens of war, the creation of a new nation, and the responsibilities of leadership. The portrait became one of the most famous images of Washington and a powerful symbol of the United States. Today, the painting hangs in the **East Room of the White House**. During the **War of 1812**, when British forces attacked and burned the White House, **First Lady Dolley Madison** helped save the portrait. As the building was burning, she instructed workers to remove the painting from its frame and carry it to safety before the British troops arrived.

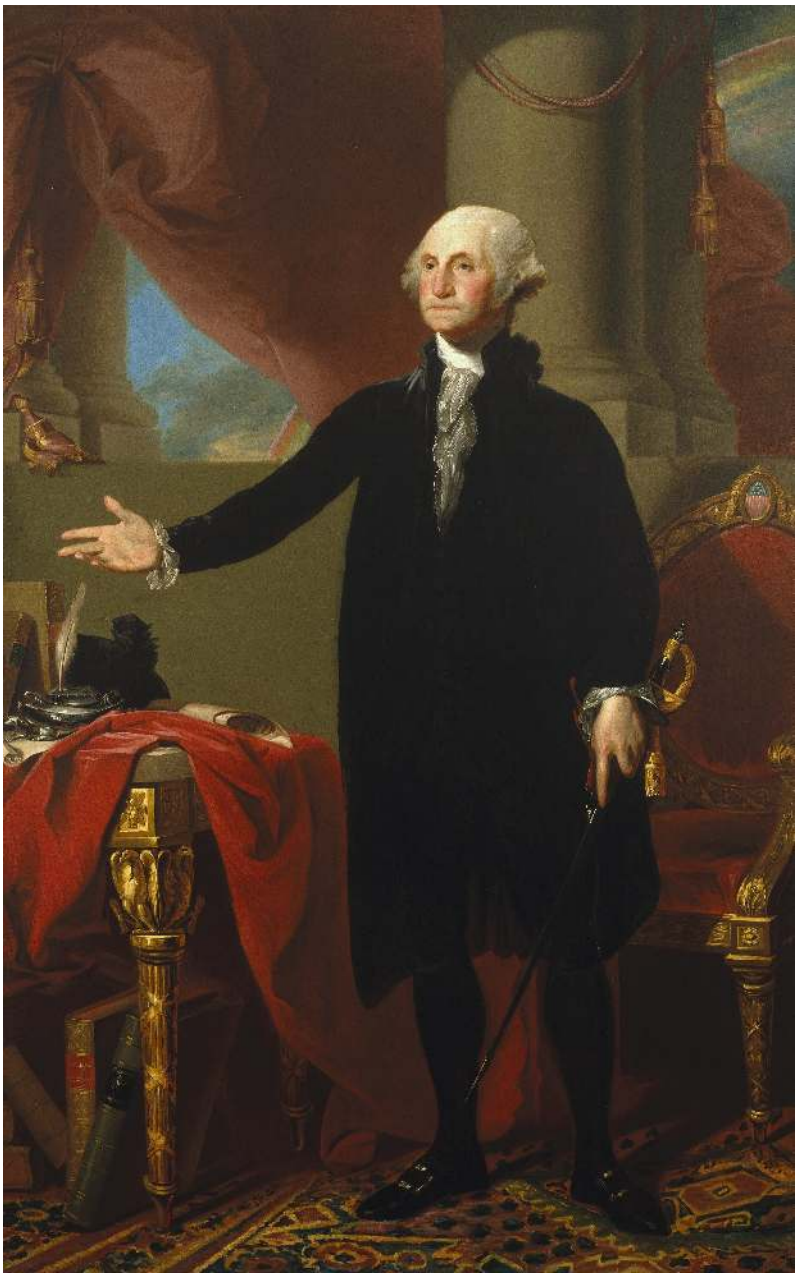


Figure \(\PageIndex{2}\): *George Washington* (Public Domain)

Charles Wilson Peale

Another important American painter, **Charles Wilson Peale** (1741–1827), created several portraits of **George Washington**, including one showing him in battle (x.x) and another portraying him standing formally (10.3.3, 10.3.4). These images present Washington as a strong and confident leader capable of commanding both an army and a newly forming nation. Peale portrayed Washington as a tall and dignified figure, emphasizing his authority and leadership. In the battle portrait, Washington's elegant military uniform contrasts sharply with the dark and stormy sky behind him, creating a dramatic atmosphere that suggests the uncertainty and challenges of war. The paintings also show that the uniforms of the **Continental Army** closely resembled traditional **English military uniforms**, reflecting the continued influence of British military traditions even during the American Revolution. Through these portraits, Peale helped shape the heroic public image of Washington as a symbol of courage, strength, and national leadership.

Figure \(\PageIndex{3}\): *George Washington at the Battle of Princeton* (Public Domain)

Figure \(\PageIndex{4}\): George Washington (Public Domain)

Charles Wilson Peale was more than a portrait painter; he was also a **naturalist**, **inventor**, and collector of scientific artifacts. Peale founded the first major American museum, created to celebrate the new democracy of the United States, which many people compared to the democratic ideals of **Ancient Greece**. One of the museum's most famous attractions was a complete **mastodon skeleton**, which fascinated visitors and demonstrated growing American interest in science and natural history. Peale's museum

was also one of the earliest institutions in America to organize specimens according to **Linnaean taxonomy**, the biological classification system developed by the Swedish scientist **Carl Linnaeus**. The museum functioned as a "cabinet of curiosities," displaying natural specimens, scientific objects, and historical artifacts for public education. Peale's institution became an important model for the development of modern **natural science museums**, which continue to evolve from the ideas he helped establish.

John Trumbull

The Declaration of Independence (10.3.5) by **John Trumbull** (1756–1843) is one of the most iconic paintings in American history. The painting depicts the presentation of the first draft of the **Declaration of Independence** in **Independence Hall** in Philadelphia, where representatives of the American colonies gathered during the Revolutionary era. Trumbull was commissioned by the **United States Congress** to create four major historical paintings celebrating important events of the **American Revolution**. In this work, forty-seven of the nation's founders are shown witnessing the presentation of the document that declared independence from **Britain**. The central focus of the composition is the group of men presenting the draft of the declaration as it rests on the desk. Trumbull carefully arranged the figures to create a balanced and formal historical scene that emphasized unity, patriotism, and the founding ideals of the new nation. Today, an image based on Trumbull's painting appears on the back of the **two-dollar bill**, making it one of the most widely recognized images in American culture.

Figure \(\PageIndex{5}\): *Declaration of Independence* (Public Domain)

Painter of the Revolution: The Declaration of Independence

THE DECLARATION OF INDEPENDENCE by John Trumbull, 1818, Oil on Canvas, 12 x 18 ft

In **General George Washington at Trenton** (10.3.6), **John Trumbull** portrayed **George Washington** during the critical moments surrounding the Battle of Trenton. Painted on a large canvas, the work presents Washington standing beside his horse against the darkening skies along the river, while boats carrying soldiers appear in the background. Washington is dressed in a dramatic yellow and dark military uniform, making him stand out as the central figure in the composition. Rather than showing action and movement, Trumbull depicted Washington in a thoughtful and contemplative moment, as if he is carefully planning his next military decision before mounting his restless horse. The dark sky and tense atmosphere suggest the uncertainty and danger of the Revolutionary War, while Washington's calm posture presents him as a confident and heroic leader. Like the portraits painted by **Charles Wilson Peale**, Trumbull's image portrays Washington as larger than life — a powerful symbol of leadership, courage, and the emerging American nation.

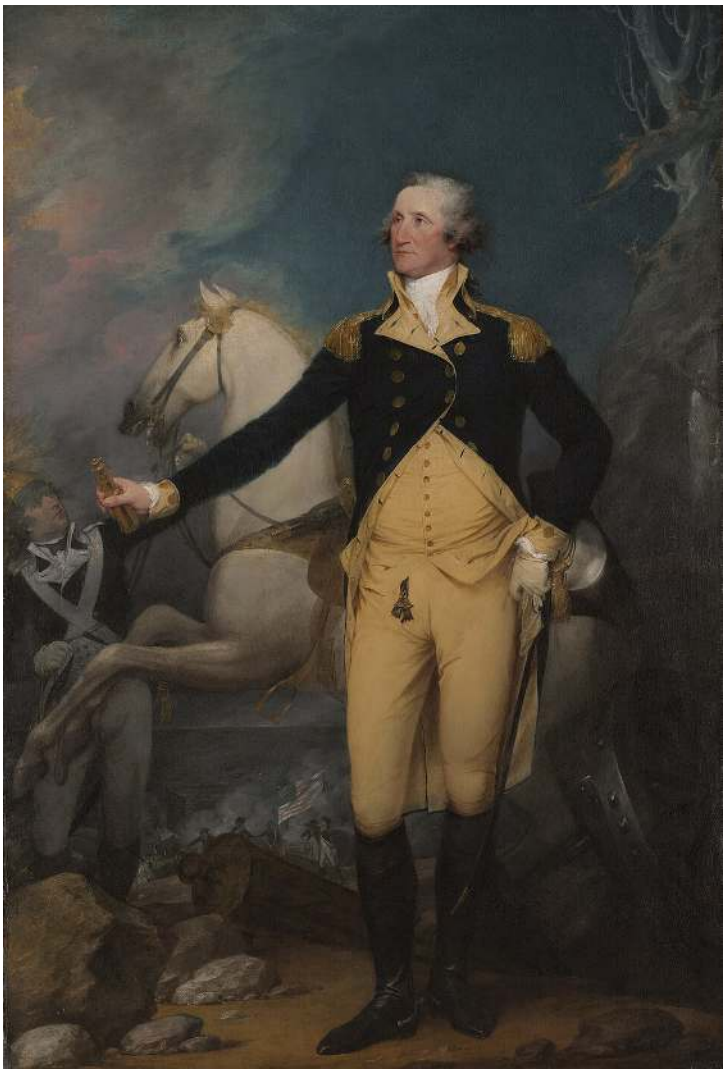


Figure \(\PageIndex{6}\):*General George Washington at Trenton* (Public Domain)

General George Washington resigned his commission as commander-in-chief of the Continental Army in a meeting with the Congress of the Confederation, the ruling body at the time. The government hired Trumbull to record historical events in paint, and Trumbull was there for the resignation. And he believed it to be "one of the highest moral lessons ever given to the world.[2] The colors in the painting (10.3.7) are generally muted, and the interior setting is darkened, creating a serious and formal atmosphere. In the center of the composition stands **George Washington**, whose light golden-colored pants draw attention and help distinguish him from the surrounding figures. Washington is also painted slightly taller than the others, emphasizing his authority and importance. His elegant pose, with one hand extended outward and the other resting on his hip, gives him a calm and commanding presence as he presents the formal document to the representatives. Trumbull carefully arranged the figures and lighting so Washington becomes the clear focal point of the painting. The artwork hangs beside **John Trumbull's** famous painting of the **Declaration of Independence**, linking Washington's leadership to the founding ideals and history of the United States.

Figure \(\PageIndex{7}\): *General George Washington Resigning His Commission* (event 1783, painted1824, oil on canvas, 365.7 x 548.6 cm) (Public Domain)

[1] Retrieved from https://www.mountvernon.org/george-w...rge-washington

[2] Trumbull, J. (1841). *Autobiography, Reminiscences and Letters of John Trumbull, from 1756 to 1841*. New York: Wiley and Putnam. p. 263. Retrieved from https://en.wikipedia.org/wiki/Genera...His_Commission

10.4: Early American Folk Art (1650 – 1900)

Definition: Term

- **Folk art** – Handmade art created by ordinary people, often reflecting local traditions and everyday life.
- **Utilitarian purposes** – Practical uses or functions rather than purely decorative purposes.
- **Rugs** – Thick woven floor coverings often decorated with patterns or designs.
- **Checkerboards** – Boards marked with squares used for playing games such as checkers.
- **Weathervanes** – Decorative objects placed on rooftops that rotate to show wind direction.
- **Portraits** – Artistic representations of people.
- **Itinerant painters** – Traveling artists who moved from place to place creating paintings and portraits for clients.
- **Photography** – The process of creating images using cameras and light-sensitive technology.
- **Handmade art** – Art created directly by hand rather than by machines or mass production.
- **Rural communities** – Communities located in countryside or farming areas rather than cities.
- **Regional styles** – Artistic styles or traditions associated with a specific geographic area.
- **Motifs** – Repeated decorative images, symbols, or patterns used in artwork.
- **Pennsylvania folk art** – Folk art traditions from Pennsylvania, often featuring birds, hearts, flowers, and colorful decorative designs.
- **New England folk art** – Folk art traditions from the New England colonies, often influenced by coastal and maritime life.
- **Marine life** – Plants and animals that live in oceans and seas.

Folk art generally referred to handmade objects created for practical or everyday use, including rugs, checkerboards, weathervanes, furniture, and household decorations. Much of this art was produced for utilitarian purposes around the home and farm rather than for formal artistic display. Small portraits and printed images also became common forms of folk art, often painted by family members or traveling **itinerant painters**. Because **photography** had not yet been invented, these artists provided an important way for ordinary people to preserve images of themselves and their families.

Folk art was often described by critics as rough, rural, simple, or inferior when compared to academically trained European art. However, many folk artists demonstrated remarkable creativity and skill, and several are now recognized as important American artists. Folk artists usually followed local traditions and regional styles, especially in rural communities. In **Pennsylvania**, folk art commonly featured decorative motifs such as birds, hearts, and flowers, while in **New England**, artists often focused on marine subjects reflecting the importance of the sea and coastal life.

Ruth Bascom

Ruth Bascom (1772–1848) was an American **folk artist** known for her profile portraits made from paper, pastel, and paint. Her father fought in the **French and Indian War** and later served as a leader in the **Minutemen** alongside **George Washington** during the American Revolution. Bascom received a strong education for a woman of her time and worked as a schoolteacher for many years. After the death of her first husband only one year into marriage, she later married a minister. Bascom frequently created portraits of friends and family members. She specialized in side-profile **bust portraits**, first constructing the images with layered paper cutouts. As her confidence and skills developed, she began adding **pastels** and eventually paint to her compositions.

Her works, including **Cynthia Allen Fitzwilliam** (10.4.1) and **Elizabeth Cummings Low** (10.4.2), have a flat, one-dimensional appearance typical of folk art. Despite their simplicity, the portraits contain elegant details in the lace clothing and carefully styled hair. Bascom used smooth outlines and minimal facial details, reducing her subjects to their essential forms while still preserving individuality and grace. Over her lifetime, Bascom created more than 1,400 portraits, making her one of the most prolific American folk artists of her era.

Figure \(\PageIndex{1}\): *Cynthia Allen Fitzwilliam* (Public Domain)

Figure \(\PageIndex{2}\): *Elizabeth Cummings Low* (Public Domain)

Joshua Johnson

Joshua Johnson (1763–1824) was one of the earliest known professional African American **folk artists** in the United States. Born to an enslaved Black woman, Johnson was sold as a child before eventually being purchased by a man who arranged for him to apprentice with a blacksmith and granted him freedom. After gaining his freedom, Johnson advertised himself as a **portrait painter** and illustrator of manuscripts. He became well known for painting portraits of individuals and multi-figure family groups. In **John Jacob Anderson and Sons, John, and Edward** (10.4.3), Johnson carefully painted detailed textures such as silk fabric and delicate lace collars. Although some areas, especially the hands, appear slightly out of proportion, the portrait demonstrates his strong attention to decorative detail and clothing.

In **Edward and Sarah Rutter** (10.4.4), Johnson portrayed two children posed formally in elegant clothing. The young girl wears white, symbolizing innocence and purity, while the boy's dark suit, likely made of velvet, contrasts with his bright white collar. Johnson balanced the composition with touches of vivid red emerging from the dark background, while the boy's dark clothing almost blends into the shadows. The children gaze directly outward with calm and restrained expressions, reflecting the formal style commonly found in early American portraiture and folk art.

Figure \(\PageIndex{3}\): *John Jacob Anderson and Sons John and Edward* (Public Domain)

Figure \(\PageIndex{4}\): *Edward and Sarah Rutter* (1805, oil on canvas, 91.4 x 81.3 cm) (Public Domain)

Rufus Hathaway

Rufus Hathaway (1770–1822) was a self-taught American **folk-art painter** who also worked as a physician. Although he painted portraits of many prominent local families, only a small number of his paintings survive today. In **Lady with Her Pets** (10.4.5), Hathaway portrayed a woman surrounded by various animals, possibly referencing her father's profession as a professor of **natural history**. The painting combines portraiture with symbolic elements connected to education, refinement, and domestic life. The woman is dressed in fashionable **French clothing**, reflecting contemporary European styles and suggesting her awareness of sophisticated worldly culture. She sits in an elegant **Chippendale-style chair**, a popular furniture style associated with wealth and taste. The flowers, decorative bodice, and carefully styled French hairstyle further emphasize her refinement and social status. The surrounding animals, described as "pets," add a personal and gentle quality to the portrait while also connecting the subject to themes of nature and learning.

Figure \(\PageIndex{5}\): *Lady with Her Pets (Molly Wales Fobes)* (Public Domain)

Robert Peckham

Robert Peckham (1785–1877) was a self-trained American **folk artist** born in **Massachusetts**. In addition to being a painter, he served as a church **deacon** and was a strong opponent of **slavery**. According to one of his daughters, the family home may have served as a stop on the **Underground Railroad**, the secret network that helped enslaved people escape to freedom. Before becoming a portrait painter, Peckham painted signs and houses. He later opened a portrait business specializing in paintings of children, charging about ten dollars per portrait, a price many middle-class families could afford.

In **The Raymond Children** (10.4.6), the children are richly dressed and stand on an **ingrain carpet**, a detail that suggests the family's wealth and social status. The young girl's bright yellow dress immediately draws attention, while her red shoes reflect a fashionable style of the period. The younger boy wears formal black clothing with white trousers and an elaborate collar, symbols of refinement and prosperity. In **The Hobby Horse** (10.4.7), Peckham again portrayed children dressed in fashionable clothing, including the popular red shoes. Both boys wear black jackets with white pants, and each child is shown with toys, emphasizing childhood and family life. Like many portraits in **folk art**, the children are posed stiffly and stare directly outward with serious expressions. Their formal appearance reflects the values of discipline, respectability, and social standing common in nineteenth-century American portraiture.

Figure \(\PageIndex{6}\): *The Raymond Children* (Public Domain)

Figure \(\PageIndex{\7}\): *The Hobby Horse* (c. 1840, oil on canvas, 103.5 x 101.6 cm) (Public Domain)

Edward Hicks

Edward Hicks (1780–1849) was an American **folk artist** and minister in the **Society of Friends**, also known as the **Quakers**. Born in **Pennsylvania**, Hicks traveled through the countryside as a Quaker preacher while also painting signs and household objects to earn a living. The decorative and ornate style of his early paintings conflicted with the Quaker belief in simplicity and modesty, leading Hicks to stop painting for a period of time. However, farming did not provide enough support for his growing family, and with his wife expecting their fifth child, Hicks eventually returned to painting.

When he resumed his artistic work, Hicks focused on subjects with strong religious and moral themes that aligned more closely with Quaker values. His most famous work, **Peaceable Kingdom** (10.4.8), was based on the biblical prophecy of peace and harmony among all living creatures. Because the subject was considered spiritually meaningful and appropriate, Hicks repeatedly returned to the theme and painted approximately sixty-two versions of the composition throughout his life. The paintings came from words of Isaiah (11:6), “The wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together; and a little child shall lead them.”[1] In the different versions, Hicks changed small things and in this painting, the tree trunk is shattered representing the schism in Quaker society. The lion and the ox were symbols Hicks used for redemption.

Figure \(\PageIndex{8}\): *Peaceable Kingdom* (c. 1830-1832, oil on canvas, 45.4 x 60.6 cm) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/art/collection/search/11081

10.5: New World Furniture and Crafts (18th Century)

Definition: Term

- **Furniture** – Movable objects such as tables, chairs, and cabinets used in homes and buildings.
- **Artisans** – Skilled craftspeople who make objects by hand.
- **Cabinet makers** – Craftsmen who design and build fine wooden furniture and cabinets.
- **Oak** – A strong hardwood commonly used in furniture making.
- **Mahogany** – A durable reddish-brown hardwood valued for fine furniture.
- **Cherry wood** – A smooth hardwood known for its warm reddish color and use in quality furniture.
- **White pine** – A lightweight softwood commonly used in construction and furniture.
- **Birch** – A pale hardwood used for furniture and decorative woodwork.
- **Walnut** – A dark hardwood prized for its beauty and durability in furniture making.
- **Hickory** – A very strong hardwood often used for furniture and tool handles.
- **Industrial Revolution** – The period of increasing machine production and industrialization beginning in the late 18th century.
- **Pennsylvania Dutch style** – A furniture style influenced by German immigrants, known for simple forms and painted decoration.
- **Federal style** – An elegant American furniture style influenced by English and French Neoclassical design.
- **Sheraton style** – A refined furniture style with delicate proportions, straight lines, and decorative upholstery.
- **American Empire style** – A furniture style influenced by French Empire design, featuring curved forms and ornate decoration.
- **Shaker style** – A simple and functional furniture style created by the Shaker religious community.
- **Victorian style** – A highly decorative furniture style from the reign of Queen Victoria, known for ornate details and rich materials.
- **Veneers** – Thin decorative layers of fine wood attached to furniture surfaces.
- **Inlays** – Decorative designs created by inserting different materials into a surface.
- **Dovetail joints** – Strong woodworking joints with interlocking wedge-shaped cuts used in drawers and furniture.
- **Upholstery** – Fabric, padding, and coverings applied to furniture such as chairs and sofas.
- **Claw feet** – Decorative carved furniture feet shaped like animal claws.
- **Queen Victoria** – The queen of Great Britain from 1837 to 1901, associated with the Victorian era.

The demand for beautiful furniture in the **18th century** created a new class of **artisans**. These skilled craftsmen became experienced **cabinet makers**, constructing fine furniture for plantation manors and local households. The abundant natural resources provided many types of wood, including **oak**, **mahogany**, **cherry**, **white pine**, **birch**, **walnut**, and **hickory**. Early tools such as **axes**, **chisels**, **mallets**, **saws**, and **planes** were brought across the ocean by artisans. A four-drawer chest in the eighteenth century could take about eight days of 12-hour workdays to complete. Later, the **Industrial Revolution** introduced automation, reducing production time but often lowering the quality of handmade furniture.

Several furniture styles developed in the United States during the eighteenth and nineteenth centuries. **Pennsylvania Dutch** (1720–1830) style reflected German immigrant influence with simple, utilitarian furniture decorated with hand-painted scenes. **Federal** (1780–1820) style featured ornamental designs with contrasting woods, veneers, inlays, and brass fittings influenced by French and English design. **Sheraton** (1780–1820) furniture commonly included **dovetail joints**and rich upholstery. **American Empire** (1800–1840) style showed French influence through curved arms, claw feet, and glass panels. **Shaker** (1820–1860) furniture emphasized simplicity with straight lines, woven seats, and plain wooden knobs. **Victorian** (1840–1910) furniture, named after Queen Victoria, was highly ornate with tapestry decorations and rosewood inlays. Many of these styles are still produced today in specialty shops.

Charles Lannuier

Charles Lannuier (1779–1819) was a French-born American **cabinetmaker** who worked in **New York City** and became known for his elegant **Neoclassical** furniture designs. His work is often described as **French Antique** in style because of its richly carved legs, decorative motifs, and refined craftsmanship. Lannuier drew inspiration from **ancient Greek and Roman art**, incorporating elements such as laurel wreaths, stars, columns, pediments, and winged figures into his furniture. He frequently used luxurious

woods like **mahogany**, satinwood, and rosewood to create richly colored surfaces. Lannuier became especially famous for his sideboards, dining tables, chairs, and game tables. One of his most celebrated works, the center table (10.5.1), combines mahogany, satinwood, rosewood, gilded brass figures, and marble inlays, and today is displayed in the **Red Room of the White House**. Another elegant piece, the card table (10.5.2), was created as a wedding gift, reflecting the importance of finely crafted furniture in wealthy American households. "The invoice for the Campbell pieces survives, revealing how expensive furniture from Lannuier's Broad Street shop was. The pair of card tables was priced at $250 and the pier table at $300--astonishing sums at a time when a journeyman cabinetmaker's wage was only about a dollar a day."[1]

Figure \(\PageIndex{1}\): Center table (c. 1810, mahogany, rosewood, white pine, gilded brass, marble) (Public Domain)

Figure \(\PageIndex{2}\): Card table (1817, mahogany, white pine, yellow poplar, gilded gesso, vert antique, gilded brass, 79.1 x 91.4, 45,1 cm) (Public Domain)

Duncan Phyfe

Duncan Phyfe (1768–1854) was a Scottish immigrant who settled in **New York** in the late eighteenth century and became one of the most famous American **furniture designers** of the early nineteenth century. Although Phyfe did not invent a completely new furniture style, he adapted fashionable European designs and incorporated them into American **Neoclassicism**. Phyfe's furniture became known for its elegant proportions, symmetry, and balance. His designs reflected refinement and craftsmanship, qualities that made his work highly desirable among wealthy Americans. An example of his style can be seen in the green striped sofa located in the **Green Room of the White House** (10.5.3). The red sofa (10.5.4) demonstrates Phyfe's use of classical design elements, including graceful curved lines and scrolling armrests. The sofa was originally part of a larger furniture set created for a lawyer's townhouse in **New York City**. The current upholstery reproduces the original fabric, featuring bright red material decorated with gold thread in a classical ornamental pattern.

Figure \(\PageIndex{3}\): Sofa, ca 1810-15, Mahogany, cherry, pine, gilt brass, and modern upholstery (Public Domain)

Figure \(\PageIndex{4}\): Sofa (ca. 1837, mahogany, pine, ash, upholstery, 97.8 x 188 x 62.2 cm) (Public Domain)

John Townsend

John Townsend (1733–1809) was one of the most important American **craftsmen** and **cabinet makers** of the eighteenth century. Born in **Newport, Rhode Island**, he came from a family of **Quaker** furniture makers known for their exceptional woodworking skills and craftsmanship. Townsend became famous for developing a furniture style known as the **Newport Case** or the **block-and-shell** design. His desks and chests featured distinctive solid wood drawer fronts shaped in alternating **concave** and **convex** curves, creating a dramatic flowing surface across the furniture. A key decorative feature of Townsend's (10.5.5) work was the carved **shell motif**, often placed at the center of the design to create visual focus and elegance. The block-front style became especially popular in Boston and other colonial cities. Townsend's furniture combined craftsmanship, balance, and decorative detail, and many of the design elements he introduced — especially the block-and-shell pattern — continue to influence furniture design today.

Figure \(\PageIndex{5}\): Townsend chest (Public Domain)

Benjamin Randolph

Benjamin Randolph (1721–1791) was an American **cabinetmaker** known for his work in the **Queen Anne** and **Philadelphia Chippendale** furniture styles. Working in Philadelphia, Randolph became recognized for producing elegant, finely crafted furniture that reflected popular English design influences adapted for the American colonies. Randolph is especially credited with creating the **portable writing desk** (10.5.6), a practical and refined piece of furniture designed for writing, storing documents, and travel. His work combined functionality with decorative craftsmanship, helping establish Philadelphia as one of the major

furniture-making centers in colonial America. Thomas Jefferson drafted the Declaration of Independence on one of Randolph's portable desks, stating, "It was made from a drawing of my own, by Ben. Randall [sic], a cabinetmaker in whose house I took my first lodgings on my arrival in Philadelphia in May 1776. And I have used it ever since."[2]

Figure \(\PageIndex{6}\): Portable writing desk (Public Domain)

Paul Revere

Paul Revere (1734–1818) was one of the most famous American **silversmiths** and craftsmen of the colonial and Revolutionary periods. Before the **American Revolution**, Revere created finely handcrafted silver objects that he sold in his Boston dry goods shop. His work included **flatware**, spoons, tableware, and serving pieces (x.x), all admired for their craftsmanship and elegant design. After the Revolutionary War, Revere shifted from small-scale silverwork to large-scale industrial production. He established an iron foundry in **Boston**, where he manufactured church bells, copper pans, and cannons. Revere became especially well known for producing **rolled copper**, an important industrial material in early America. Although his foundry emphasized standardization and mass production, many of the finished products still contained hand-crafted details. For example, cannons were cast in molds but then individually finished by hand, making each one slightly unique.

One example of Revere's silverwork is the drum-shaped **teapot** (10.5.7), which differs from traditional round teapots by having an oval body. Made after the Revolutionary War from thin hammered silver, the teapot reflects the **Neoclassical style** through its straight spout and refined handle supports. A delicate pinecone-shaped finial decorates the lid. Another example is the **cann** (10.5.8), a type of mug recognized by its pear-shaped body, scroll handle, and silver footed base. This particular cann was unusually large and personalized with the owner's engraved initials on the front. "In April of 1783, Revere recorded in his ledger that he was making a pair of quart canns for E. H. Darby, Esq."[3] Most of the design is found in the elegant scroll of the handle, larger at the top and narrowing down at the bottom before turning outward.

Figure \(\PageIndex{7}\): Teapot (1782, silver, 16.5 x 23.8 cm) (Public Domain)

Figure \(\PageIndex{8}\): Cann (1783, silver, 16.7 x 16.5 cm) (Public Domain)

Myer Myers

Myer Myers (1723–1795) was the first known Jewish **silversmith** in the American colonies and became famous for creating both luxury silverware and religious objects for Jewish patrons. Living in **New York City**, Myers was registered as a **"freeman,"** a legal term indicating that he was not enslaved and possessed certain civic rights. In colonial America and England, Jewish people often faced restrictions on voting, holding office, serving on juries, and attending universities. Although the new United States Constitution later granted Jews greater equality, some states still imposed religious restrictions that limited full freedoms. For this reason, Jewish citizens sometimes emphasized their status as "freemen" to distinguish themselves from enslaved people, who had no legal rights.

Myers became highly respected for his craftsmanship and produced some of the finest silver objects in the **English Rococo style**. He created elaborate silver baskets (x.x) for wealthy customers in New York and North Carolina. These baskets (10.5.9) were used to serve cake, bread, or fruit and acted as symbols of wealth and social status among elite families. His baskets were especially admired for their sculptural quality and decorative details, including asymmetrical forms, geometric and floral patterns, pierced cut-outs, and engraved ornamentation. Myers combined elegance, technical skill, and fashionable Rococo design to create some of the most celebrated silverwork in colonial America.

Figure \(\PageIndex{9}\): Basket (1770-1795, silver, 28.4 x 36.7 x 28.9 cm) (Copyright; author via source)

[1] Retrieved from https://www.metmuseum.org/met-public...deral-new-york

[2] Jefferson to Ellen Wayles Randolph Coolidge, November 14, 1825, in Edwin M. Betts and James Bear, Jr., eds., *Family Letters of Thomas Jefferson* (Columbia, MO: University of Missouri Press, 1966), pp. 461-62.

[3] Retrieved from https://www.metmuseum.org/essays/pau...e-jr-1734-1818

10.6: Natural History Illustration (18th Century)

Definition: Term

- **Scientific illustrator** – An artist who creates accurate drawings of plants, animals, and other scientific subjects for study and documentation.
- **Watercolor** – A painting medium made with pigments mixed with water, known for transparent color effects.
- **Illustration** – A drawing or image created to explain, describe, or record something visually.
- **New World** – A historical European term used to describe North and South America.
- **Explorers** – People who travel to unfamiliar places to discover and study new lands, peoples, or species.
- **Natural world** – All living organisms and natural environments found in nature.
- **Specimen** – An individual plant, animal, or object collected or studied as an example.
- **Exotic species** – Plants or animals considered unusual or foreign to a particular region.
- **Scientific records** – Detailed information or documentation used for scientific study and research.
- **Detailed observation** – Careful and precise examination of a subject.
- **Plants** – Living organisms that typically grow in soil and produce energy through sunlight.
- **Animals** – Living organisms that move, consume food, and respond to their environment.
- **Birds** – Warm-blooded animals with feathers, wings, and beaks.
- **Sketches** – Quick or preliminary drawings used to record ideas or observations.
- **Documentation** – The process of recording information for reference or study.

A **scientific illustrator** is an artist who carefully records the detailed features of plants, animals, birds, and other natural subjects. Using tools such as fine pens, pencils, and **watercolor**, scientific illustrators create highly accurate drawings that document even the smallest details of a specimen. With the discovery and exploration of the **New World**, Europeans became fascinated by unfamiliar plants and animals found in different regions. Many of these species were unknown in Europe and were viewed as strange or exotic. Because photography did not yet exist, explorers often hired scientific illustrators to travel with them and visually document their discoveries. These illustrations served as important scientific records and proof of what explorers encountered during their journeys. Scientific illustrations helped scholars study new species and expanded European knowledge of the natural world.

John Audubon

John Audubon (1785–1851) was a famous American **naturalist**, **scientific illustrator**, and painter best known for documenting birds in their natural environments. His most celebrated work, **The Birds of America**, was first published in 1827 and is considered one of the finest and most beautiful **ornithological** books ever created. The book was based on Audubon's detailed **watercolor** paintings, produced while he traveled across the United States searching for different bird species. To create accurate illustrations, Audubon often used recently killed birds as models. He carefully wired the birds into lifelike poses that resembled their natural movements and habitats before painting them. In addition to watercolor, Audubon also used **pastels**, oil paint, and chalk in his artwork.

Audubon developed a distinctive artistic style by placing birds dramatically in detailed natural settings. In works such as **Wild Turkey** (10.6.1) and **Mourning Dove** (10.6.2), he focused closely on the animal while surrounding it with carefully observed environmental details. His compositions often placed viewers at eye level with the birds, creating a more immersive experience. Audubon also painted many of his subjects at larger-than-life scale, increasing their visual impact. His dramatic and theatrical portrayals of birds, such as the **Ivory-Billed Woodpecker** (10.6.3), became extremely popular, especially in England. His work established an enduring legacy that continues today through organizations such as the **Audubon Society**, dedicated to bird conservation and environmental protection.

Figure \(\PageIndex{1}\): Wild Turkey (Public Domain)

Figure \(\PageIndex{2}\): Mourning Dove (Public Domain)

Figure \(\PageIndex{3}\): *Ivory-Billed Woodpecker* (Public Domain)

How Audubon's Birds of America Changed Natural History

This December, Sotheby’s is delighted to offer an early subscriber's copy of John James Audubon’s Birds of America in a single lot sale immediately following our Fine Books and Manuscripts auction. In this episode of Expert Voices, Senior International Specialist Selby Kiffer explains why this outstanding work is universally acknowledged as one of the most important achievements in both book illustration and natural history. One of only 15 sets in private hands, this extremely rare “Double Elephant Folio” copy of Birds of America features all 435 magnificent hand colored etched plates depicting 1,065 life-size birds. (

John Audubon traveled extensively throughout the United States in search of different bird species to study and paint. One of his journeys took him to **Florida**, where he documented and illustrated the region's native water birds. His travels were often difficult and physically demanding. Audubon journeyed by foot and horseback through swamps and forests, crossed rough log roads, traveled by canoe through waterways, and followed remote trails in order to observe birds in their natural habitats. These challenging expeditions allowed him to create highly detailed and accurate illustrations that became important contributions to both art and natural science. He spent six months there, constantly swarmed by mosquitoes. He wrote, "Reader, if you have not been in such a place, you cannot easily conceive the torments we endured."[1]

Sir Joseph Banks

Sir Joseph Banks (1743–1820) (10.6.4) was an English **botanist**, **naturalist**, and scientific collector who developed a lifelong passion for plants after studying at **Eton College**. Banks became fascinated with the natural world and devoted much of his life to collecting and documenting plants, animals, and other specimens from newly explored regions. Banks traveled to **Newfoundland** and **Labrador** before joining **Captain James Cook's** first voyage aboard the **Endeavour** (1768–1771). During the expedition, the crew visited places including **Australia**, **New Zealand**, **Tahiti**, and **Brazil**. Throughout the journey, Banks and the expedition artists recorded large numbers of previously unknown plants and animals through detailed drawings and paintings.

During the eighteenth century, exotic plants and natural specimens became highly desirable in Europe, and Banks' collections grew enormously. The expedition produced a remarkable visual record of flora and fauna from around the world. ***Acacia Cunninghamii from the Banks Florilegium*** (10.6.5) is a botanical illustration based on plant specimens collected during Captain James Cook's first voyage to the Pacific (1768–1771). The collection was organized by the English botanist Sir Joseph Banks and artist Sydney Parkinson. The **Banks Florilegium** is a famous series of botanical engravings documenting plants discovered during the expedition, especially from Australia and the South Pacific.was an illustration After returning to England, Banks hired several artists to complete and refine the expedition drawings. He also employed engravers to create copper printing plates so the scientific illustrations could be mass-produced and shared throughout Europe. These publications greatly expanded European scientific knowledge of the natural world.

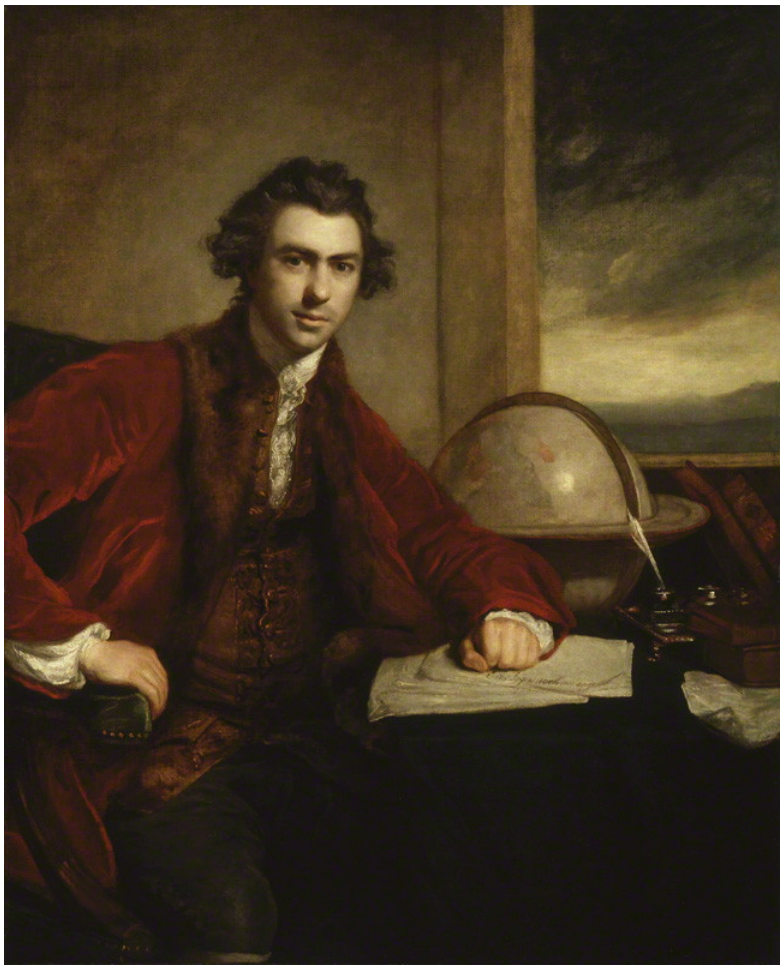


Figure \(\PageIndex{4}\): *Joseph Banks* (Public Domain)

Figure \(\PageIndex{5}\): *Acacia Cunninghamii from Banks Florilegium* (Public Domain)

Sir Joseph Banks strongly supported British exploration and colonization in **Australia** and played an important role in introducing plants such as the **eucalyptus** and **acacia** trees to Europe and other parts of the world. He was a close friend of the scientist **Carl**

Linnaeus, the creator of the modern system of biological classification known as **Linnaean taxonomy**. Banks later became an advisor to **King George III**, encouraging and supporting scientific expeditions and voyages of discovery. Through his travels and research, Banks documented thousands of plants, birds, and other forms of wildlife, greatly expanding European knowledge of the natural world. The enormous collection of botanical drawings created from Banks' expeditions was eventually published in 1990 in a monumental set of thirty-five volumes. These illustrations remain an important scientific and artistic record of eighteenth-century exploration and discovery.

Sydney Parkinson

Sydney Parkinson (1745–1771) was a Scottish **Quaker** and talented **botanical illustrator** who traveled with **Sir Joseph Banks** aboard the **HMS Endeavour** during **Captain James Cook's** first voyage. Parkinson created more than 1,000 scientific illustrations while living and working in the cramped conditions of the ship. His small cabin was crowded with plant and animal specimens collected during the expedition. While working in **Tahiti**, Parkinson struggled with swarms of flies that were attracted to his paints and drawings. Despite these difficult conditions, he became the first European artist to systematically collect and illustrate plants from **Australia** and nearby islands.

Parkinson was admired for the accuracy and honesty of his work. Unlike many European artists of the period, he portrayed **Indigenous peoples** realistically rather than idealizing or romanticizing them. Although Parkinson died of **dysentery** during the voyage, Banks preserved and returned his collections and illustrations to England. Among Parkinson's most famous works are illustrations of **Banksia Serrata** (10.6.6), **Banksia Integrifolia** (10.6.7), and **Banksia Dentata** (10.6.8), plants collected at **Botany Bay, Australia**. After sketching the plants, Parkinson added **watercolor** to create vivid and lifelike images that carefully documented the intricate structures of the leaves and flowers with remarkable precision.

Figure \(\PageIndex{6}\): Banksia Serrata (Public Domain)

Figure \(\PageIndex{7}\): Banksia Integrifolia (Public Domain)

Figure \(\PageIndex{8}\): Banksia Dentana (Public Domain)

George Heriot

George Heriot (1759–1839) was a Canadian-born **watercolorist** who exhibited many of his paintings at the **Royal Academy of Arts** in England. He spent much of his life traveling outdoors, carefully observing and painting the Canadian landscape. Heriot developed a distinctive watercolor style that combined long, broad brushstrokes with finely detailed areas. In **Village of Chippawa near the Falls of Niagara** (10.6.9), he depicted the **King's Bridge** in Chippawa, Ontario, using soft light colors and long shadows to create atmosphere and depth. As he traveled throughout Canada, Heriot used **watercolor** to document landscapes, plants, rivers, mountains, and forests. In **Lake St. Charles near Quebec** (10.6.10), he painted an expansive natural scene that includes sky, mountains, water, trees, and vegetation, reflecting his interest in capturing the full environment. Heriot is considered one of the first artists to visually document the Canadian landscape in detail. In addition to his paintings, he also published two books describing and illustrating his travels through Canada.

Figure \(\PageIndex{9}\): *Village of Chippawa Near the Falls of Niagara* (Public Domain)

Figure \(\PageIndex{10}\): *Lake St. Charles near Quebec* (x. 1801, watercolor, pencil, on paper) (Copyright; author via source)

[1] Retrieved from https://www.floridamuseum.ufl.edu/na...lists/audubon/

10.7: Textiles (Ongoing)

All cultures have used textiles for over 5,000 years or more, not only as a necessity but also as a decorative art form. Some textiles have been prized and traded for centuries as the silk from China by the Silk Road. During the 18th Century, explorers, traders, and settlers collected and traded textiles from different parts of the world, encouraging the growth of the raw materials in the expanded lands. The raw material was harvested from animals, plants, and even insects, then cleaned, sorted, spun, and woven to create a fabric with elaborate or straightforward designs.

The industrial revolution eventually changed the way fabric was processed, and machines took over for the hand labor, producing thousands of meters of fabric in the time it would take one weaver to create a meter. Sewing machines emerged during the 19th century and spawned a new production line of textile manufacturers. However, in most of the world, in homes and by artists, textiles are still made traditionally by hand on small looms. Almost every culture has unique and specific methods and outcomes for creating fabric based on natural materials available and historical traditions and definitions. Weaving is the art of textile production when two yarns are woven at a right angle to each other, producing some type of fabric or cloth. The warp is the yarn attached to the loom, and the weft is the yarn woven through the alternating warp yarns to create a pattern.

Scotland

Country	Fiber	Origin	Type
Scotland	Wool	Sheep	Tartans

Scotland is known for its green grassy lands with roaming sheep (10.36) grazing. It is also known to be bitter cold and their solution was to weave a heavy tartan wool cloth for clothing and blankets. The plentiful sheep provided the wool (10.37) for spinning (10.38) and dyeing it multiple colors. Tartans were woven from six to eight colors forming a unique plaid pattern (10.39) created by local weavers who designed the special patterns for a family or small town. These distinct designs are traditionally passed down for centuries.

10.36 Sheep

10.37 Before and after cleaning

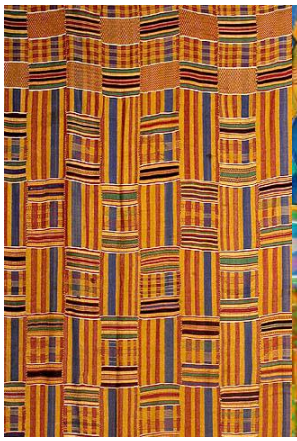
10.38 Combing and spinning

10.39 Tartan

Ghana

Country	Fiber	Origin	Type
Ghana	Cotton	Plant	Kente

Ghana is located on the west coast of Africa, almost on the equator, a climate suitable to grow cotton, the material used in kente cloth. Using strip hand looms the brightly colored strips (10.40) of cotton are woven into patterns of geometric designs. Each design has a story the weaver artistically designs into the pattern and every color has a meaning that is part of the design and story of the fabric. Originally the patterned fabric was reserved for royalty, today kente cloth (10.41) is the traditional garment of Ghana.



10.40 Kente cloth

10.41 Kente cloth variations

Mali

Country	Fiber	Origin	Type
Mali	Cotton	Plant	Bogolan

Bogolan is Malian cotton fabric dyed with mud. The cotton is woven in narrow strips (10.42), sewn together and dyed in a bath of mashed leaves to turn it yellow. When it is dry, the artist has to visualize the pattern and fill it in with mud around the planned images or concepts, pressing the mud into the cloth to totally penetrate the fabric (10.43). Sometimes multiple coats of mud are used to achieve the proper color and look before the material is stored in jars to ferment for a year. They create elaborate patterns (10.44) that have been designed over the years, originally used in rituals or as status, today as traditional fabric for clothing.

10.42 Weaving cotton

10.43 Cloth drying

10.44 Bogolan cloth

China

Country	Fiber	Origin	Type
China	Silk	Worm	Silk

Silk weaving in China is a centuries old process and has been an economic staple of China and a desired fabric for trade along the Silk Road. Silk is derived from worms that feast on mulberry leaves and then spin a silk cocoon (10.45). The silk cocoon is boiled (10.46) to kill the worm and the cocoon unwound into thin strands. The strand is combined with other threads of silk (10.47) to make it stronger and are ready to be dyed in any color. Once the silk is dyed, it is woven into elegant fabric. Silk has a shimmer to the surface of the cloth because the structure of the fiber is a triangular prism that catches the reflecting light, causing a shimmer (10.48). Silk weaving is one of China's greatest inventions and has been around for over 4,000 years.

10.45 Worm and cocoon

10.46 Boiling silk

10.47 Silk thread

10.48 Silk fabric

Japan

Country	Fiber	Origin	Type
Japan	Cotton	Plant	Kasuri

Kasuri (10.49) is a Japanese fabric dyed with specific patterns, usually geometric in design. The formal name for the pattern is ikat, a technique to make the pattern look blurred and is achieved during the weaving process. The pattern may only be dyed on the weft threads and when the other thread is added during the weaving process, it creates the blurred pattern (10.50). Kasuri is a traditional folk-art process starting in the middle of the 18th century and refined over the last century. Although the technique did not originate in Japan, it became a popular and traditional fabric (10.51).

10.49 Kasuri

10.50 Kasuri pattern

10.51 Weaving Kasuri

New Guinea

Country	Fiber	Origin	Type
New Guinea	Tapa	Tree	Tapa

New Guinea, a large island located in the South Pacific, is the second-largest island after Greenland. Indigenous people have lived in the area for more than 40,000 years and some traditions, including making tapa cloth, continue today. Tapa cloth is a unique New

Guinea product made from bark (10.52). The bark is removed from the mulberry tree, and the outer bark is stripped off leaving a white sheet (10.53) that is soaked in water and dried in the sun. The bark is beaten with wooden mallets called “ike” (10.54) until it is thin and then several layers are combined and beaten again into a large sheet. The final step in the process is to paint the large sheets with island designs. (10.55).

10.52 Stripping bark

10.53 Beating bark

10.54 Rubbing patterns

10.55 Tapa cloth

Peru

Country	Fiber	Origin	Type
Peru	Wool	Alpaca	Ponchos

High up in the Andes Mountains, the Peruvian people domesticated the alpaca (10.56) and used the wool to weave their outstanding blankets, ponchos, and hats. The wool is collected, carded and spun into yarn for weaving. Alpaca fleece is a silky, long and lustrous fiber and when woven, can be flame-resistant. Weaving is not about just the final utilitarian product but is deeply ingrained in the culture and society of the people. They use rich colors to dye the wool and weave with the bold colors to create brightly colored clothing. The Aguayo (10.57) is the most common item of clothing, a long rectangular cloth used to carry any item or a small child on their back.

10.56 Llamas

10.57 Aguayo

United States

Country	Fiber	Origin	Type
United States	Wool	Sheep	Blankets

The Navajo people have occupied the Southwestern United States for thousands of years creating their own style of weaving designs. They raise dibe (sheep) in the arid land (10.58) and harvest their wool as well as growing cotton. The Navajo use an upright loom (10.59) to weave the fibers from cotton and wool. The textiles have strong geometric designs and the complex designs (10.60) were usually created in the maker's head as she let her strings and spirit guide the design. Originally, the blankets and rugs were utilitarian and could be found in most Navajo homes or were traded with nearby tribes, today they are highly regarded and bring a high price at market.

10.58 Dibe (sheep)

10.59 Weaving rugs

10.60 Navajo pattern

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10.8: Conclusion

The New World Grows was a period marked by exploration, immigration, and cultural change. As people traveled to unfamiliar lands, they created new societies while often disrupting and destroying the natural environments and cultures of **Indigenous peoples**. Immigrants brought their artistic styles, materials, and techniques from Europe, adapting traditional methods to fit the conditions and experiences of the New World. Painting during this period frequently focused on **portraiture**, especially images of families or important individuals. **English portraiture** remained formal and carefully structured, while **American portraiture** gradually developed a more informal and natural style that reflected colonial life and the values of the new republic. At the same time, both English and American artists used painting to document important historical events and battles.

Examples of portraiture from this era include **Family Portrait** by **Angelica Kauffman**, which reflects the formal elegance of English portrait traditions; **A Boy with a Flying Squirrel** by **John Singleton Copley**, which demonstrates the realism and individuality of American portraiture; and **Edward and Sarah Rutter** by **Joshua Johnson**, an example of American **folk art** portraiture. Historical and narrative scenes also became important subjects. **The Death of Major Pierson** by **John Singleton Copley** represents the dramatic style of English battle painting. **The Treaty of Penn with the Indians** by **Benjamin West** documents an early American historical event involving diplomacy between settlers and Indigenous peoples. **The Declaration of Independence** by **John Trumbull** became one of the most iconic images celebrating the founding of the United States and the ideals of the new nation. European artists documented history by painting battles. American artists also documented the beginnings of their new country.

Portraits

English Portraiture	American Portraiture	American Folk Art
Family Portrait By Angelica Kauffmann	*A Boy With A Flying Squirrel* By John Singleton Copley	*Edward and Sarah Rutter* By Joshua Johnson

Scenes

English battle scene	Early American scene	American scene
The Death of Major Peirson by John Singleton Copley	*The Treaty of Penn with the Indians* by Benjamin West	*Declaration of Independence* by John Trumbull

CHAPTER OVERVIEW

11: The Industrial Revolution (1800 CE – 1899 CE)

The 19th century was a time of transformation around the world and the concepts and principles of art were revolutionized as part of the broad changes in the art world. Instead of lasting several decades or centuries, art movements changed every 10-20 years as artists experimented with technology and the innovative ideas. The industrial revolution brought prosperity, an emerging middle class, and people with time on their hands to enjoy life. Transportation gave the general population and artists the ability to travel to other countries, exposure to other cultures, to study and learn new art methods. Art around the world changed and became incorporated into everyday life, no longer controlled by royalty, government, or religion.

11.1: Overview
11.2: Romanticism (1780-1850)
11.3: Realism (1848 – 1870)
11.4: Hudson River School (1850s – 1880)
11.5: Shanghai School of Art (Late 19th Century)
11.6: Edo Period (1615 – 1868)
11.7: Impressionism (1860 – 1890)
11.8: Post-Impressionism (1885 – 1905)
11.9: Art Nouveau (1890 – 1914)
11.10: Photography (Since 1826)
11.11: Conclusion

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11.1: Overview

11.1 Overview

The **19th century** was a period of transformation around the world, reshaping the concepts, purposes, and principles of art. Instead of lasting for several decades or centuries, art movements began to change every **10 to 20 years** as artists experimented with new technologies, materials, and ideas. The **Industrial Revolution** brought prosperity, an emerging middle class, and more leisure time, allowing more people to travel, study, visit exhibitions, and enjoy art. Art was no longer controlled only by royalty, government, or religion; it became increasingly connected to everyday life.

New technologies changed traditional artistic practices. The invention of **portable paint tubes** allowed artists to paint outdoors, or **en plein air**, capturing natural light directly on the canvas instead of relying only on sketches completed later in the studio. Both the **Impressionists** and **Hudson River School** artists used direct observation of nature and light. **Georges Seurat** developed **Pointillism**, applying small dots of color that visually blended together to form an image. The invention of the **camera** also profoundly changed art by allowing images to be recorded quickly and accurately, encouraging artists to rethink the purpose of painting.

This period also created new opportunities for **women artists**. In France, the women known as **Les Trois Grandes Dames of Impressionism** helped open doors for future generations by exhibiting their work and competing alongside leading male artists. In the United States, women used art exhibitions to support the **women's suffrage movement**, although these efforts sometimes faced public resistance. At the same time, increased global exchange introduced European artists to Japanese art, helping inspire the style known as **Japonisme**.

The **Industrial Revolution** transformed art through new inventions, increased travel, cultural exchange, and shifting social structures. Advances in technology changed the materials and methods artists used, while improved transportation allowed artists to visit new places, encounter different cultures, and study diverse artistic traditions. As industrialization expanded the middle class, more people gained access to art, exhibitions, and education, moving art beyond the exclusive control of royalty, religion, and government institutions. Artists around the world experimented with innovative styles, built upon earlier movements, and embraced modern technology to expand both the possibilities of artistic expression and the role of art in everyday life.

11.2: Romanticism (1780-1850)

Definition: Term

- **Romanticism** – A 19th-century art and literary movement that emphasized emotion, imagination, nature, and individual expression over reason and order.
- **Neoclassical** – An art movement inspired by the ideals and styles of ancient Greece and Rome, focusing on reason, balance, and harmony.
- **Emotion** – Strong feelings such as joy, fear, sorrow, or excitement expressed in art and human experience.
- **Imagination** – The ability to create ideas, images, or concepts beyond ordinary reality.
- **Individual Experience** – Personal thoughts, feelings, and perspectives unique to each person.
- **Passion** – Intense enthusiasm or deep emotional feeling.
- **Intuition** – Understanding or feeling something instinctively without logical reasoning.
- **Industrial Revolution** – A period of rapid industrial and technological growth during the 18th and 19th centuries that changed society, transportation, manufacturing, and daily life.
- **Liberalism** – A political and social philosophy supporting individual freedoms, equality, and political reform.
- **Nationalism** – Strong pride and loyalty toward one's nation or cultural identity.
- **Nature** – The natural world, including landscapes, mountains, forests, oceans, and weather, often celebrated in Romantic art.
- **Heroism** – Courageous or noble actions often associated with bravery and sacrifice.
- **Spirituality** – A focus on inner beliefs, emotions, or connections beyond the physical world.
- **Sublime** – A feeling of awe, wonder, or overwhelming power often inspired by nature or dramatic experiences.
- **Pyramidal composition** – A method of arranging figures or objects in a triangular or pyramid shape within a work of art to create balance, stability, and guide the viewer's eye through the composition.
- **Monomania** – A 19th-century psychological theory suggesting a person could suffer from one specific obsession or mental disorder while appearing otherwise rational.

Romanticism emerged as a rebellion against the strict logic and order of the Neoclassical period, ushering in an age that emphasized emotion, imagination, and individual experience over reason and restraint. Rather than focusing on rationality and balanced compositions, Romantic artists celebrated passion, intuition, drama, and the power of human feeling. The movement also developed as a response to the **Industrial Revolution** and the rapid social changes brought by liberalism and nationalism. Artists rejected rigid social conventions and instead explored the emotional intensity of nature, heroism, spirituality, tragedy, and the sublime. Romanticism focused on creating powerful visual experiences that stirred the viewer's emotions and emphasized the beauty, mystery, and unpredictability of life.

Francisco Goya

The primary characteristics of **Romanticism** included the free expression of the artist, the idea of the artistic **genius**, and the importance of the painter's personal voice and emotional vision. Artists rejected strict academic rules and instead focused on imagination, emotion, individuality, and dramatic subject matter. The **French Revolution** also inspired major social and political changes that influenced artists to explore themes of freedom, heroism, suffering, and nationalism. Romanticism flourished throughout the late 18th and early 19th centuries until the mid-1800s.

One of the earliest and most influential painters associated with this transition was Francisco Goya. Although Goya did not fit neatly into either **Neoclassicism** or **Romanticism**, his emotionally powerful and often dark works helped bridge the gap between the two movements and ushered in a new era of artistic expression. Goya "has been referred to as the last of the Old Masters and the first of the moderns."[1] Goya's father was a master gilder, and his mother was from an aristocratic family. Goya formally studied art from the age of 14 and eventually became a court painter to the Spanish king.

Women known as **majas** dressed in extravagant and fashionable traditional clothing popular in Spain during the late 18th and early 19th centuries. Francisco Goya painted *Majas on a Balcony* (11.2.1), depicting two women seated on a balcony as they might appear to someone passing below on the street. Behind them, two men dressed in dark clothing are partially hidden in the shadows, creating a mysterious and somewhat unsettling atmosphere. The women wear elegant gowns richly embroidered with gold lace, emphasizing their wealth and social status. One woman's light blue dress shimmers with the appearance of luxurious silk, while both women wear delicate lace headdresses. Leaning toward one another, they appear engaged in quiet conversation as they

observe the activity below them. Goya combined beauty, fashion, and subtle tension in the painting, creating a scene that reflects both everyday life and the dramatic emotional qualities associated with Romanticism.

Figure \(\PageIndex{1}\): *Majas on a Balcony* (1800-1810, oil on canvas, 194.9 x 125.7 cm) (Public Domain)

Painting in the court of the Spanish Crown, Francisco Goya was also an artist of **social commentary** and protest, as represented in his paintings *The Nude Maja* (11.2.2) and *The Clothed Maja* (11.2.3). The two paintings are nearly identical images of the same woman, presented in two different ways. In both works, the **Maja** reclines on the same green velvet couch with identical pillows placed behind her; however, in one image she is nude, while in the other she is fully clothed.

The Nude Maja is considered one of the first fully realistic female nudes in **Western art** because it was not based on an idealized **mythological** figure. Instead, Goya portrayed a real woman with natural physical features, including visible **pubic hair**, something rarely shown in earlier Western painting. The Maja's direct gaze toward the viewer is bold and unsettling, challenging traditional expectations of modesty and passive femininity.

In *The Clothed Maja*, the figure appears more confident and commanding. Her dressed body fills the picture space more completely, pressing against the edges of the **frame** and creating a stronger sense of presence. The luxurious clothing, combined with her relaxed posture and direct expression, makes her appear self-assured and sensuous. Together, the two paintings challenged social conventions and demonstrated Goya's willingness to explore **realism**, identity, and the changing role of women in art.

Figure \(\PageIndex{2}\): *The Nude Maja* (Public Domain)

Figure \(\PageIndex{3}\): *The Clothed Maja* (Public Domain)

Although Francisco Goya helped set the stage for **Romanticism**, Théodore Géricault became one of the movement's earliest pioneers. Born in Rouen, Géricault later moved to Paris to study art and develop his dramatic painting style. His masterpiece, *The Raft of the Medusa* (11.2.4), depicts the terrifying moment of rescue after survivors drifted at sea for more than thirteen days following a shipwreck. Because it was his first major work, Géricault selected a recent historical tragedy, knowing the emotional subject matter would attract public attention and strengthen his artistic reputation.

The painting portrays the suffering, death, and desperate hope of the people stranded on the raft. The larger-than-life figures are arranged in a dramatic **pyramidal composition**, (11.2.5) guiding the viewer's eye upward across the canvas. Two triangular groupings emphasize the emotional tension between humanity and the overwhelming power of the sea. Some figures are already dead or dying, while others desperately signal toward a distant rescue ship. The scene captures themes central to Romanticism, including intense emotion, human struggle, tragedy, and survival.

The historical event itself shocked the French public. When the ship sank, wealthy and high-ranking passengers were placed in lifeboats, while approximately 150 people were abandoned on a makeshift raft built by the ship's carpenter. By the time rescuers arrived, only fifteen people remained, and just ten were still alive. Géricault transformed this contemporary disaster into a monumental history painting unlike anything seen before, combining realism, political criticism, and emotional intensity on a grand scale.

Figure \(\PageIndex{4}\): *The Raft of the Medusa* (1818-1819, oil on canvas, 490 x 716 cm) (Public Domain)

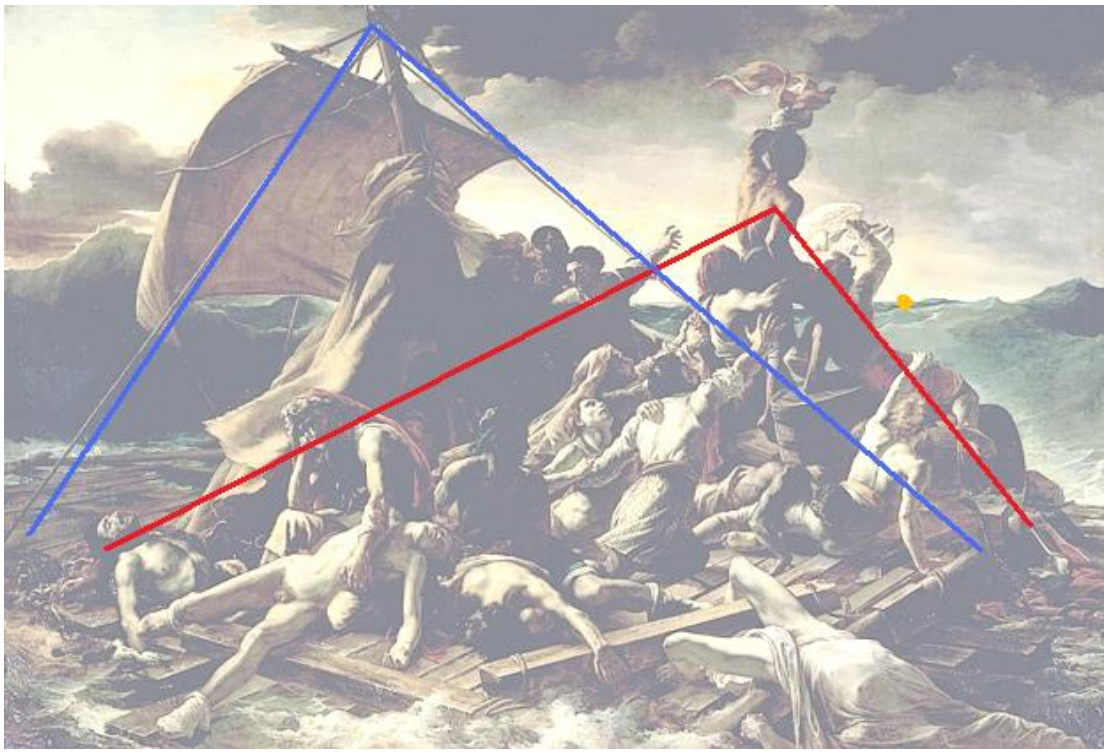


Figure \(\PageIndex{5}\): *The Raft of the Museum* structure (Public Domain)

Gericault, Raft of the Medusa

Théodore Géricault, Raft of the Medusa, 1818-19, oil on canvas, 4.91 x 7.16 m (Musée du Louvre, Paris)

Théodore Géricault died at the young age of thirty-two, yet he left behind some of the most powerful works of the **Romantic** period. Among his most significant achievements are his portraits of the **insane**, a series of paintings exploring mental illness and human psychology. Although Géricault originally painted ten portraits, only five survive today, and historians still do not know who commissioned them. During this period, the theory of **monomania** was widely accepted. People believed that mental illness could be identified through a person's physical appearance and facial features. In these portraits, Géricault painted individuals believed to suffer from different forms of mental disorders. Both paintings (11.2.6) and (11.2.7) are nearly life-size and shown in three-quarter profile, with each figure appearing isolated and deeply lost in thought.

The dark backgrounds and shadowed figures create an atmosphere of emotional heaviness and psychological tension. Historians believe Géricault completed each portrait in a single sitting because of the loose and energetic **brushwork**, which differs from the more controlled style seen in his larger historical paintings. In some areas, the paint is thin and almost transparent, while in others it is heavily layered with thick applications of paint. Although the subjects appear troubled and emotionally distressed, Géricault presented them with dignity and humanity rather than as simple medical curiosities.

Figure \(\PageIndex{6}\): *Portrait of a Woman Suffering from Obsessive Envy* (1819-1820, oil on canvas, 72 x 58 cm) (Public Domain)

Figure \(\PageIndex{7}\): *Portrait of a Kleptomaniac* (c. 1820, oil on canvas, 61.2 x 50.2 cm) (Public Domain)

Eugène Delacroix was considered the leader of the French **Romantic** Art School and became one of the most influential painters of the 19th century. Born in Paris into a privileged family, Delacroix embraced the emotional intensity and dramatic subjects associated with Romanticism, although he did not seek to completely overturn traditional French painting styles. He once wrote, "Glory is not a vain word for me," revealing his strong desire for artistic recognition and success. Delacroix transformed the traditional **Neoclassical** emphasis on precise line and order by developing a more emotional and painterly style focused on expressive **color** and movement. His most famous painting, *Liberty Leading the People* (11.2.8), commemorates the **July Revolution of 1830**, which overthrew King Charles X and established a new government in France.

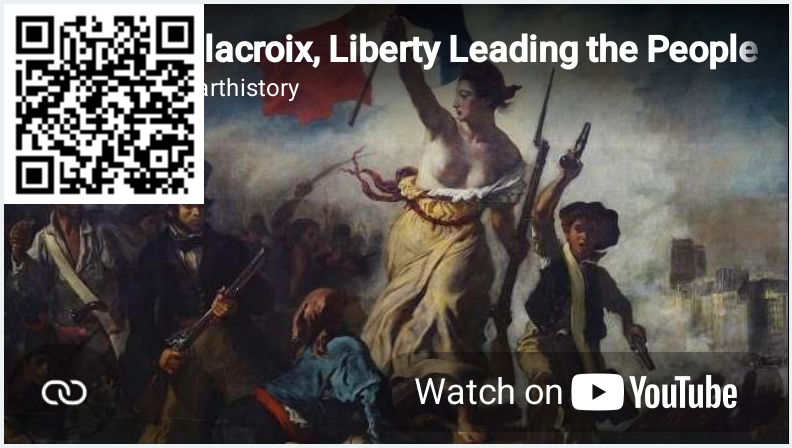
In the painting, **Lady Liberty** appears as an allegorical figure leading the people forward across a barricade while carrying the French **tricolor flag**. The flag's blue, white, and red colors symbolize **liberty**, **equality**, and **fraternity**, the ideals of the French Revolution. Delacroix used these colors strategically throughout the composition to direct the viewer's attention upward from the crowd to Liberty and the waving flag. The painting combines realism with symbolism, capturing the chaos, violence, and emotional power of revolution. Although Delacroix lived near the fighting, he did not actively participate in the revolution itself. Instead, he documented the spirit and energy of the uprising through art, creating one of the defining images of Romanticism and political

freedom. Afterward, he wrote, "I have undertaken a modern subject, a barricade, and although I may not have fought for my country, at least I shall have painted for her."[3]

Figure \(\PageIndex{8}\): *Liberty Leading the People* (1830, oil on canvas, 260 x 325 cm) (Public Domain)

Delacroix, Liberty Leading the People

Eugène Delacroix, Liberty Leading the People (July 28, 1830), September - December 1830, oil on canvas, 260 x 325 cm (Musée du Louvre, Paris)

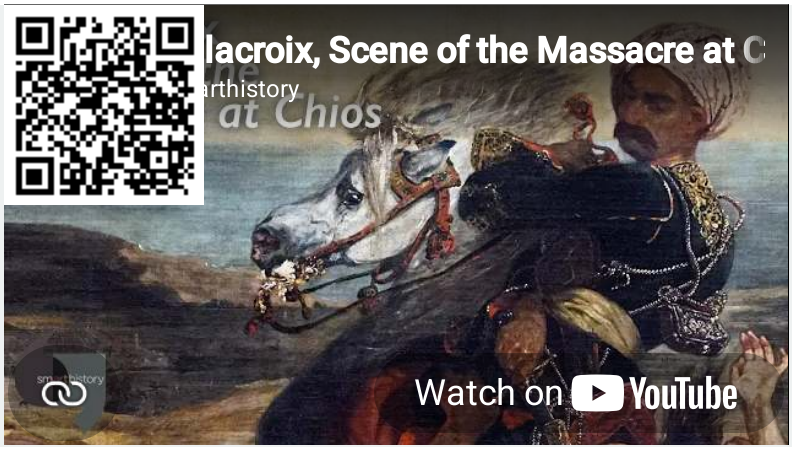


In *The Massacre at Chios* (11.2.9), Eugène Delacroix portrayed one of the tragic events of the Greek struggle for independence against the **Ottoman Empire**. Like many paintings of the **Romantic** period, the work focused on violence, suffering, and intense human emotion rather than heroic victory. Ottoman forces rounded up Greek civilians, many of whom were killed or sold into slavery, and Delacroix emphasized the despair and sorrow experienced by innocent people caught in the conflict. Unlike traditional historical paintings that celebrated triumph and glory, *The Massacre at Chios* presents scenes of exhaustion, grief, and helplessness. The emotional impact of the painting is intensified by Delacroix's use of brilliant blue tones contrasted with dark shadows and suffering figures. One especially disturbing image shows a baby clinging to its dead mother, a detail that shocked many viewers and was criticized as inappropriate and too emotionally painful for public display. Delacroix used expressive **color**, dramatic lighting, and deep shadows to heighten the sense of agony and tragedy. The painting became an important example of Romanticism because it focused on human suffering, emotional intensity, and contemporary political events instead of idealized heroism.

Figure \(\PageIndex{9}\): *The Massacre at Chios* (1824 oil on canvas, 419 x 354 cm) (Public Domain)

Delacroix, Scene of the Massacre at Chios

Eugène Delacroix, Scene of the Massacre at Chios; Greek Families Awaiting Death or Slavery, 1824, oil on canvas, 419 cm × 354 cm (Musée du Louvre, Paris)



[1] Retrieved from https://www.frick.org/sites/default/...exhibition.htm

[2] Barthélémy Jobert, *Delacroix* (Princeton: Princeton UP, 1997), 83.

[3] Ibid., 130.

11.3: Realism (1848 – 1870)

Definition: Term

- **Romanticism** – An art movement emphasizing emotion, imagination, drama, and individual expression.
- **Realism** – A 19th-century art movement focused on depicting everyday life and ordinary people accurately and truthfully.
- **Photographic precision** – A style of painting that captures subjects with highly realistic detail and accuracy.
- **Middle class** – A social group between the wealthy upper class and working class, often benefiting from industrial and economic growth.
- **Industrialization** – The growth of industry and machine production that transformed society, labor, and cities during the Industrial Revolution.
- **Urbanization** – The expansion and development of cities as more people moved into urban areas.
- **Boulevards** – Wide city streets often lined with trees, shops, cafés, and public spaces.
- **Modernization** – The process of transforming society through new technology, infrastructure, and social change.
- **Contemporary society** – The social conditions, lifestyles, and events occurring during a particular time period.
- **Everyday life** – Ordinary daily activities and experiences of common people.

While **Romanticism** dominated the first half of the 19th century, **Realism** became the major artistic movement of the second half. As its name suggests, Realism focused on portraying life as it truly appeared, emphasizing ordinary people, everyday activities, and accurate detail instead of dramatic emotion or idealized subjects. Artists sought to paint scenes with almost photographic precision, often depicting peasants, laborers, and working-class life as worthy subjects for serious art. During this period, Paris underwent dramatic modernization. The old medieval city of crowded streets and narrow alleyways was transformed into a modern urban center with wide boulevards, public parks, and new residential buildings designed for different social classes. An expanding **middle class** benefited from increased wealth and leisure time brought by industrialization. People now spent time strolling along the boulevards, shopping, dining, and socializing, reflecting the changing lifestyle and social structure of 19th-century society. Realist artists responded to these social changes by painting modern life and contemporary society rather than mythological, religious, or heroic subjects. Their works documented the realities of urban growth, industrial labor, poverty, and everyday experiences, making art more connected to ordinary people and modern life.

Gustave Courbet

The father of Realism was **Gustave Courbet** (1819-1877), a French artist who lived in Paris during a time of significant change. Courbet was a self-proclaimed "proudest and most arrogant man in France."[1] *Le Sommeil (The Sleepers)* (11.3.1) by Gustave Courbet was one of the most controversial paintings of the **Realist** period. The painting depicts two women resting together on a bed surrounded by richly painted fabrics and textiles. Courbet used subtle tones and soft lighting to emphasize the natural curves and forms of the women's bodies. One woman has long dark hair, while the other has bright red curly hair, creating visual contrast within the composition.

The painting challenged many social conventions of the 19th century because of its intimate portrayal of a same-sex relationship. Rather than idealizing the figures through mythology or fantasy, Courbet presented them realistically and humanely, consistent with the goals of **Realism**. After the painting was exhibited, other artists began exploring similar themes, and the repeated depiction of lesbian relationships in art gradually helped reduce some of the social taboos surrounding homosexuality in Parisian society. Courbet's work reflected the broader Realist interest in portraying modern life and subjects that traditional academic art often avoided.

Figure \(\PageIndex{1}\): *Le Sommeil* (*The Sleepers*) (1866, oil on canvas, 158 x 224 cm) (Public Domain)

In *The Stonebreakers* (11.3.2), Gustave Courbet portrayed the harsh realities of rural poverty during the 19th century. The two laborers are shown performing exhausting physical work, breaking stones along the roadside. Their poverty is visible in their torn and dirty clothing, worn-out shoes, and tired postures. Rather than idealizing the workers, Courbet painted them realistically, emphasizing the difficult conditions faced by the working class in France. Courbet reinforced the emotional tone of the painting through rough **brushwork** that reflects the texture of the stones and rugged landscape. The muted palette of browns, grays, and earth tones creates a bleak atmosphere with no indication of comfort, leisure, or hope. The scene appears ordinary and unromantic, consistent with the goals of **Realism**, which focused on depicting everyday life truthfully.

According to Courbet, he encountered the workers while traveling on the road and was inspired to paint their labor and poverty directly from observation. The painting challenged traditional academic art by elevating common laborers to the large scale normally reserved for heroic or historical subjects. He told his friends, "It is not often that one encounters so complete an expression of poverty, and so, right then and there, I got the idea for a painting."[2]

Figure \(\PageIndex{2}\): *The Stonebreakers* (1849, oil on canvas, 165 x 257 cm) (Public Domain)

Thomas Eakins was an important American **Realist** painter and fine arts educator born in Philadelphia. He studied at the Pennsylvania Academy of the Fine Arts and even attended medical school classes to gain a deeper understanding of **human anatomy**, which became essential to the accuracy and realism of his paintings. Eakins believed artists should carefully study the structure and movement of the human body in order to portray figures truthfully. When Eakins traveled to Paris to continue his artistic education, he became influenced by European approaches to figure painting and helped shift American art away from its earlier emphasis on landscape painting toward the realistic portrayal of human figures. After returning to Philadelphia, he taught art and introduced more rigorous methods of anatomical study into the classroom.

However, Eakins's teaching methods created controversy in **Victorian** Philadelphia because he believed students should study and paint from nude models. At the time, many people considered nude study inappropriate and immoral, especially in mixed-gender classrooms. Although his methods were criticized, Eakins's dedication to realism and anatomical accuracy greatly influenced American art education and modern figure painting. "In January 1886, lecturing about the pelvis to a class that included female students, Eakins removed a loincloth from a male model so that he could trace the course of a muscle. Angry protests by parents and students forced him to resign at the request of the Academy board."[3] After Eakins returned to Philadelphia, he started painting sports images, a genre he is identified with. The *Champion Single Sculls* (11.3.3) was Eakins' first of the sports series. Eakins was an avid rower and wanted to commemorate the victory of the critical race. The fatigue is visible in the rower's body as he slumps over the oars. The deep shadows in the water indicate the day is late, as the water darkens, and the Realism of Eakins' style is seen in the painting.

Figure \(\PageIndex{3}\): *The Champion Singles Sculls (Max Schmitt in a Single Scull)* (1871, oil on canvas, 81.9 x 117.5 cm) (Public Domain)

In *Swimming Hole* (11.3.4), Thomas Eakins created an American **genre painting** depicting a group of nude young men swimming and relaxing beside a small lake. The setting appears natural and ordinary, suggesting it could represent a quiet outdoor scene anywhere in the United States. Through this work, Eakins challenged the restrictive attitudes of **Victorian** society toward nudity and the human body. The painting demonstrates Eakins's deep understanding of **human anatomy** and movement. He carefully rendered six complex male figures, each posed differently to suggest natural motion and physical realism. The human body was considered difficult to portray accurately, yet Eakins painted the figures with remarkable precision and balance. The **male nude**, which had largely disappeared from Western art after the **Renaissance**, reemerged in Eakins's work as a subject worthy of serious artistic study. Inspired by the ideals of **classical Greek art**, Eakins sought to portray the young men as symbols of beauty, strength, harmony, and athleticism. Most of the figures are shown in profile or from the back, directing attention to the forms and structure of the body rather than to individual identity or expression.

Figure \(\PageIndex{4}\): *Swimming Hole* (Public Domain)

Rosa Bonheur

Rosa Bonheur was one of the most celebrated female painters of the 19th century and became especially known for her highly realistic paintings of animals. While Gustave Courbet focused on realistic portrayals of people, Bonheur devoted her career to studying and painting animals with extraordinary accuracy and detail. She grew up alongside her father, who was also an artist, and demonstrated artistic talent at a young age. At the age of fourteen, Bonheur began sketching in the Louvre, where she studied classical painting techniques and developed the skills that later influenced works such as *Plowing in the Nivernais* (11.3.5). In the painting, the expansive blue sky occupies nearly half of the composition, while a powerful line of oxen pulls a plow across the countryside. The arrangement of the oxen creates a rhythmic movement across the hill, balancing the composition.

Bonheur's attention to **Realism** is evident in the detailed textures of the freshly turned earth, the muscular bodies of the oxen, and the natural lighting across the landscape. The viewer can almost imagine the smell of the soil and the physical effort required to plow the heavy ground. Soft light falls across the leading pair of oxen as they strain against the weight of the plow. Bonheur painted hundreds of animals throughout her career, often studying them directly in their natural environments, and she became especially famous for her dynamic and lifelike horse paintings.

Figure \(\PageIndex{5}\): *Ploughing in Nevers* (1849, oil on canvas, 134 x 260 cm) (Public Domain)

"At the time, paintings of the human figure were considered the most prestigious genre of artmaking—but women were barred from the life room, where they could paint from observation of live models."[4] Rosa Bonheur preferred painting large animals because they allowed her to demonstrate remarkable detail, movement, and muscular definition. One of her most famous works, *The Horse Fair* (11.3.6), depicts the busy horse market held on the streets of Paris, where traders gathered to buy and sell horses. To study and sketch the animals accurately, Bonheur often dressed as a man because women were not permitted to enter certain public spaces such as horse markets and slaughterhouses.

In *The Horse Fair*, Bonheur captured the energy and movement of the scene as horses strain against their handlers and toss their manes through the crowded street. The large white **Percheron** horses dominate the center of the composition, their powerful muscles flexing as they pull against restraints. Bonheur's careful attention to anatomy and motion reflects her commitment to **Realism** and direct observation. A rearing black horse near the center of the painting creates dramatic balance and movement within the composition, drawing the viewer's eye upward above the surrounding figures. The tree-lined Paris street provides depth and atmosphere, while the dynamic arrangement of horses and handlers gives the painting a sense of motion and excitement. Through her detailed and energetic animal paintings, Bonheur became one of the most respected artists of the 19th century.

Figure \(\PageIndex{6}\): The Horse Fair (Public Domain)

Bonheur, Plowing in the Nivernais

Rosa Bonheur, Plowing in the Nivernais (or The First Dressing), oil on canvas, 1849 (Musée d'Orsay, Paris)

Winslow Homer

Winslow Homer is considered one of the greatest American **landscape painters** and printmakers of the 19th century. Born in Boston, Homer first worked as a **printmaker** before studying oil painting. Throughout his career, he traveled extensively across the United States and Europe, gradually becoming more interested in the struggles and realities of everyday life. Later in life, he became increasingly isolated and deeply fascinated by the beauty, danger, and power of the sea. Homer's later **seascapes** are especially admired for their emotional intensity and realistic portrayal of the ocean's movement. Through energetic **brushwork** and dramatic compositions, he captured the rushing and receding motion of waves and the unpredictable force of nature.

In *Fog Warning* (11.3.7), Homer places the viewer directly inside a small rowboat with a lone fisherman struggling against the sea. The fisherman looks anxiously toward a distant ship he must reach before the fog surrounds him and leaves him lost in the dangerous waters off the coast of Newfoundland. The dark ocean appears cold, empty, and threatening, with waves breaking

around the boat and creating a sense of tension and uncertainty. Homer used dark colors and dramatic lighting to create a brooding and suspenseful atmosphere. The heavy white fish piled inside the boat emphasize the physical burden carried by the fisherman as the front of the boat dips into the rough water. The painting reflects both the beauty and danger of nature while highlighting human vulnerability and determination.

Figure \(\PageIndex{7}\): *The Fog Warning* (1885, oil on canvas, 76.8 x 123.1 cm) (Public Domain)

Homer, The Fog Warning

Winslow Homer, The Fog Warning (Halibut Fishing), 1885, oil on canvas, 30-1/4 x 48-1/2 inches / 76.83 x 123.19 cm (Museum of Fine Arts, Boston)

Edouard Manet

Édouard Manet was a French painter who played a crucial role in the transition from **Realism** to **Impressionism**. Born into a wealthy Parisian family, Manet showed artistic talent at an early age and studied drawing under private tutors. Much of his artistic training came from copying paintings in the Louvre, where he studied the techniques of earlier masters. As Manet developed his

career, he focused on scenes of **modern life**, including cafés, streets, bars, and unconventional social settings. His paintings often challenged traditional expectations of subject matter and style, leading to harsh criticism from many viewers and critics. His most controversial work was *Olympia* (11.3.8), unveiled in 1865 and immediately labeled “shocking” by the public and art critics.

In *Olympia*, a nude woman reclines on a bed covered with luxurious white satin sheets. Although nude figures had long appeared in Western art, viewers were disturbed not simply by her nudity, but by her direct and confrontational gaze. Unlike idealized mythological figures, Olympia appears modern, aware, and unapologetically self-possessed. A servant stands partially hidden in the background holding a bouquet of flowers, likely sent by a suitor, while a black cat arches its back at the foot of the bed, adding tension and symbolism to the scene. The painting recalls Francisco Goya and his *Nude Maja*, yet Olympia’s expression feels even more challenging and confrontational toward the viewer. Critics reacted strongly against the painting, with most condemning it for its realism, modern subject matter, and rejection of traditional ideals of beauty. Today, *Olympia* is considered one of the defining works that helped usher modern art into a new era.

Figure \(\PageIndex{8}\): *Olympia* (Public Domain)

Marie Bashkirtseff

Marie Bashkirtseff was born into a wealthy noble family in Russia, in a region that is now part of Ukraine. From a young age, she displayed exceptional musical talent; however, illness damaged her voice and ended her musical ambitions. Bashkirtseff then turned her attention to art and moved to Paris, where she studied at the **Académie Julian**, one of the few art schools at the time that accepted women students. Despite her short life, Bashkirtseff produced a significant body of artistic work before dying of **tuberculosis** at the age of twenty-five. Tragically, many of her paintings were later destroyed by the Nazis during **World War II**, resulting in the loss of much of her artistic legacy. In addition to painting, Bashkirtseff was also an accomplished writer who kept an extensive personal **journal**documenting her thoughts, ambitions, emotions, and struggles. Aware of her declining health and early mortality, she deeply desired recognition and artistic glory. Through both her writings and artwork, Bashkirtseff expressed her determination to be remembered and to leave a lasting mark on history despite her brief life. Bashkirtseff wrote in her diary every day from when she was fourteen until six days before she died, using 106 notebooks.[2]

In *In the Studio* (11.3.9), Marie Bashkirtseff documented the educational experience of women artists studying at the **Académie Julian** in Paris. During the 19th century, most major art academies excluded women from formal artistic training, especially from studying the nude human figure. The Académie Julian became one of the most important schools for women because it provided opportunities for serious artistic instruction and attracted female students from around the world. The painting shows a crowded studio filled with women actively sketching and painting from a live model. Even so, restrictions still existed; the model is only partially nude and appears to be young, reflecting the limitations placed on women artists at the time. Some students focus on the entire figure, while others study only the upper portion of the body. Bashkirtseff's painting demonstrates remarkable **Realism** through its careful detail, natural lighting, and convincing portrayal of the busy classroom environment. The viewer can almost sense the conversations, movement, and concentration of the artists as they work. The painting not only records an important moment in women's art education but also highlights the growing determination of women artists to gain professional training and recognition in the art world.

Figure \(\PageIndex{9}\): *In the Studio* (1881, oil on canvas, 188 x 154 cm) (Public Domain)

In *The Meeting* (11.3.10), Marie Bashkirtseff portrayed a busy urban scene in which six young boys gather closely together in animated discussion around an object held by the tallest figure. Their worn clothing and rough surroundings suggest they come from a **working-class** background, reinforcing the realistic depiction of everyday city life common in **Realism**. A tall fence dominates much of the background, creating a feeling of confinement and limitation within the environment. Bashkirtseff carefully captured the energy and movement of the boys as they interact, giving the painting a sense of immediacy and realism.

One especially significant detail is the solitary girl standing apart from the group. Art historians often interpret her separation as a symbolic comment on the position of women in 19th-century society. Because Bashkirtseff is frequently associated with early

feminist ideas, the isolated figure may represent how women were excluded or marginalized within male-dominated social spaces. Through both its realistic detail and subtle social commentary, *The Meeting* reflects Bashkirtseff's interest in modern urban life and issues of gender and class.

Figure \(\PageIndex{10}\): *The Meeting* (1884, oil on canvas, 193 x 177 cm) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/essays/gus...rbet-1819-1877

[2] Boime, A. (2008). Art in an Age of Civil Struggle, 1848-1871, Chicago Illinois: University of Chicago Press. p. 158.

[3] Retrieved from https://www.metmuseum.org/essays/tho...-1916-painting

[4] Retrieved from https://www.metmuseum.org/perspectiv...eur-transcript

11.4: Hudson River School (1850s – 1880)

Definition: Term

- **Hudson River School** – A 19th-century American art movement known for dramatic landscape paintings inspired by nature and Romanticism.
- **Romanticism** – An artistic movement emphasizing emotion, imagination, nature, and individual experience.
- **Landscape painting** – Artwork that focuses on natural scenery such as mountains, rivers, forests, and skies.
- **Panoramic** – A wide, sweeping view of a large landscape or scene.
- **Sublime** – A feeling of awe, wonder, or overwhelming power often inspired by nature.
- **Frontier** – Land at the edge of settled areas, often associated with exploration and expansion.
- **Exploration** – The act of traveling through and studying unfamiliar places.
- **Settlement** – The establishment of communities in new territories or regions.
- **Atmospheric effects** – Artistic techniques used to show light, weather, fog, or mood within a landscape.
- **National identity** – A shared sense of culture, history, and pride connected to a nation.
- **Luminism** – A painting technique emphasizing glowing light, calm atmosphere, and smooth, nearly invisible brushstrokes.
- **Manifest Destiny** – The 19th-century belief that the United States was destined to expand across North America.
- **Atmosphere** – The mood or visual feeling created in a work of art through light, color, and weather effects.
- **Reflection** – The mirrored image of objects or light on a surface such as water.
- **Colonization** – The process of settling and controlling land already inhabited by Indigenous peoples.
- **Shoshone** – A Native American people traditionally living in regions of the western United States, including areas near the Rocky Mountains.

The **Hudson River School** became an important American art movement deeply influenced by **Romanticism** and the major political themes of 19th-century America: discovery, exploration, and settlement. Artists associated with the movement painted sweeping landscapes that celebrated the vast and dramatic scenery of the United States, emphasizing how the American wilderness differed from the more cultivated landscapes of Europe. The Hudson River School was the first distinctly American school of painting. Many of the artists lived and worked near the **Hudson River** in New York, often sharing studios, ideas, and artistic inspiration. Their paintings focused on the beauty, power, and spiritual qualities of nature, portraying mountains, rivers, forests, and expansive skies in grand panoramic views. The artists frequently depicted nature as both **sublime** and formidable. Some landscapes emphasized peaceful beauty and harmony, while others portrayed the overwhelming power and mystery of the natural world. Through dramatic lighting, atmospheric effects, and detailed scenery, Hudson River School painters expressed a Romantic fascination with nature as a symbol of national identity, spiritual reflection, and the untamed American frontier.

Thomas Cole

Thomas Cole founded the **Hudson River School**, the first major American art movement centered on landscape painting. Cole lived near the **Hudson River** in New York and became known for wandering through forests, mountains, and river valleys to sketch scenes directly from nature. Deeply influenced by **Romanticism**, he viewed the American wilderness as both spiritually inspiring and symbolically important to the nation's identity. In *The Oxbow* (11.4.1), Cole created a dramatic landscape showing an approaching storm threatening a peaceful, sunlit valley. The painting depicts the curved bend, or **oxbow**, of the Connecticut River and is often interpreted as a contrast between untamed nature and growing civilization. A lone tree anchors the foreground while the viewer's eye moves downward through the hillside, across the winding river valley, and upward toward distant mountains and the turbulent sky. The contrast between dark storm clouds and bright blue skies creates a sense of tension and the **sublime** power of nature.

In *A View of the Two Lakes and Mountain House, Catskill Mountains, Morning* (11.4.2), Cole portrayed the famous Mountain House hotel overlooking the Catskill Mountains. The hotel had become a popular destination for tourists seeking to experience the beauty of the American wilderness. Cole frequently painted scenes from this region and likely stayed at the hotel himself. The painting combines detailed observation of nature with the Romantic idea that landscapes could inspire awe, reflection, and national pride. Cole's images of the Catskills brought more tourists to the mountains, causing Cole to complain and say, "There was much company & as usual in such places few that enjoyed the magnificence that nature spread around them...One party of men was engaged in the intellectual game of ninepins and half a dozen ladies & as many of the other sex were dancing in a long room...What

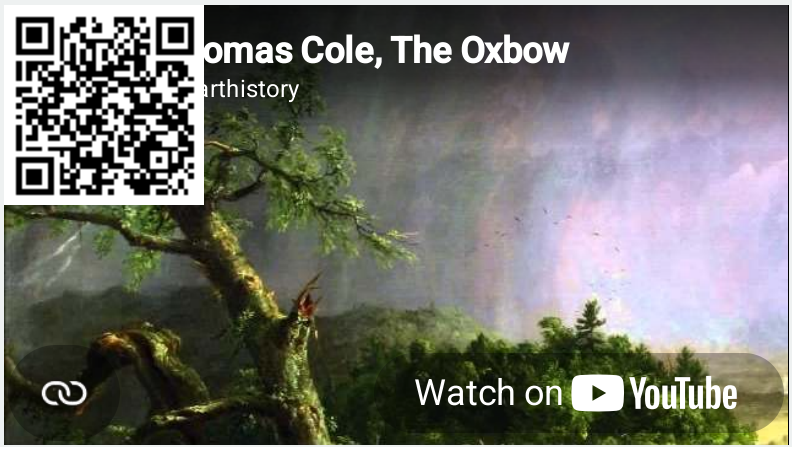
a desecration of the place where nature offers a feast of higher, holier enjoyment! Alas that men should thrust their frivolities into the very face of the sublimest regions of the world."[1]

Figure \(\PageIndex{1}\): *The Oxbow* (1836, oil canvas, 130.8 x 193 cm) (Public Domain)

Figure \(\PageIndex{2}\): *A View of the Two Lakes and Mountain House, Catskill Mountains, Morning* (1844, oil on canvas, 91 x 136.9 cm) (Public Domain)

Thomas Cole, The Oxbow

Thomas Cole, View from Mount Holyoke, Northampton, Massachusetts, after a Thunderstorm—The Oxbow, 1836, oil on canvas, 51 1/2 x 76 inches / 130.8 x 193 cm (The Metropolitan Museum of Art)



Albert Bierstadt

Albert Bierstadt was another important artist associated with the **Hudson River School** who became famous for his dramatic paintings of the American West. Although born in Germany, Bierstadt spent most of his life in the United States and traveled extensively through western territories, creating monumental landscapes that celebrated the beauty and grandeur of the frontier. His painting *Rocky Mountain Landscape* (11.4.3), which hangs in the White House in Washington, D.C., presents a breathtaking vision of the western wilderness. Towering snowcapped mountains rise above clouds and mist, surrounding a peaceful lake where deer

quietly gather. Bierstadt carefully arranged reflections in the water to create a strong sense of depth and expansive space, drawing the viewer into the scene.

The glowing quality of the sky and water reflects the technique known as **luminism**, in which smooth, nearly invisible brushstrokes enhance the effects of light and atmosphere. This technique gives the landscape a radiant and almost spiritual appearance, emphasizing the Romantic idea of the **sublime** power of nature. Bierstadt's paintings also supported the ideology of **Manifest Destiny**, the belief that Americans were divinely destined to expand across the continent. His idealized images of the West were often used to encourage White settlement in western territories. However, this expansion brought displacement, violence, and death to many Indigenous peoples, including the **Shoshone**, who are represented within the painting. Today, Bierstadt's work is viewed both as a celebration of the American landscape and as part of the complex history of westward expansion and colonization.

Figure \(\PageIndex{3}\): *The Rocky Mountains, Lander's Peak* (1863, oil on canvas, 186.7 x 306.7 cm) (Public Domain)

Frederic Church

In *The Massacre at Chios* (11.4.4), Eugène Delacroix portrayed one of the tragic events of the Greek struggle for independence against the **Ottoman Empire**. Like many paintings of the **Romantic** period, the work focused on violence, suffering, and intense human emotion rather than heroic victory. Ottoman forces rounded up Greek civilians, many of whom were killed or sold into slavery, and Delacroix emphasized the despair and sorrow experienced by innocent people caught in the conflict. Unlike traditional historical paintings that celebrated triumph and glory, *The Massacre at Chios* presents scenes of exhaustion, grief, and helplessness. The emotional impact of the painting is intensified by Delacroix's use of brilliant blue tones contrasted with dark shadows and suffering figures. One especially disturbing image shows a baby clinging to its dead mother, a detail that shocked many viewers and was criticized as inappropriate and too emotionally painful for public display. Delacroix used expressive **color**, dramatic lighting, and deep shadows to heighten the sense of agony and tragedy. The painting became an important example of Romanticism because it focused on human suffering, emotional intensity, and contemporary political events instead of idealized heroism.

Figure \(\PageIndex{4}\): *Niagara Falls* (Public Domain)

Julie Beers

Julie Hart Beers became a successful landscape painter despite the many obstacles faced by women artists during the 19th century. Although she did not receive formal artistic training, her brothers were painters, and she likely learned painting techniques through observing and working with them. During this period, women were often excluded from major art schools and professional organizations, limiting their access to training, exhibitions, and potential clients. Women artists also faced social restrictions that made outdoor painting difficult. They were discouraged from working with nude models and were often considered physically unsuited for traveling and painting outdoors. Heavy paint supplies, rugged landscapes, and restrictive clothing such as corsets, bustles, and hoop skirts made sketching trips especially challenging. Some male artists even complained that women could not properly climb rocks or camp in the wilderness.

Despite these barriers, Beers established a successful career as a **landscape painter**, built a strong client base, and mentored other female artists by leading sketching excursions into the mountains. In *Birches by a Woodland Stream* (11.4.5), Beers demonstrated exceptional attention to detail through the careful depiction of peeling birch bark, flowing water, and dense woodland scenery. The trees bend across the stream and partially block the sunlight, creating a shaded and somewhat mysterious atmosphere within the landscape. Her work reflects both the influence of the **Hudson River School** and the growing role of women in American art during the 19th century.

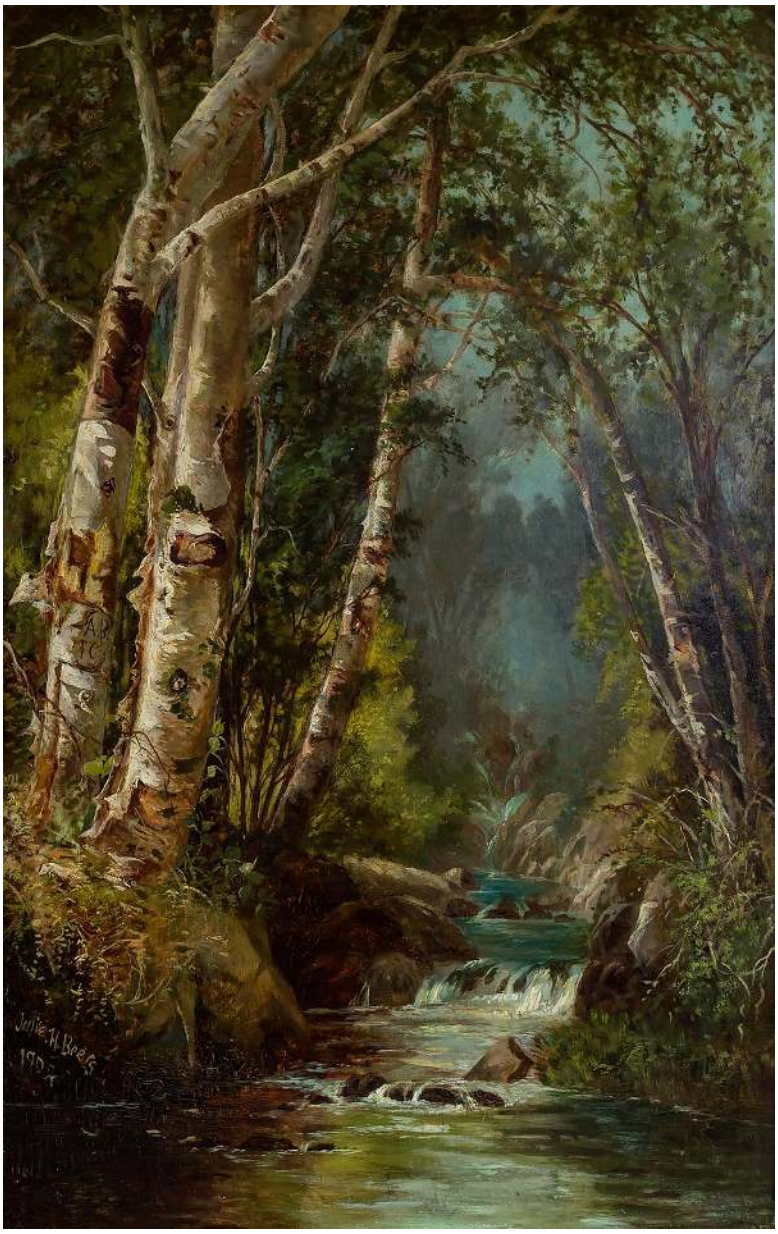


Figure \(\PageIndex{5}\): *Birches by a Woodland Stream* (Public Domain)

Harriet Cany Peale

Harriet Cany Peale was an American artist who married the well-known painter Rembrandt Peale. Although her husband's fame often overshadowed her accomplishments, Harriet Peale developed her own successful artistic career. She first worked as a **portrait painter** before later turning to **landscape painting**, a genre that became increasingly popular in 19th-century America. During the mid-1800s, women activists began challenging restrictive clothing styles, leading to practical changes that improved women's mobility. Shorter skirts, looser chemises, and durable hiking boots made it easier for women artists to travel outdoors and sketch directly from nature, an important aspect of **Hudson River School** landscape painting.

In *Kaaterskill Clove* (11.4.6), Peale painted a dramatic natural setting that was favored by many landscape artists of the period. Large boulders dominate the foreground and anchor the composition, guiding the viewer's eye along a pathway toward distant mountains fading into a misty atmosphere. The gradual transition from the light, hazy sky to the darker shadowed rocks creates depth and mood within the painting. Through careful use of light, atmosphere, and natural detail, Peale captured the Romantic beauty and mystery of the American wilderness.

Figure \(\PageIndex{6}\): *Kaaterskill Clove* (1858, oil on canvas) (Public Domain)

Robert Seldon Duncanson

Robert Seldon Duncanson was an important African American landscape painter associated with the **Hudson River School** tradition. Born in New York, Duncanson was the son of a free Black tradesman descended from Charles, a formerly enslaved person. His family worked as carpenters, and Duncanson learned the trade before turning his attention to art. After moving to Ohio, he encountered artists influenced by the Hudson River School and became inspired to pursue landscape painting. Because of racial discrimination, Duncanson was not allowed to attend the **Cincinnati Academy of Fine Arts**, forcing him to educate himself through observation, practice, and study. He initially earned a living painting portraits and copying printed images before developing a strong interest in landscapes after seeing the work of Thomas Cole and other Hudson River School artists.

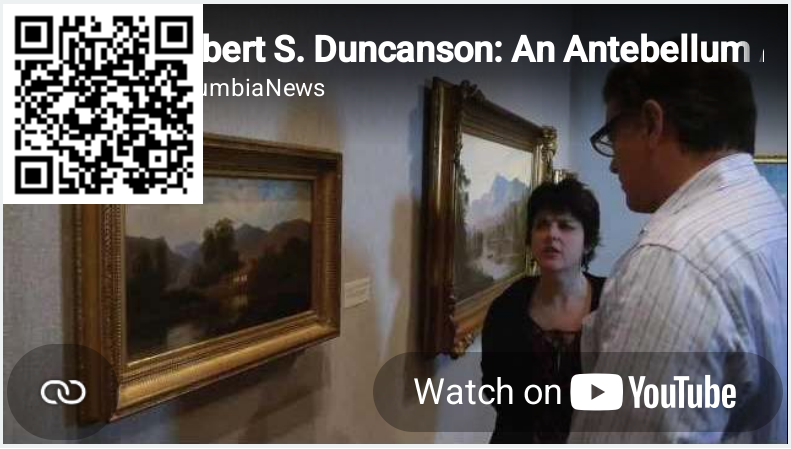
Inspired especially by Cole, Duncanson traveled across the country on sketching tours, gathering ideas and studies that he later transformed into finished paintings in his studio. In *Landscape with Rainbow* (11.4.7), Duncanson portrayed an expansive view of mountains, trees, and rock formations illuminated by warm golden light. He used delicate washes and glowing atmospheric effects to create a luminous sky and rainbow, emphasizing the harmony and beauty of nature. The painting demonstrates influences of **Romanticism** and **luminism**, with its glowing light and peaceful atmosphere contributing to the sense of awe and tranquility.

Contemporary viewers praised the work as one of the most beautiful representations of the western mountain landscape, and today Duncanson is recognized as one of the most significant African American artists of the 19th century.

Figure \(\PageIndex{7}\): *Landscape with a Rainbow* (Public Domain)

Robert S. Duncanson: An Antebellum African American

Learn more about Robert S. Duncanson: An Antebellum African American Artist, on exhibit at the Miriam and Ira D. Wallach Art Gallery



Susie M. Barstow

Susie M. Barstow was a New York artist known for her landscape paintings and adventurous spirit. She studied art at the Rutgers Female Institute in New York and later continued her artistic training in Europe. During the 19th century, women artists had limited opportunities to exhibit their work publicly, yet Barstow successfully taught art and displayed many of her paintings. Barstow deeply loved the outdoors and became a member of the **Appalachian Mountain Club**, hiking extensively throughout the mountains of New York and New England. She reportedly climbed more than one hundred mountain peaks and often joined sketching expeditions with other artists. At a time when women were expected to wear restrictive **Victorian clothing**, including corsets, long skirts, and delicate shoes, Barstow adapted her clothing to better suit outdoor exploration. She designed shorter skirts

worn over trousers and paired them with sturdy boots, even creating hooks to lift and secure her skirt while hiking. These practical changes reflected the goals of the **rational dress movement**, which sought to reform women's restrictive fashion and provide greater freedom of movement.

In *Kaaterskill Creek* (11.4.8), Barstow painted one of the most popular landscape locations for artists associated with the **Hudson River School**. The area's dramatic scenery, flowing water, rocky terrain, and changing light made it an ideal subject for landscape painting. In the foreground, scattered boulders and rocks guide the viewer's eye along the stream, while a single leafless tree balances the distant mountain and adds depth to the composition. Barstow carefully used light to draw attention through the painting, allowing the illuminated sky to flow downward toward the rocks and water below. Her attention to natural detail, atmosphere, and composition demonstrates both her artistic skill and her deep appreciation for the beauty of the American landscape.

Figure \(\PageIndex{8}\): *Kaaterskill Creek* (c. 1870, oil on canvas) (Public Domain)

[1] Retrieved from https://explorethomascole.org/projec...tains-morning/

[2] Retrieved from https://www.metmuseum.org/essays/fre...urch-1826-1900

11.5: Shanghai School of Art (Late 19th Century)

Definition: Term

- **Shanghai School of Art** – A 19th-century Chinese art movement centered in Shanghai that blended traditional Chinese painting with modern and Western influences.
- **Qing Dynasty** – The last imperial dynasty of China, ruling from 1644 to 1912.
- **Calligraphy** – Decorative and expressive handwriting considered a major art form in East Asia.
- **Bird-and-flower painting** – A traditional Chinese painting style focusing on flowers, birds, plants, and nature.
- **Freehand brushwork** – A loose, expressive painting technique using energetic and spontaneous brushstrokes.
- **Ink painting** – A traditional East Asian painting method using black ink and brush on paper or silk.
- **Symbolism** – The use of objects, colors, or images to represent deeper meanings or ideas.
- **Longevity** – Long life; in Chinese art, peaches often symbolize long life and immortality.
- **Complementary colors** – Colors opposite each other on the color wheel that create strong visual contrast when placed together.
- **Abstract grouping** – An arrangement of shapes or forms that emphasizes design and composition more than realistic representation.

The **Shanghai School of Art** emerged during the 19th century in the city of Shanghai and became an important artistic movement during the **Qing Dynasty**. Similar in some ways to the American **Hudson River School**, the Shanghai School brought together artists who developed new approaches to painting while responding to rapid social and political change. The movement developed after the **Taiping Rebellion** of the 1840s and 1850s, a devastating civil conflict that destroyed cities and displaced many artists. As violence spread across China, numerous painters fled to Shanghai, an international port city influenced by growing contact with European powers. In this environment, artists from different regions gathered together and formed what became known as the Shanghai School.

Unlike traditional Chinese painting, which often followed conservative artistic rules and established subjects, Shanghai School artists embraced innovation, individuality, and experimentation. Influenced partly by Western artistic ideas and the changing urban culture of Shanghai, they introduced brighter colors, expressive brushwork, and more fashionable or popular subject matter. Their work reflected a growing interest in creativity, freedom of expression, and modern urban life. The Shanghai School helped transform Chinese art by blending traditional techniques with new artistic influences, creating a style that was more vibrant, commercial, and accessible to a changing society.

Wu Changshuo

Wu Changshuo was one of the most influential painters and calligraphers of the late **Qing Dynasty** and an important figure in the **Shanghai School of Art**. Born in Huzhou into a scholarly family, Wu studied poetry, calligraphy, and traditional Chinese culture from an early age. Before becoming a painter in his thirties, he had already gained recognition for his skill in **calligraphy** and poetry. Wu became especially known for revitalizing the traditional Chinese subject of **bird-and-flower painting**. In works such as *Peonies and Daffodil* (11.5.1), he combined classical artistic traditions with the bold creativity and expressive style associated with the Shanghai School. He used bright colors, exaggerated forms, and energetic compositions to create a modern interpretation of traditional subjects. The large peonies dominate the composition, while the smaller daffodils create balance through contrasting shapes and the complementary colors of red and green.

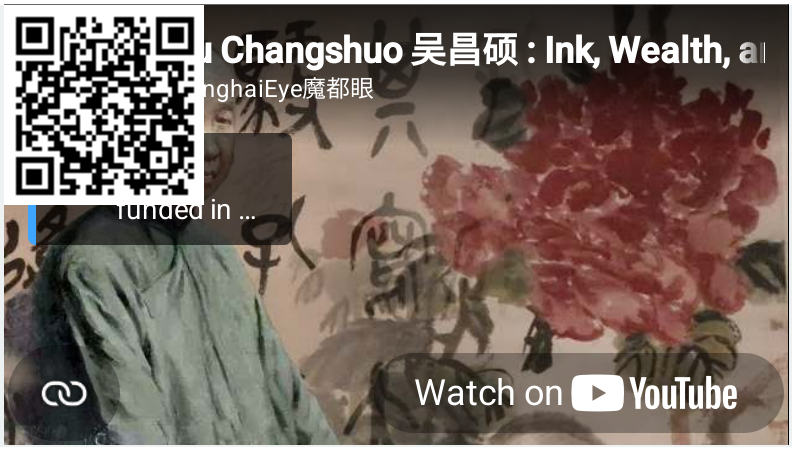
In Chinese art, **peaches** traditionally symbolize longevity and immortality. In *Peach Fruit of Three Thousand Years* (11.5.2), Wu painted heavy branches filled with ripe red peaches hanging downward under their weight. Instead of using delicate and controlled brushstrokes typical of earlier Chinese painting, Wu employed vigorous and expressive **freehand brushwork**, giving the painting a sense of movement and energy. Wu Changshuo was admired both as a master of traditional **ink painting** and as an innovator who introduced new methods and styles into Chinese art. His work helped bridge traditional Chinese artistic practices with the more expressive and modern approaches emerging during the late 19th and early 20th centuries.

Figure \(\PageIndex{1}\): *Peonies and Daffodil* (Public Domain)

Figure \(\PageIndex{2}\): *Peach Fruit of Three Thousand Years* (1918, ink and color on paper, 96 x 45 cm) (Public Domain)

Wu Changshuo: Ink, Wealth, and Influence with a taste of Shanghai

In 1914, Wu Changshuo, a master of Chinese arts who had settled in Shanghai two years earlier, published a pricing list for his works. A small painting or calligraphy piece started at around 3 Chinese silver dollars, while larger pieces could cost up to 28 silver dollars. To put this into perspective, a single silver dollar in Shanghai could buy 15 kilograms of rice. Wu's income rivaled that of successful industrialists of his time, raising the question: What made his works so sought after and valuable?



Zhao Zhiqian

Zhao Zhiqian became one of the leading figures during the transformation of Chinese art in the 19th century. Educated in the classical traditions of the **Qing Dynasty**, Zhao originally prepared for a career in government service and successfully passed the demanding **civil service examination**, an important requirement for government officials in imperial China. Although he worked in government for a period of time, Zhao struggled to support himself through art and initially found little success selling his paintings. Over time, however, he gained recognition as a skilled **calligrapher**, **seal carver**, and painter. His talents in multiple artistic disciplines helped establish him as an influential figure connected to the developing **Shanghai School of Art**. Zhao became especially known for creating a distinctive form of **calligraphy** called the **square-brush style**. This technique emphasized bold, angular brushstrokes that gave written characters a strong and structured appearance. By combining traditional scholarship with innovative artistic methods, Zhao Zhiqian helped modernize Chinese art while still preserving important cultural traditions.

In the scroll *Couplet* (11.5.3), the calligraphy has a plumper look to the lettering with rounded, heavy lines. The words, appropriate for a Confucian household, stated, “Great virtue comes from forbearance, sincerity comes from a mind free from deception.”[1] In his album *Flowers* (11.5.4), Zhao Zhiqian created bold and colorful images of plants using a highly innovative style. Bright red flowers and large green leaves dominate the composition, filling the surface of the page in a way that departed from traditional Chinese painting conventions. Instead of carefully balanced compositions and delicate details, Zhao emphasized oversized forms, strong color contrasts, and expressive shapes.

As both a painter and **calligrapher**, Zhao often incorporated written text directly into his paintings. In *Flowers* (11.5.5), the calligraphy appears across the open white background, blending poetry, writing, and painting into a unified artistic expression. This combination reflected long-standing Chinese artistic traditions while also allowing for new experimentation and personal style. The simplified backgrounds and limited sense of depth gave artists greater creative freedom to focus on color, brushwork, and emotional expression rather than strict realism. Zhao’s innovative approach helped modernize traditional **bird-and-flower painting** and encouraged artists to paint more freely and expressively according to their own observations and imagination.

Figure \(\PageIndex{3}\): *Couplet* (1867, ink on paper, 181.9 x 48.1 cm) (Public Domain)

Figure \(\PageIndex{4}\): From album *Flowers* (1859) (Public Domain)

Figure \(\PageIndex{5}\): From album *Flowers* (Public Domain)

Marketing peonies, Zhao Zhiqian's, flower album

Zhao Zhiqian, Flowers Album, 1862 (Qing dynasty), album leaves, China (Shanghai Museum, China)

Ren Bonian

Ren Bonian became an important member of the **Shanghai School of Art** after moving to Shanghai following the death of his father. Ren combined traditional Chinese painting methods with newer Western artistic influences, creating paintings that included people, landscapes, flowers, and wildlife. Although his early work was influenced by the refined styles of the **Song Dynasty**, he later adopted a freer and more expressive modern style. Ren became especially famous for his **figure paintings** as well as his depictions of flowers and birds in natural settings. In *Playing the Flute* (11.5.6), the figure sits outdoors near the water among twisted tree roots while playing a flute. Unlike traditional Chinese paintings, where human figures were often small and secondary

to the landscape, Ren painted the figure in greater proportion to the surrounding environment, giving the subject more importance within the composition. Ren was also admired for his bold use of color, including the unusual use of blue tones.

In *Portrait of Gao Yong's Wife* (11.5.7), Ren created a memorial portrait painted after the woman's death. The artwork includes a poem written in **calligraphy** by Gao Yong, a fellow Shanghai artist and respected calligrapher. The woman appears partially concealed behind lines or a screen, suggesting a spiritual or eternal presence as though she continues to watch from beyond. Ren decorated the composition with flowering branches, adding elegance, symbolism, and beauty to the image while blending painting, poetry, and calligraphy into a unified work of art.

Figure \(\PageIndex{6}\): *Playing the Flute* (btw. 1860-1880, ink and color on paper mounted on cloth, 34 x 36.5 cm) (Public Domain)

Figure \(\PageIndex{7}\): *Portrait of Gao Yong's Wife* (1886, ink on paper) (Public Domain)

[1] Retrieved from https://www.metmuseum.org/art/collection/search/55495

11.6: Edo Period (1615 – 1868)

Definition: Term

- **Edo Period** – A period in Japanese history from 1603 to 1868 marked by peace, economic growth, and cultural development under the Tokugawa shogunate.
- **Tokugawa shogunate** – The military government that ruled Japan during the Edo Period through a feudal system.
- **Feudal system** – A social and political system in which powerful landowners controlled regions and people in exchange for loyalty and service.
- **Isolationism** – A policy limiting contact and influence from foreign countries.
- **Urbanization** – The growth and expansion of cities and urban life.
- **Heian culture** – The artistic and cultural traditions from Japan's Heian Period known for elegance, literature, poetry, and refined visual arts.
- **Ukiyo-e** – Japanese woodblock prints and paintings depicting scenes from the "floating world," including entertainment, fashion, actors, and landscapes.
- **Woodblock printing** – A printmaking process in which images are carved into wood blocks, inked, and pressed onto paper.
- **Calligraphy** – Decorative and expressive handwriting considered an important art form in East Asia.
- **Samurai** – Members of Japan's warrior class who held military and political power during the feudal era.
- **Floating world** – A term describing the temporary pleasures of urban life, entertainment, beauty, and leisure during the Edo Period.
- **Impermanence** – The idea that life and worldly experiences are temporary and constantly changing.
- **Authoritarian social order** – A strict system in which people were expected to follow established social roles and rules.
- **Middle class** – Social groups between the ruling elite and laboring classes, often involved in business, trade, and urban culture.

In Japan, the **Edo Period** lasted from 1603 to 1868 and was marked by economic growth, political stability, and flourishing artistic and cultural development. The country was governed by the **Tokugawa shogunate**, a feudal system organized into regional territories controlled by powerful lords known as daimyo. Japanese society followed a strict social hierarchy, with merchants and artisans occupying lower social classes even though they played important roles in commerce and artistic production.

During more than two centuries of relative peace, Japan experienced increasing urbanization and economic prosperity. The government promoted **isolationism**, limiting foreign influence and contact with other countries while maintaining a highly organized authoritarian social order. At the same time, the arts and culture thrived among both the ruling elite and the growing middle class. By the early 19th century, several major artistic traditions had developed. Influences from **Heian culture** continued to shape painting and visual arts, while **Ukiyo-e** artists mastered the techniques of **woodblock printing**. The spread of literature also elevated the importance of **calligraphy**, which became an essential artistic skill. The ruling classes supported elegant architecture, garden design, and artistic refinement, while widespread literacy increased the popularity of printed books and illustrated publications.

The **samurai** class held the highest social and political power, and even their weapons were treated as artistic objects. Meanwhile, commoners in growing urban centers found entertainment in theaters, teahouses, fashion, and pleasure districts associated with **ukiyo-e**, meaning "pictures of the floating world." The term **ukiyo** originally came from a Buddhist idea emphasizing the temporary and impermanent nature of life. During the Edo Period, however, the meaning evolved to celebrate enjoying the present moment and the pleasures of everyday urban life.

Ukiyo" (浮世) means the "floating world" while "e" (絵) means "picture(s)." The idea of the "floating world" is related to an older Buddhist concept of melancholia from the impermanence of human life on earth highlighting the fleeting, untethered existence where nothing lasted – fashion, beauty, seasons, a night of passion. In the Edo period, the term "floating" emphasized savoring the present moment in a carefree realm, forgetting the mundane constraints of everyday life. Pictures of the floating world – ukiyo-e -- were visual records of the activities of the townsmen (*chōnin)* and the people who worked to entertain them.

Hishikawa Moronobu

Hishikawa Moronobu was born near Edo Bay and became one of the earliest and most important artists associated with **Ukiyo-e** woodblock prints. His father created decorative pictorial tapestries, and Moronobu learned artistic techniques from him before

studying painting more formally. He is often credited with helping popularize ukiyo-e as a major artistic genre during the **Edo Period**.

In the series *The Appearance of Yoshiwara* (11.6.1), Moronobu depicted the lively atmosphere inside a brothel located in **Yoshiwara**, the famous pleasure district of Edo (modern Tokyo). Patrons sit together watching a courtesan perform a dance while musicians accompany the performance using **shamisens** and drums. Servants and attendants stand nearby providing food and drinks, creating a detailed view of urban entertainment culture during the Edo Period. Common subjects in **ukiyo-e** included beautiful women, courtesans, **kabuki** actors, scenes from theatrical performances, ghost stories, folk tales, and erotic imagery. As travel and tourism increased during the 19th century, artists also began creating more landscape prints featuring famous scenic locations and beautiful views throughout Japan. Moronobu's work helped establish many of the themes and visual styles that later became central to ukiyo-e art and Japanese popular culture.

Figure \(\PageIndex{1}\): Interior of a Brothel from the woodblock series The Appearance of Yoshiwara (1678, monochrome woodblock print, ink on paper, 31.5 x 147 cm) (Public Domain)

Torii Kiyonaga was one of the great masters of **Ukiyo-e** and became especially known for his elegant full-color prints of courtesans and beautiful women. During the **Edo Period**, creating color woodblock prints was a highly skilled and complicated process because a separate carved woodblock was required for every individual color used in the image. In *Snowball Fight* (11.6.2), Kiyonaga used multiple shades of gray, red, yellow, and black, each carefully printed from its own precisely carved block. The layering of colors demonstrates the technical sophistication of Japanese **woodblock printing** and the careful coordination needed to align each impression correctly.

In *Cooling on Riverside* (11.6.3), Kiyonaga portrayed three women dressed in richly patterned and colorful clothing. The intricate fabrics and detailed designs required an even more complex series of woodblocks to achieve the final image. Unlike many artists of the period who idealized women with delicate proportions, Kiyonaga often depicted women as taller, fuller, and more natural in appearance. Kiyonaga also frequently created **diptychs** and **triptychs**, artworks composed of two or three connected panels. These larger compositions gave his prints a more monumental and dramatic quality while allowing him to portray broader scenes of fashionable urban life in the floating world of ukiyo-e.

Figure \(\PageIndex{2}\): *Snowball Fight* (1787, woodblock print) (Public Domain)

Figure \(\PageIndex{3}\): *Cooling on Riverside* (1785, woodblock print) (Public Domain)

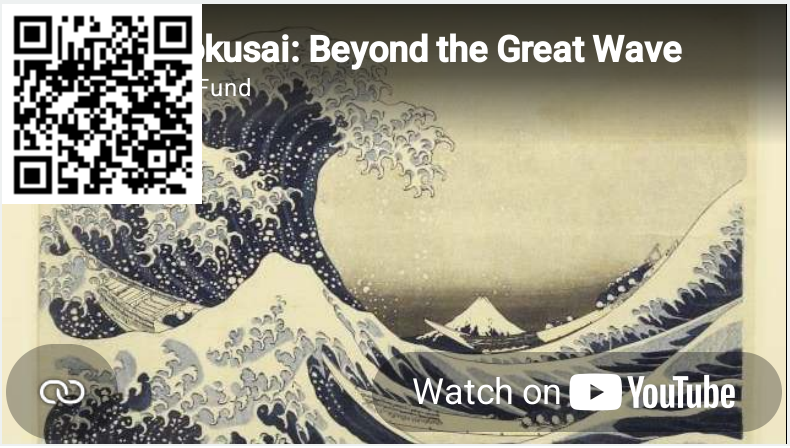
Ukiyo-e is a Japanese style of painting and **woodblock printmaking** created through multiple engraved blocks, with each block printing a different color onto the final image. Katsushika Hokusai became one of the greatest masters of ukiyo-e and produced one of the most famous prints in the world, *The Great Wave off Kanagawa* (11.6.4). Hokusai deeply admired **Mount Fuji** and frequently traveled throughout Japan to sketch and paint the mountain. *The Great Wave off Kanagawa* belongs to his celebrated series *Thirty-six Views of Mount Fuji*, which explored different perspectives and environments surrounding the sacred mountain.

The print depicts a massive wave, often compared to a tsunami, towering over small boats struggling in the rough sea. Near the center of the composition, **Mount Fuji** appears small and distant beneath the enormous curling wave. Although Fuji is Japan's tallest mountain and an important national symbol, Hokusai intentionally reduced its scale to emphasize the overwhelming power of nature. Hokusai used innovative **perspective**, detailed carving techniques, and carefully layered colors to create depth, movement, and drama within the composition. The curved forms of the wave, the foaming water, and the contrast between the calm mountain and violent sea make the print both visually powerful and emotionally memorable. Today, *The Great Wave off Kanagawa* is considered one of the defining masterpieces of Japanese art and had a major influence on Western artists during the 19th century.

Figure \(\PageIndex{4}\): *The Great Wave off Kanagawa* (Public Domain)

Hokusai: Beyond the Great Wave

As a new exhibition dedicated to Japanese artist Katsushika Hokusai opens at the British Museum in London, this film explores the legacy and impact of his most iconic image, the Great Wave, and asks why it has such appeal.



Utagawa Hiroshige was another major master of **Ukiyo-e** who became famous for his landscape prints and scenes of travel throughout Japan. Hiroshige journeyed across the country sketching mountains, villages, roads, rivers, and changing weather conditions, transforming ordinary travel scenes into poetic and atmospheric works of art. His best-known series, *The Fifty-three Stations of the Tokaido*, was inspired by his travels along the important Tokaido Road, which connected Edo (Tokyo) and Kyoto. The series depicted travelers moving through different stations and landscapes while capturing seasonal changes and the moods of nature.

In *Kanbara* (11.6.5), Hiroshige portrayed a quiet winter scene filled with darkness, snow, and stillness. The figures move carefully through the snowy landscape, creating a peaceful yet isolated atmosphere. In *Travelers Surprised by Sudden Rain* (11.6.6), he captured the dramatic energy of people rushing through a storm as heavy rain falls diagonally across the composition. These weather effects required multiple carefully carved **woodblocks** to print the subtle background colors and atmospheric details. Hiroshige produced an enormous body of work during his lifetime and became celebrated for his ability to portray nature, travel, and changing weather with emotional sensitivity and technical mastery. Near the end of his life, he retired from artistic practice and became a **Buddhist monk**.

Figure \(\PageIndex{5}\): *Kanbara* (1833-34, woodblock print, 22.5 x 34.9 cm) (Public Domain)

Figure \(\PageIndex{6}\): *Travelers Surprised by Sudden Rain* (Public Domain)

11.7: Impressionism (1860 – 1890)

Definition: Term

- **Impressionism** – A 19th-century art movement focused on capturing light, color, atmosphere, and brief moments using loose brushstrokes.
- **Romanticism** – An artistic movement emphasizing emotion, imagination, drama, and nature.
- **Realism** – An art movement portraying everyday life and ordinary people with truthful detail.
- **En plein air** – A French term meaning "in the open air," referring to painting outdoors directly from nature.
- **Brushstrokes** – Visible marks made by a paintbrush that create texture and movement in a painting.
- **Tin paint tube** – A portable container for paint that allowed artists to easily carry colors outdoors.
- **Salon** – The official French art exhibition controlled by an academic selection committee.
- **Société Anonyme des Artistes** – The independent group formed by Impressionist artists to organize their own exhibitions outside the Salon system.
- **Atmosphere** – The mood or visual quality created by light, weather, and color in a painting.
- **Modern life** – Contemporary everyday experiences and activities of people during a specific time period.
- **Visual impression** – The immediate appearance or sensory effect of a scene rather than a detailed realistic depiction.
- **Light and color** – Key elements emphasized by Impressionists to show changing natural conditions and movement.

Impressionism was an influential art movement that developed between 1860 and 1886 and permanently transformed the direction of modern art. Before the rise of Impressionism, the art world was dominated by **Romanticism** and **Realism**, movements often characterized by carefully finished, highly detailed, and almost photographic paintings. The Impressionists rejected many traditional artistic rules and instead focused on capturing fleeting moments, changing light, and immediate visual impressions of modern life. One important technological innovation that helped the movement develop was the invention of the **tin paint tube** earlier in the 19th century. Portable tubes allowed artists to carry multiple paint colors outdoors and paint directly from nature, a method known as **en plein air** painting. Using loose and visible **brushstrokes**, Impressionist artists sought to capture the shifting effects of sunlight, atmosphere, weather, and color in natural environments.

The Impressionists were revolutionary not only because of their painting techniques but also because they challenged the traditional art system. At the time, artists generally depended on acceptance into the official **Salon**, the prestigious exhibition controlled by a strict selection committee. Frustrated by the Salon's rejection of their work, the Impressionists organized their own independent exhibition in a rented studio. The movement received its name after a critic attended the first exhibition of the **Société Anonyme des Artistes** and mocked Claude Monet's painting *Impression, Sunrise* (11.7.1). The critic sarcastically referred to the artists as "Impressionists," suggesting the paintings looked unfinished and merely captured an "impression" of a scene. Although intended as criticism, the name remained and eventually became associated with one of the most important artistic movements in history.

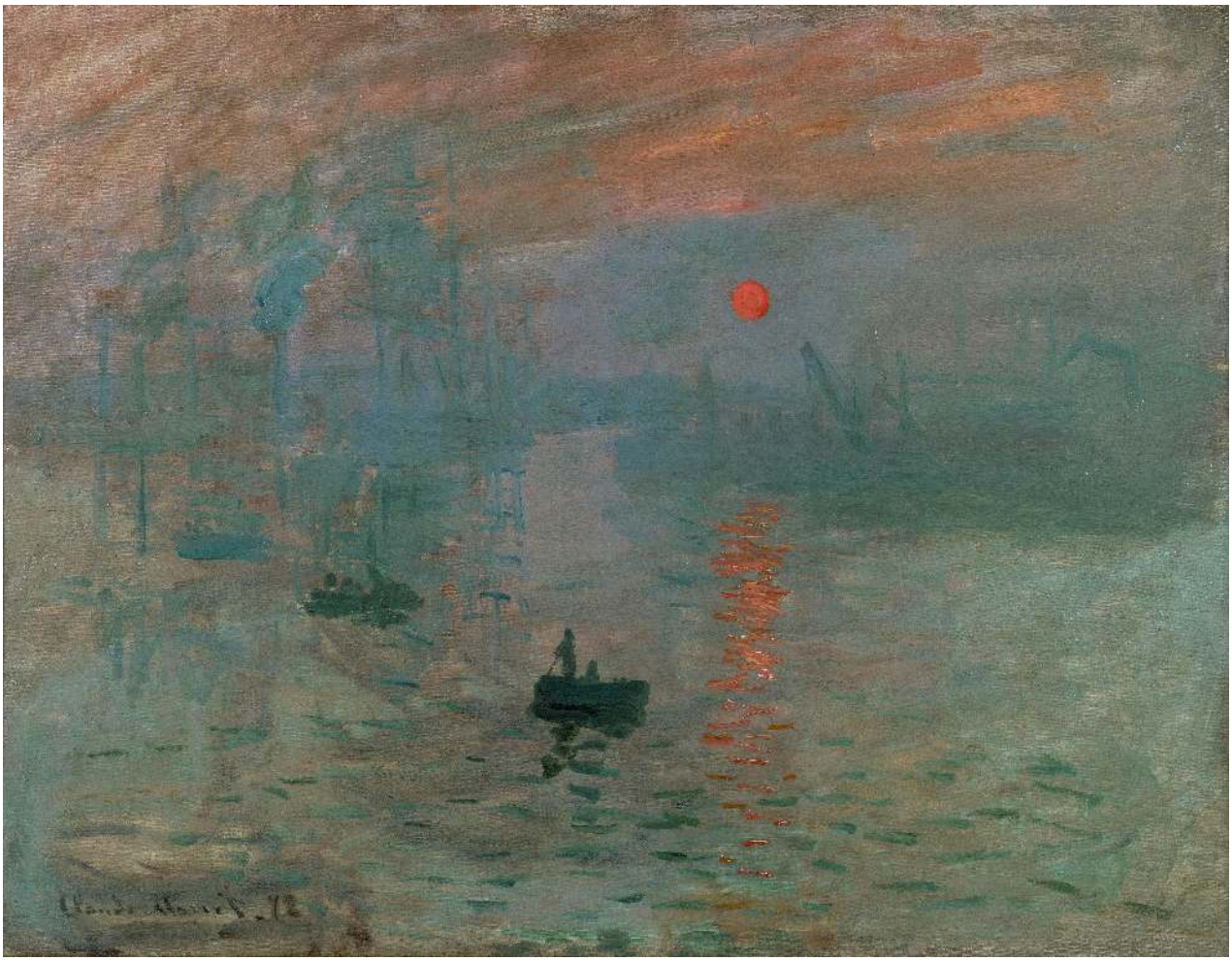
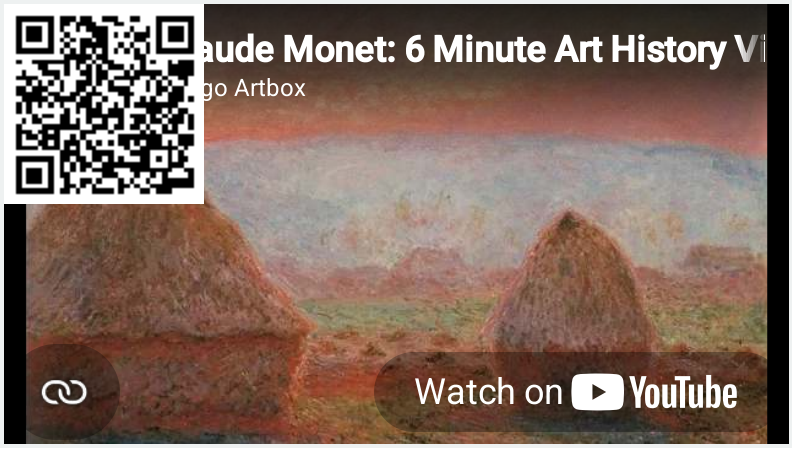


Figure \(\PageIndex{1}\): *Impression Sunrise* (Public Domain)

Claude Monet: 6 Minute Art History Video

Claude Monet and the art of Impressionism



Claude Monet

Claude Monet was one of the most important and productive painters of the **Impressionist** movement. Monet became known for applying paint freely with visible **brushstrokes** and using intense, pure colors to capture the changing effects of light and atmosphere. Like many Impressionists, he often painted **en plein air**, working outdoors to observe fleeting moments in nature directly. One of Monet's most innovative techniques was painting the same subject repeatedly at different times of day and under

varying weather conditions. By creating series of paintings from the same viewpoint, he demonstrated how changing light could dramatically alter color, shadows, mood, and visual perception.

During his travels to Venice, Monet painted several views of the city's famous waterways, including six paintings of the Grand Canal. In *Grand Canal Venice* (11.7.2) and *The Grand Canal* (11.7.3), Monet showed how light transforms the appearance of the same location. Differences in sunlight, reflections, and atmosphere change the colors of the buildings and water while altering the depth of shadows and the emotional feeling of each scene. Through his focus on light, color, and momentary visual effects, Monet helped redefine painting and became one of the leading figures of modern art. "Monet found the lagoon city an ideal environment for capturing the evanescent, interconnected effects of colored light and air that define his radical style. In his Venice paintings, magnificent churches and mysterious palaces, all conjured in prismatic touches of paint, dissolve in the shimmering atmosphere like floating apparitions."[1]

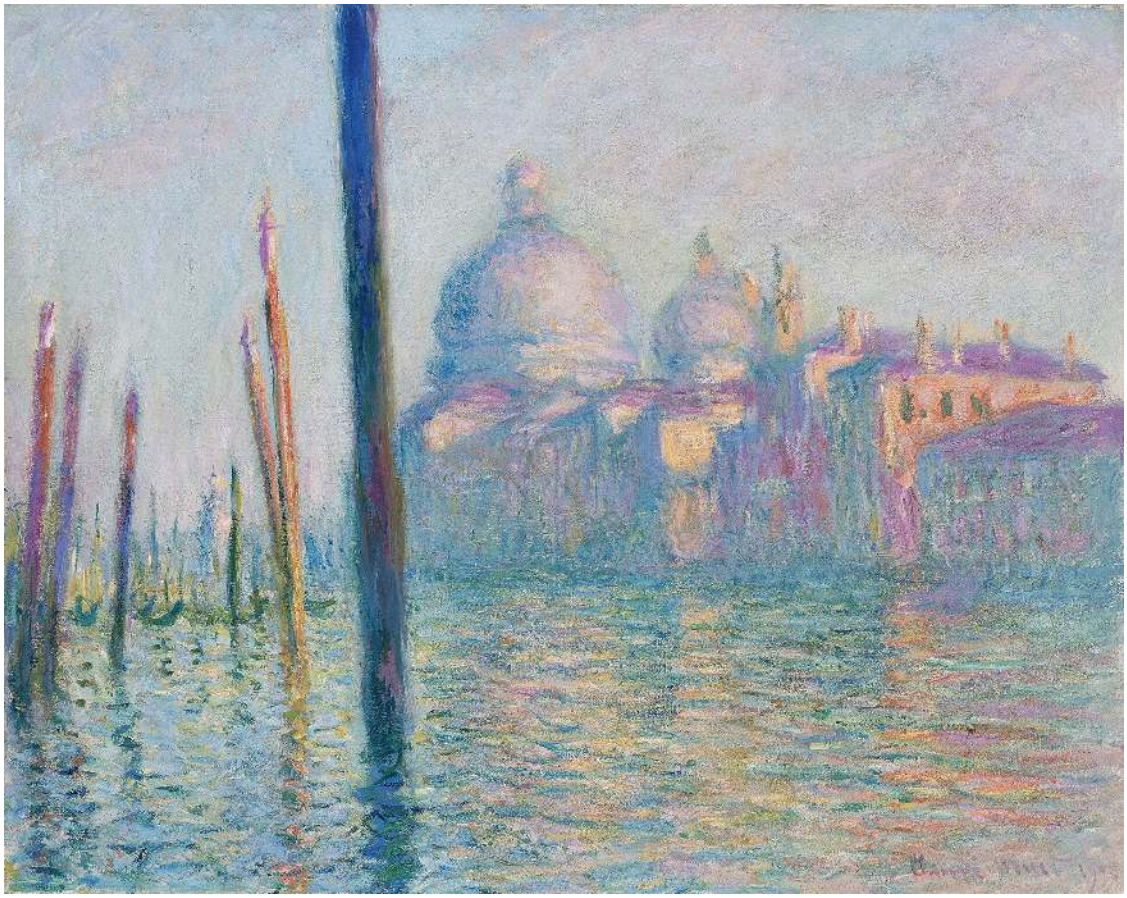
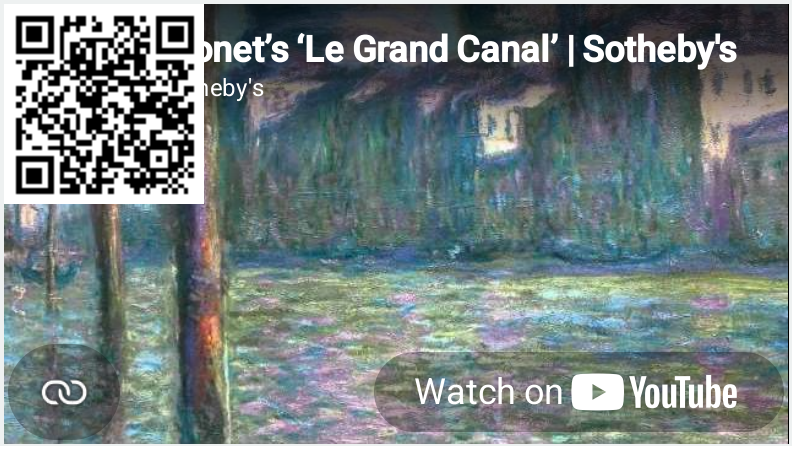


Figure \(\PageIndex{2}\): *Le Grand Canal* (Public Domain)

Figure \(\PageIndex{3}\): *The Grand Canal and Santa Maria della Salute* (Public Domain)

Monet's Le Grand Canal

Claude Monet is best known as the painter of light, and in Venice he found the most wonderful inspiration for his treatment of light on water. The magnificent ‘ Le Grand Canal’, from 1908, is part of his ‘Series’ paintings.



Claude Monet purchased a house and several acres of land in Giverny, France, transforming the property into a carefully designed garden that became the inspiration for many of his most famous **Impressionist** paintings. The garden featured archways, roses, flower beds, and a water lily pond crossed by a Japanese-style bridge, all arranged to create changing effects of light, reflection, and color throughout the day. The pond and bridge became central subjects in Monet’s work, especially in *Water Lilies and Japanese Bridge* (11.7.4). In this painting, Monet used cool green tones, reflective water, and soft brushstrokes to create a peaceful and atmospheric scene centered on the iconic Japanese footbridge. He often arranged multiple canvases around the pond so he could paint the same view at different times of day as the light changed.

In *Waterlilies* (11.7.5), the surface of the pond reflects bright sunlight while delicate lily pads and flowers float across the water. Shadows from nearby trees and the changing movement of the sun alter the appearance of the pond throughout the day, causing the lily pads to shift between light and shadow. Through these paintings, Monet explored the Impressionist fascination with fleeting moments, natural light, and the constantly changing effects of atmosphere and reflection.

Figure \(\PageIndex{4}\): *Water Lilies and Japanese Bridge* (Public Domain)

Figure \(\PageIndex{5}\): *Water Lilies* (Public Domain)

Auguste Renoir

Pierre-Auguste Renoir studied art in Paris alongside many of the artists who helped develop **Impressionism**, including Claude Monet. Although Renoir admired the balanced compositions and beauty of **Renaissance** art, he embraced the loose brushwork, bright colors, and modern subjects associated with the Impressionist movement. Renoir often painted scenes of everyday leisure and social life in Paris. In *Le Moulin de la Galette* (11.7.6), he portrayed working-class people gathering on a Sunday afternoon to eat, drink, dance, and enjoy themselves at an outdoor café and dance garden. Renoir used fluid **brushstrokes** and dappled sunlight to create movement and atmosphere, capturing the lively energy of the dancers and the shifting effects of light filtering through the trees. The painting reflects the Impressionist interest in portraying ordinary modern life and spontaneous moments.

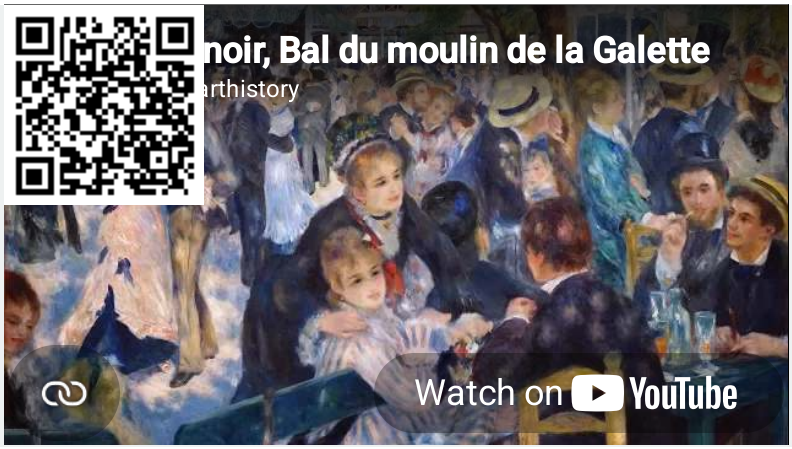
Unlike many early Impressionist works that were rejected by critics, *Le Moulin de la Galette* was accepted into the official **Salon**, helping strengthen Renoir's reputation as an artist. Renoir also painted quieter scenes along the Seine River, often depicting people engaged in simple daily activities. In *Two Sisters (On the Terrace)* (11.7.7), two girls sit near the river beside a basket filled with balls of wool. The background of trees and water is painted with loose, broad brushstrokes and muted colors, while the girls dominate the foreground through the strong contrasting colors of white, blue, and red. Renoir combined bright color, soft light, and relaxed compositions to create paintings filled with warmth, beauty, and everyday human interaction.

Figure \(\PageIndex{6}\): *Le Moulin de la Galette* (Public Domain)

Figure \(\PageIndex{7}\): *Two Sisters (On the Terrace)* (Public Domain)

Renoir, Bal du moulin de la Galette

Pierre-Auguste Renoir, Bal du moulin de la Galette, 1876, oil on canvas, 131 x 175 cm (Musée d'Orsay, Paris)



Alfred Sisley and Camille Pissarro

Alfred Sisley devoted most of his life to painting **en plein air**, working outdoors to capture the changing effects of light, atmosphere, water, and weather. His paintings often portray peaceful rivers, drifting clouds, and people enjoying outdoor leisure activities. Like other **Impressionists**, Sisley focused on fleeting moments and the natural qualities of light reflected across the landscape. Camille Pissarro was born in the Danish West Indies, and the bright tropical light and vivid colors of the islands influenced his artistic understanding of color and atmosphere throughout his life. Pissarro became one of the central figures of Impressionism and was admired for his use of textured paint and observation of rural life.

In Sisley's *The Bridge at Villeneuve-la-Garenne* (11.7.8), bright sunlight reflects across the blue sky and shimmering water of the Seine River. Green trees and lively outdoor activity suggest the warmth and freshness of summer. Sisley used a dramatic angled perspective of the stone and iron bridge to guide the viewer through the composition while adding boats and people relaxing along the riverbank to create a scene of leisure and movement. Flat and visible **brushstrokes** reflect the sparkling sunlight across the water's surface. In contrast, Pissarro's *The Red Roofs* (11.7.9) presents a quieter winter landscape. Deep red rooftops and darker shrubs stand beneath a muted sky, while bare trees indicate the colder season. Pissarro created a strong sense of depth by gradually reducing the size of houses and forms as they recede into the distance. Using thick layers of paint known as **impasto**, he captured the texture of the landscape and the soft winter light through energetic brushwork. Both artists demonstrated the Impressionist desire to capture a specific moment in time, using light, color, and atmosphere to portray the changing moods of the French countryside.

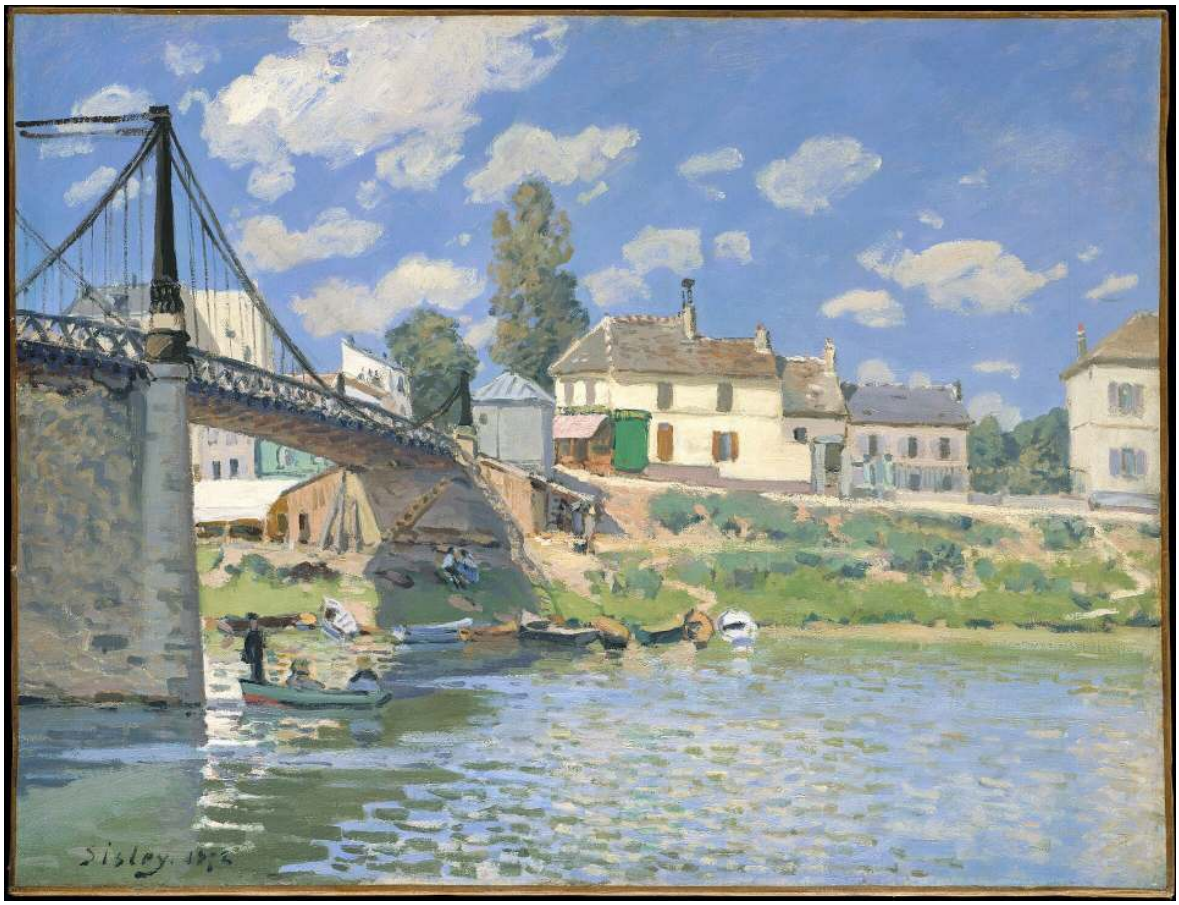


Figure \(\PageIndex{8}\): *The Bridge at Villeneuve* (1872, oil on canvas, 49.5 x 65.4 cm) (Public Domain)

Figure \(\PageIndex{9}\): *Red Roofs* (Public Domain)

Marry Cassatt, Berthe Morisot, and Marie Bracquemond

Three important women artists contributed significantly to the **Impressionist** movement: Mary Cassatt, Berthe Morisot, and Marie Bracquemond. Together, they are often called the **"Grand Dames of Impressionism."** Morisot and Bracquemond were born in France, while Cassatt was born in the United States and later moved to France to study art. Their paintings shared many common themes, including women, children, domestic life, gardens, and everyday activities. All three artists used loose **brushwork**, soft light, and modern compositions characteristic of Impressionism.

Mary Cassatt focused primarily on intimate scenes of women and children. In *The Child's Bath* (11.7.10), Cassatt portrayed the close emotional bond between a mother and child during an ordinary daily activity. Using muted colors and flattened space, she emphasized the tenderness and physical closeness of the figures. Decorative patterns in the woman's clothing, rug, and wallpaper add visual texture and rhythm to the composition. Cassatt's subject matter reflected experiences and domestic scenes rarely explored by male artists of the period.

Berthe Morisot often painted outdoor scenes filled with light and movement. In *Child Among the Hollyhocks* (11.7.11), a child wanders among blooming flowers while Morisot uses loose white brushstrokes to suggest sunlight reflecting across petals and clothing. The child's white dress visually blends into the flowers, while darker trees behind the scene create contrast and depth. Morisot's energetic brushwork captures both movement and atmosphere.

Marie Bracquemond created scenes drawn from domestic gardens and family life because women artists were often discouraged from painting public spaces and large outdoor landscapes. In *Artist's Son and Sister in the Garden at Sevres* (11.7.12), Bracquemond used vibrant contrasts between light and dark to animate the figures. The bright white clothing of her subjects stands out against the darker garden background punctuated with red flowers. Although Bracquemond was highly talented, her husband

discouraged her artistic career, and she rarely exhibited her work publicly. Together, these three women expanded the themes and perspectives of Impressionism, bringing attention to domestic life, motherhood, gardens, and women's experiences while mastering the innovative techniques of modern painting.

Figure \(\PageIndex{10}\): *The Child's Bath* (Public Domain)

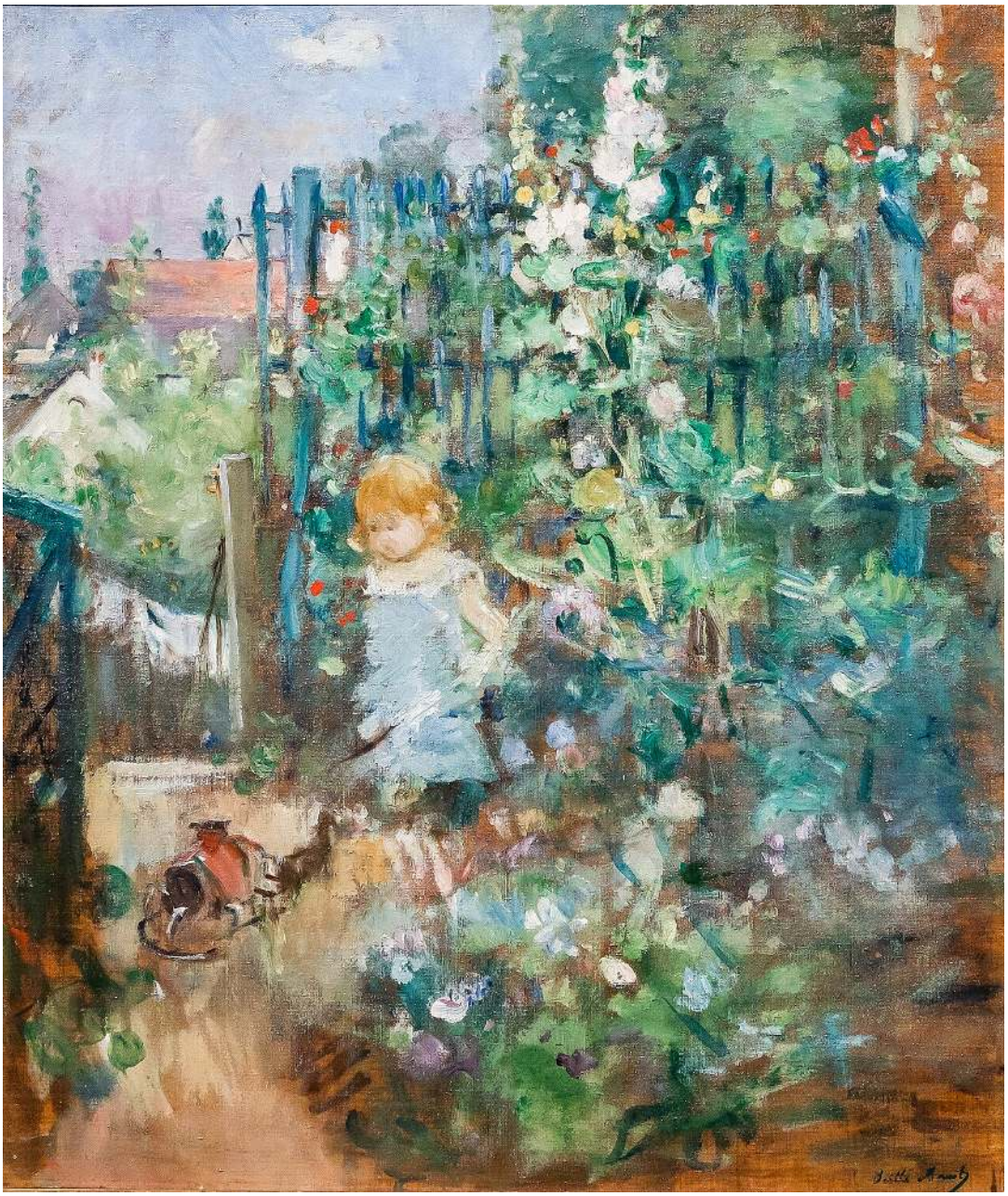
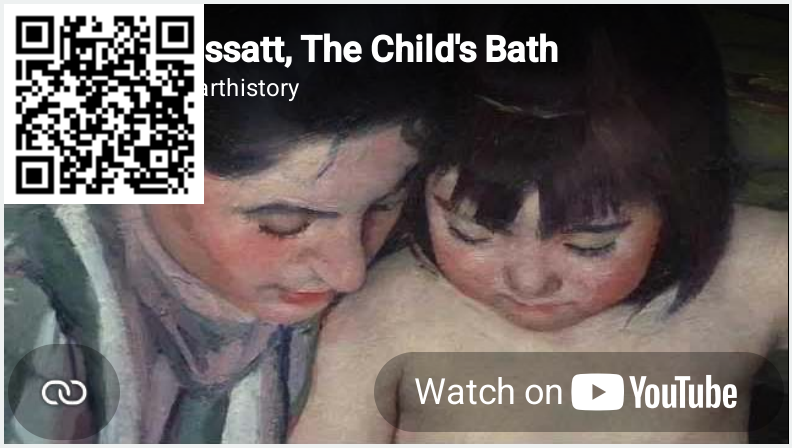


Figure \(\PageIndex{11}\):*Child Among the Hollyhocks* (Public Domain)

Figure \(\PageIndex{12}\): *Artist's Son and Sister in the Garden at Sevres* (Public Domain)

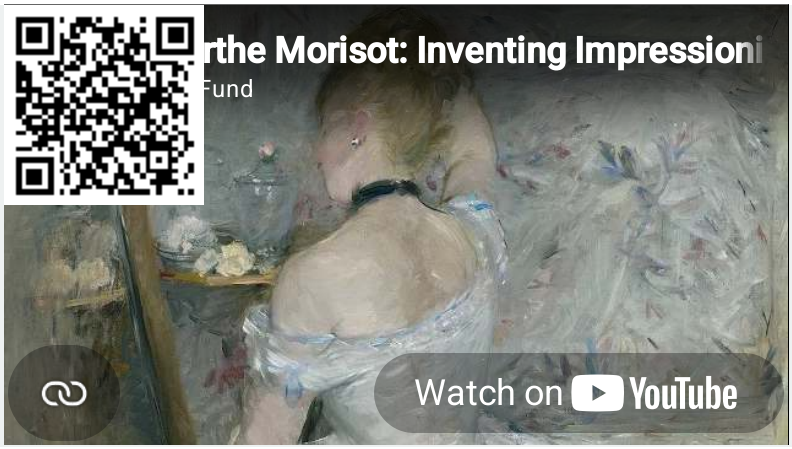
Cassatt, The Child's Bath

Mary Cassatt, The Child's Bath, 1893, oil on canvas, 100.3 x 66.1 cm / 39-1/2 x 26 inches (Art Institute of Chicago)



Berthe Morisot: Inventing Impressionism

Berthe Morisot was a talented young painter when she united with a group of revolutionary painters known as the Impressionists. Morisot exhibited in the ground-breaking Impressionist exhibitions, sold paintings at considerable prices and inspired her brother-in-law Édouard Manet in the use of colour. Art historian Jacky Klein explores the story of this gifted female Impressionist painter.



[1] Retrieved from https://www.brooklynmuseum.org/press...s-monet-venice

11.8: Post-Impressionism (1885 – 1905)

Definition: Term

- **Post-Impressionism** – An art movement from about 1880 to 1905 that moved beyond Impressionism by emphasizing emotion, symbolism, and personal expression.
- **Impressionism** – A movement focused on capturing fleeting moments, natural light, and atmosphere with loose brushstrokes.
- **Symbolism** – An artistic and literary movement using images, colors, and forms to represent emotions, ideas, or spiritual meanings.
- **Naturalism** – A style of art that attempts to realistically represent the natural world.
- **Emotion** – Strong feelings expressed through color, composition, and artistic style.
- **Personal expression** – The communication of an artist's individual feelings, ideas, and experiences through art.
- **Psychological depth** – The portrayal of complex emotions, thoughts, or inner experiences in artwork.
- **Expressive brushwork** – Visible and energetic brushstrokes used to convey movement, feeling, and emotion.
- **Abstract forms** – Shapes and designs that are simplified or altered from realistic appearance.
- **Visual impression** – The immediate appearance or sensory effect of a scene.
- **Artistic individuality** – The unique personal style and creative vision of an artist.
- **Modern art** – Art movements that broke away from traditional artistic rules and explored new styles and ideas.
- **Still life** – A work of art depicting arranged objects such as fruit, flowers, or household items.
- **Perspective** – A technique used to create the illusion of depth and space in art.
- **Cubism** – A modern art movement that broke objects into geometric shapes and multiple viewpoints.
- **Lithography** – A printmaking process using a flat surface, often stone or metal, to create printed images.
- **Poster art** – Large printed artworks designed for advertising entertainment, performances, or public events.
- **Woodblock printing** – A printmaking process in which images are carved into wood blocks and printed onto paper.
- **Brushstrokes** – Visible marks made by a paintbrush that create texture, movement, and style in a painting.
- **Cabaret** – A venue featuring music, dance, and theatrical entertainment, popular in Paris during the late 19th century.
- **Cancan dance** – A lively French dance known for high kicks and energetic movement.
- **Middle class** – Social groups between the wealthy upper class and working class, often associated with urban leisure and entertainment culture.
- **Graphic design** – The art of combining images, text, and layout for visual communication.
- **Symbolism** – The use of images, colors, or forms to represent ideas, emotions, or deeper meanings.

Post-Impressionism developed between 1880 and 1905 as a movement created by artists who wanted to move beyond the naturalism and fleeting visual impressions emphasized by the **Impressionists**. Influenced by **Symbolism**, Post-Impressionist artists focused more on expressing emotion, imagination, personal meaning, and psychological depth within their paintings.

The movement began in France and later spread to other countries, including the United States. While Impressionists concentrated on capturing changing light and everyday moments, Post-Impressionists experimented with bold color, expressive brushwork, symbolic imagery, and abstract forms to create stronger emotional experiences for the viewer. Each artist developed a highly personal style, making the movement diverse and innovative.

Vincent van Gogh became one of the most famous artists associated with Post-Impressionism. His statement, "Love what you love," reflects the movement's emphasis on personal expression, emotional intensity, and artistic individuality. Post-Impressionist artists sought not only to represent the visible world but also to communicate inner feelings, imagination, and deeper human experiences through art.

Vincent Van Gogh

One of the most influential **Post-Impressionist** artists was Vincent van Gogh, a Dutch painter who originally planned to become a minister before turning to art in his twenties. Van Gogh never received extensive formal training in an art academy; instead, he developed his own highly personal style by painting directly from observation and emotion. His work is now among the most recognizable in the history of art.

Financially supported by his brother Theo, Van Gogh experimented with bold color combinations, expressive **brushwork**, and emotional intensity. He painted instinctively, often placing contrasting colors side by side to create movement, energy, and feeling within the composition. Although he sold only one painting during his lifetime, his artworks later became some of the most valuable and celebrated in the world, with certain paintings selling for more than 150 million dollars at auction.

Despite his short life, Van Gogh produced more than 2,100 works of art, making him one of the most prolific artists of the 19th century. Among his most famous paintings are *The Starry Night* (11.8.1), with its swirling sky and emotional atmosphere, and *Still Life Vase with Twelve Sunflowers* (11.8.2), known for its vibrant yellow tones and energetic application of paint. Van Gogh's emotionally charged style, vivid colors, and expressive techniques helped shape the development of modern art and made him one of the defining figures of Post-Impressionism.

Who was Vincent van Gogh?

A short film about Vincent van Gogh, for use as an introduction to lessons about the artist and his work.

Vincent van Gogh painted several versions of his famous sunflower series, each one similar in subject yet different in the arrangement, number, and position of the flowers. Some sunflowers tilt forward while others bend sideways, creating a sense of movement and individuality within the compositions. Van Gogh used newly developed **synthetic yellow pigments**, which allowed him to experiment with a wide range of brilliant yellow and gold tones. Through thick layers of paint and expressive **brushwork**, he transformed ordinary flowers into vibrant and emotional works of art.

During his stay in an asylum in Saint-Rémy, Van Gogh painted the night sky from the view outside his barred window. In *The Starry Night* (11.8.3), he portrayed the sky as swirling with movement and energy rather than as a realistic observation of nature. Deep blues and blacks dominate the night scene, while glowing yellow stars and the moon appear to move across the sky in rhythmic patterns. Van Gogh used color, motion, and expressive lines to communicate emotion and psychological intensity, making the painting one of the most iconic works of **Post-Impressionism**.

"On a starry night…A twinkling light, I look up and imagine myself traveling through time. The beautiful shimmery lights seem to call me there. I can only imagine what it would be like to fly among them. To be able to look down on the earth and see its beauty. All of this, on a starry night." ~ Van Gogh

Figure \(\PageIndex{2}\): *Vase with Twelve Sunflowers* (1888, oil on canvas, 91 x 72 cm) (Public Domain)

Figure \(\PageIndex{3}\): *The Starry Night* (1889, oil on canvas, 73 x 92 cm) (Public Domain)

Van Gogh Starry Night Interactive Animation

Greek artist Petros Vrellis creation of an interactive animation of Vincent Van Gogh's famous "Starry Night" painting.

Vincent Van Gogh - Starry Starry Night with Don McClean

Slideshow of Van Gogh paintings with music by Don Mclean

Paul Gauguin

Paul Gauguin was a major **Post-Impressionist** artist known for his bold use of color, simplified forms, and emotionally symbolic imagery. Born in France, Gauguin became friends with Vincent van Gogh, and for a time the two artists lived and painted together. They spent time painting side by side, socializing in cafés, and discussing new artistic ideas. Van Gogh even decorated their shared house with his sunflower paintings. As a child, Gauguin had lived in Peru, an experience that influenced his later fascination with non-European cultures. Seeking inspiration outside industrialized Europe, he traveled to Tahiti in the South Pacific, where he painted local people, landscapes, and spiritual themes. In Tahiti, Gauguin developed his distinctive artistic style characterized by flat areas of color, emotional symbolism, and imaginative compositions rather than realistic representation.

In *Tahitian Women on the Beach* (11.8.4), Gauguin portrayed women seated along the shoreline with calm, expressionless faces that create a mysterious emotional distance. He used highly contrasting colors, including bright pink, red, and white clothing against dark horizontal bands of sea and soft yellow sand. Rather than using naturalistic color, Gauguin selected colors for their emotional and symbolic impact, encouraging viewers to interpret the scene imaginatively. After returning to Paris from Tahiti, Gauguin painted *Sacred Spring, Sweet Dreams* (11.8.5), a work inspired by his memories and romanticized vision of Tahitian life. The painting symbolizes different stages of life through the figures of Tahitian women. One sleeping young woman with a halo represents innocence and purity, while another figure holding fruit recalls the biblical story of Eve and temptation. In the background, islanders dance around an idol, suggesting spirituality, ritual, and ancient beliefs. Through symbolic imagery and dreamlike color, Gauguin attempted to create an idealized vision of harmony between humanity and nature. The canvas reveals the artist's very individual style with its pure colours applied in generalised flat areas which, like the lines, are subjugated to a single rhythm."[1]

Figure \(\PageIndex{4}\): *Tahitian Women on the Beach* (Public Domain)

https://human.libretexts.org/@go/page/308346

Figure \(\PageIndex{5}\): *Sacred Spring, Sweet Dreams* (Nave nave moe) (1894, oil on canvas, 74 x 100 cm) (Public Domain)

Paul Cezanne

Still life painting became an important subject during the late 19th century, and Paul Cézanne became one of its greatest innovators. Cézanne transformed ordinary arrangements of fruit, cloth, and household objects into highly influential studies of color, structure, and form that helped lead art toward modern movements such as **Cubism**. In *Still Life with a Curtain* (11.8.6), the arrangement of fruit, draped fabric, and containers may appear simple at first glance; however, Cézanne's sophisticated use of color and composition reveals a revolutionary approach to painting. Instead of relying on traditional **perspective** and realistic detail, he flattened forms and simplified shapes, focusing on how objects relate to one another through color and structure.

In *Still Life, Drapery, Pitcher, and Fruit Bowl* (11.8.7), Cézanne applied thick layers of paint to create solidity and depth on otherwise flat surfaces. The fruit is arranged in unstable and unusual ways, with some pieces appearing ready to roll out of the bowl or off the table. White drapery spreads across the table, visually connecting and stabilizing the objects within the composition. Cézanne used muted beige and neutral background colors to contrast with the bright reds, oranges, and greens of the fruit. Dark outlines around the forms give the objects a stronger sense of dimension and structure. Through these still life paintings, Cézanne moved away from realistic representation and instead explored how color, shape, and composition could build form, making him one of the most influential artists in the transition from **Post-Impressionism** to modern art.

Figure \(\PageIndex{6}\): *Still Life with a Curtain* (Public Domain)

Figure \(\PageIndex{7}\): *Still Life, Drapery, Pitcher, and Fruit Bowl* (1893-1894, oil on canvas, 59 x 72.4 cm) (Public Domain)

Still Life with Apples and Peaches

Still Life with Apples and Peaches, c. 1905, Paul Cezanne

Henri Toulouse-Lautrec

Henri de Toulouse-Lautrec brought a new direction to **Post-Impressionism** through his work in **lithography**, poster design, and painting. Influenced by Japanese **woodblock printing**, Toulouse-Lautrec created bold and modern images of Parisian entertainment culture, especially the cafés, cabarets, and dance halls frequented by the growing French middle class. Rather than focusing on traditional fine art subjects, Toulouse-Lautrec captured scenes of nightlife and popular entertainment. In works such as *La Goulue* (11.8.8), a famous poster, and *Marcelle Lender Doing the Bolero in Chilperic* (11.8.9), he portrayed dancers, performers, and audiences enjoying the lively atmosphere of Parisian cabarets. Many of his images feature energetic women dancers performing the **cancan**, often shown with skirts lifted high as they kick their thin, graceful legs into the air. Men frequently appear in the background observing the performance, emphasizing the theatrical and social environment of the cabaret.

In his posters, Toulouse-Lautrec used strong outlines, flat areas of color, and carefully controlled compositions inspired by Japanese printmaking. Although the poster designs relied on precise lines, he also incorporated more simplified and almost **abstract** forms, such as the shadowy figure dressed in brown. In his paintings, he used rapid, expressive **brushstrokes** and layered paint to create movement, energy, and atmosphere. Through his innovative posters and scenes of modern urban entertainment, Toulouse-Lautrec helped elevate commercial art and graphic design into respected forms of artistic expression while capturing the excitement and complexity of Parisian nightlife.

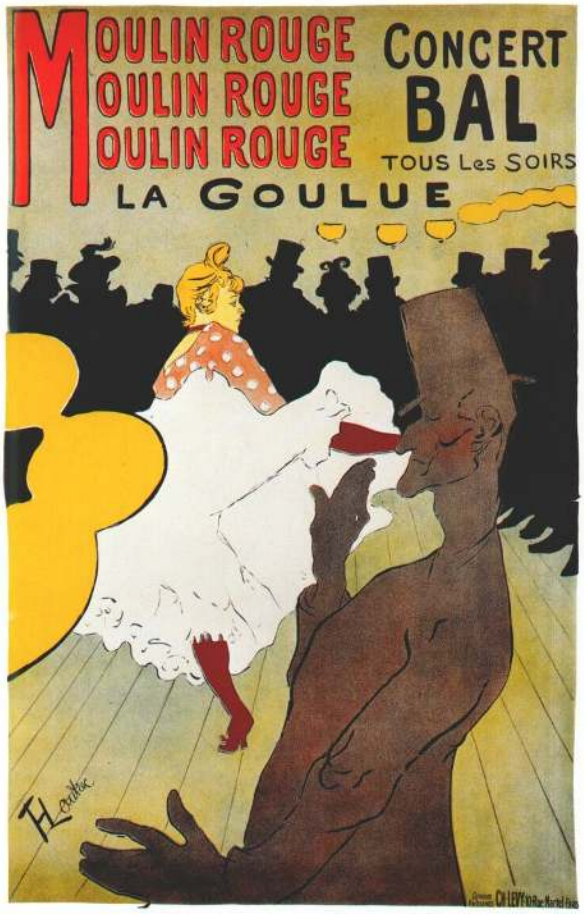


Figure \(\PageIndex{8}\): *Moulin Rouge: La Goulue* (1891, Lithograph in four colors, 190 x 116.5 cm) (Public Domain)

Figure \(\PageIndex{9}\): *Marcelle Lender Dancing the Bolero in Chilperic* (btw. 1895-1896, oil on canvas, 145 x 149 cm) (Public Domain)

Together, Paul Cézanne, Vincent van Gogh, Paul Gauguin, and Henri de Toulouse-Lautrec transformed the direction of modern art during the **Post-Impressionist** period. Although each artist developed a highly individual style and came from different backgrounds, they shared a desire to move beyond the naturalism of **Impressionism** and create art filled with emotion, symbolism, and personal expression. These artists experimented boldly with bright colors, expressive **brushwork**, unusual compositions, and symbolic imagery. Cézanne explored structure and form, helping pave the way for modern abstraction and **Cubism**. Van Gogh used swirling lines and vivid colors to communicate deep emotional intensity. Gauguin employed symbolic color and simplified forms to create dreamlike and spiritual imagery, while Toulouse-Lautrec captured the energy and excitement of modern urban life through posters, paintings, and lithographs. Together, they shifted art away from realistic representation and toward emotional interpretation, imagination, and experimentation, laying the foundation for many of the major modern art movements of the 20th century.

George Seurat

Georges Seurat became famous for developing the innovative painting technique known as **Pointillism**. Instead of blending colors directly on the canvas, Seurat carefully applied thousands of tiny dots of pure color next to one another. When viewed up close, the painting appears to consist only of separate colored dots; however, from a distance, the viewer's eye visually blends the colors together to create a complete and lifelike image.

His most famous work, *A Sunday Afternoon on the Island of La Grande Jatte* (11.8.10), became one of the most influential paintings of the late 19th century and helped transform the future direction of modern art. Seurat used carefully arranged contrasting colors and tiny brushstrokes to create light, shadow, and atmosphere through scientific color theory rather than traditional blending methods. The painting depicts people from different social classes relaxing and strolling through a park along the Seine River. Their clothing identifies their social status, while the calm and carefully arranged composition gives the scene a

formal and almost timeless quality. Through Pointillism, Seurat combined artistic creativity with scientific study of color and visual perception, creating a highly original style that influenced later modern art movements.

Figure \(\PageIndex{10}\): *A Sunday on La Grande Jatte* (1884, oil on canvas, 207.5 x 308.1 cm) (Public Domain)

Seurat, A Sunday on La Grande Jatte

Georges Seurat, A Sunday on La Grande Jatte - 1884, 1884-86, oil on canvas, 81-3/4 x 121-1/4 inches / 207.5 x 308.1 cm (The Art Institute of Chicago)

VIDEO: https://www.youtube.com/watch?v=wNB9Vm6MoDQ

Edgar Degas

Edgar Degas was originally trained as a historical painter and brought his strong classical education into the depiction of modern life, becoming known as the “classical painter of modern life.” Degas believed that painting people realistically required a deep

understanding of **human anatomy**, including muscles, tendons, and bone structure. His careful study of movement and form allowed him to create highly convincing and dynamic figures. Degas became especially interested in horses and horse racing, spending long hours at racetracks sketching horses and studying their anatomy and movement. In *At the Races* (11.8.11), he used unusual **perspective** and close cropping to create a modern and spontaneous composition. Some horses are partially cut off, carts extend beyond the edges of the canvas, and no single horse is shown completely. This cropped viewpoint gives the impression of a fleeting moment captured in motion. Degas also balanced the foreground activity with a detailed background of distant houses and rolling hills, demonstrating his mastery of depth and composition. The jockeys wear brightly colored racing silks that add contrast and energy to the scene.

Degas is perhaps best known for his paintings of ballet dancers. In works such as *Ballet Rehearsal* (11.8.12), he portrayed dancers practicing, stretching, and waiting backstage rather than idealized performances. He often composed his paintings with large empty areas of floor or wall, pushing the dancers to one side and creating unconventional viewpoints influenced partly by photography and Japanese prints. The dancers' white tutus are painted with soft, flowing **brushstrokes** that suggest movement and lightness. In contrast, the ballet director stands near the center in dark clothing, visually separating him from the dancers. Degas carefully observed the different ballet positions of each dancer, capturing natural variations in posture and movement rather than creating perfectly synchronized figures. His work combined classical draftsmanship with modern composition, making him one of the most innovative artists associated with **Impressionism**.

Figure \(\PageIndex{11}\): *At the Races* (Public Domain)

Figure \(\PageIndex{12}\): *The Rehearsal Onstage* (1874, pastel, brush and ink drawing, paper, 53.3 x 72.4 cm) (Public Domain)

Degas, The Dance Class

Edgar Degas, The Dance Class, oil on canvas, 1874 (Metropolitan Museum of Art)

[1] Retrieved from https://www.hermitagemuseum.org/digi...n/28178?lng=en

11.9: Art Nouveau (1890 – 1914)

Definition: Term

- **Art Nouveau** – An international art and design movement from about 1880 to 1905 known for decorative flowing lines and organic forms inspired by nature.
- **Decorative arts** – Artistic objects that are both beautiful and functional, such as furniture, jewelry, glass, and textiles.
- **Industrial Revolution** – A period of rapid industrial and technological growth that transformed manufacturing, cities, and society.
- **Craftsmanship** – Skilled handmade work emphasizing quality, detail, and artistic ability.
- **Arts and Crafts guilds** – Organizations formed to train artisans and promote handmade artistic production.
- **Ornamental** – Highly decorative in appearance.
- **Asymmetrical** – A design arrangement that is balanced without identical sides or mirror images.
- **Organic forms** – Shapes inspired by nature, including plants, flowers, insects, and flowing natural lines.
- **Linear lines** – Long, flowing lines used to create movement and rhythm in a design.
- **Mass-produced** – Items made quickly and in large quantities by machines or factories.
- **Architecture** – The art and design of buildings and structures.
- **Artisan** – A skilled craftsperson who creates handmade objects.
- **Stained glass** – Colored glass arranged into decorative patterns or images, often used in windows.
- **Textiles** – Fabrics and woven materials used for clothing, furniture, and decoration.

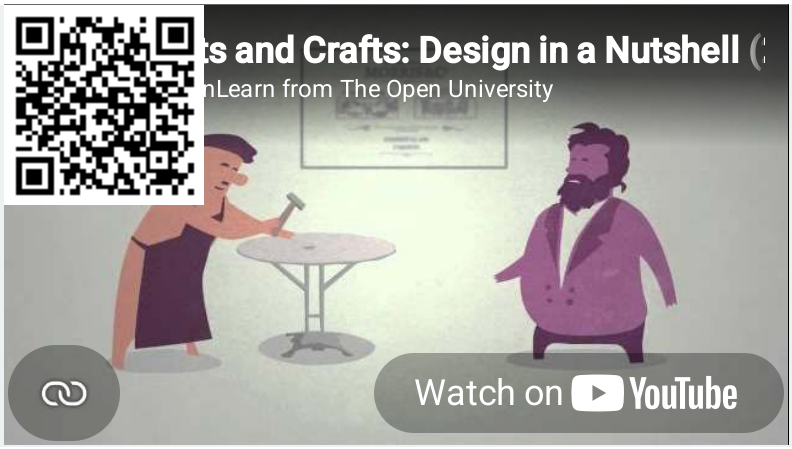
Art Nouveau was an international artistic movement that flourished between 1880 and 1905 and emphasized decorative arts, fine craftsmanship, and elegant organic design. The movement developed partly as a response to the social and economic changes brought by the **Industrial Revolution**. As industrialization expanded, large numbers of people moved from rural farming communities into crowded cities, where poor living conditions and the loss of traditional ways of life created dissatisfaction with mass-produced industrial goods.

In reaction to machine-made products, many artists and designers returned to handcrafted methods, believing handmade objects possessed greater beauty, quality, and individuality. Numerous **Arts and Crafts guilds** formed to train artisans and promote traditional craftsmanship. Art Nouveau became known for its highly decorative and ornamental style. Designs often featured flowing, asymmetrical lines that curved and twisted across surfaces in graceful patterns. Artists drew inspiration directly from **nature**, incorporating forms such as flowers, vines, leaves, insects, birds, and butterfly wings into their work. Organic growth and movement became central elements of the style.

The Art Nouveau aesthetic appeared across many different artistic mediums, including painting, printmaking, architecture, stained glass, furniture, ceramics, textiles, and jewelry. Artists frequently combined multiple materials and intricate decorative details to create unified and visually elegant designs. Through its emphasis on beauty, craftsmanship, and natural forms, Art Nouveau helped bridge the transition from 19th-century decorative arts to modern design movements of the 20th century.

Arts and Crafts: Design in a Nutshell

This influential design movement began because people got fed up with machines. The Arts and Crafts movement promoted economic and social reform, sticking up for ordinary workers and craftspeople.



William Morris

William Morris was one of the leading figures of the **Arts and Crafts Movement** and an important influence on **Art Nouveau** design. Born into a wealthy family in London, Morris studied at Oxford, where he developed a strong interest in art, literature, and craftsmanship. After marrying, he became dissatisfied with the poor quality and mass-produced furniture and textiles created during the **Industrial Revolution** and decided to produce handmade objects instead. Morris founded his own decorative arts company based on the belief that beautiful objects should be carefully crafted by hand rather than manufactured by machines. His philosophy opposed the growing industrial emphasis on efficiency and mass production. Through his work, Morris helped revive traditional handicrafts and promoted the idea that fine art and design should be accessible rather than limited to wealthy elites.

His company became famous for producing richly patterned textiles and wallpapers inspired by nature. In *Snakeshead* (11.9.1), Morris created a repeating floral design based on natural plant forms. He carefully repeated shapes and colors throughout the pattern to create rhythm and harmony. Morris spent months experimenting with dyes in order to achieve the exact colors he wanted. Unlike woven fabrics, *Snakeshead* was produced as a printed textile and often used as wallpaper. In *Peacock and Dragon* (11.9.2), Morris designed an elaborate wool textile featuring decorative birds and organic forms. He preferred using natural materials such as plant and root-based dyes instead of the synthetic chemical dyes commonly used in industrial production. Through his emphasis on craftsmanship, natural beauty, and handmade design, Morris became one of the most influential designers of the late 19th century. "Morris sought to produce textiles that could function as he imagined medieval wall hangings had, bringing warmth to stone-cold rooms. Boldly designed with soothing colors in thick wool, *Peacock and Dragon* is the closest Morris came to achieving this ideal."[2]

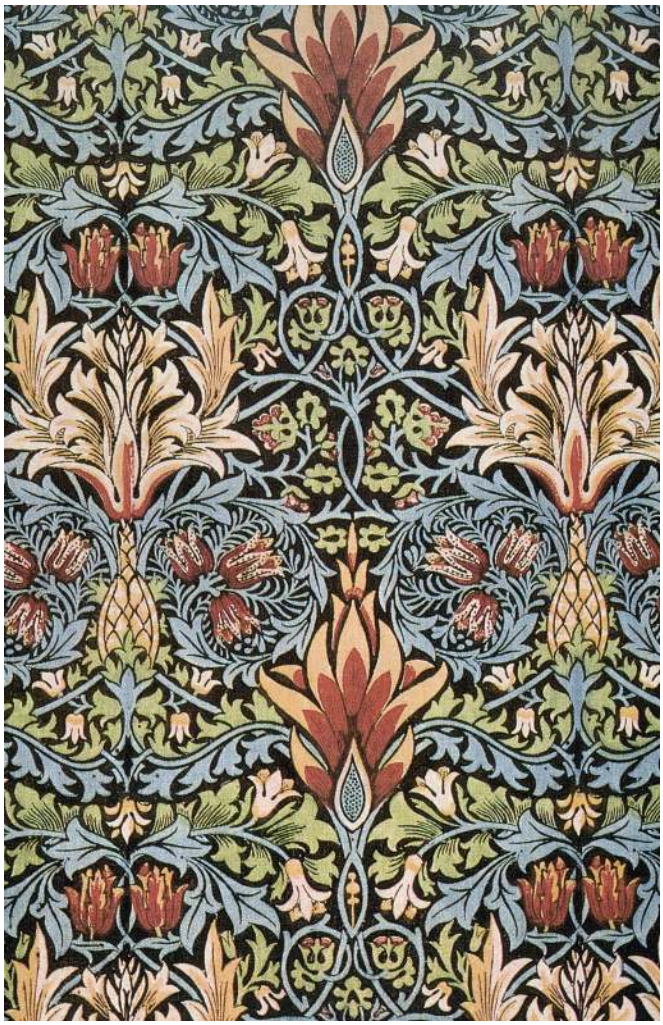


Figure \(\PageIndex{1}\): *Snakeshead* (Public Domain)

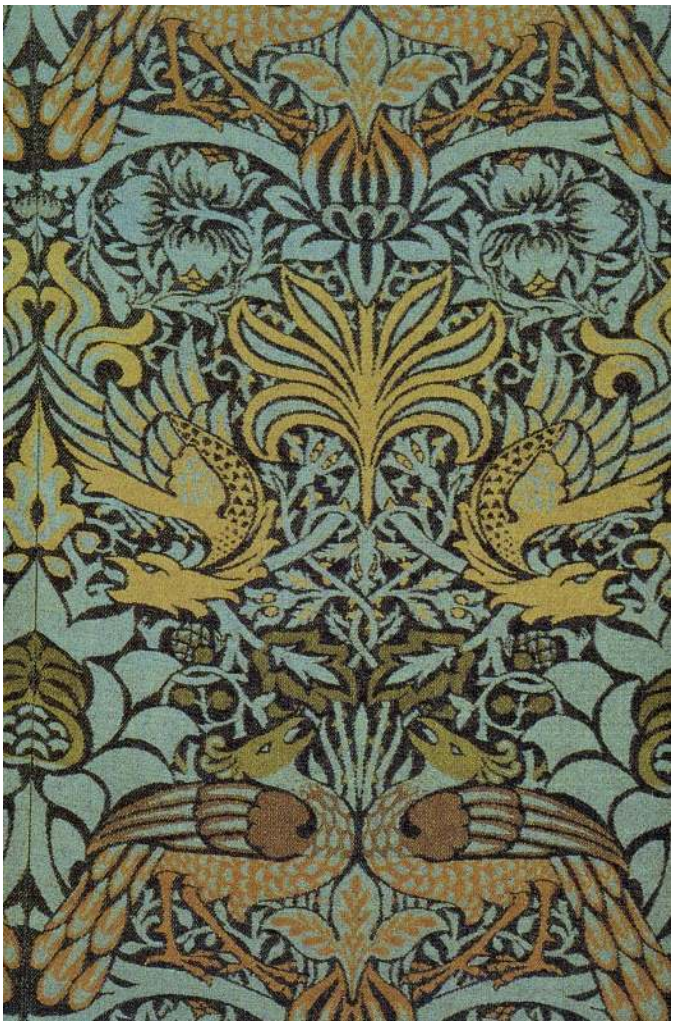


Figure \(\PageIndex{2}\): *Peacock and Dragon* (1878, wool) (Public Domain)

Louis Comfort Tiffany

Louis Comfort Tiffany began his artistic career as a painter and interior designer before becoming famous for his innovative work with glass. By the 1890s, Tiffany had become one of the most recognized American artists and designers, especially for his stained-glass windows, lamps, and decorative objects associated with **Art Nouveau**. One of Tiffany's earliest experiments involved creating a stained-glass window for his own studio using unconventional techniques. Instead of relying on traditional methods of painting color onto glass, Tiffany experimented with textures, layered colors, rough-cut surfaces, and iridescent effects. He embedded tiny fragments of glass to create a sparkling "confetti" appearance and developed glass surfaces that resembled marble through swirling color variations.

Tiffany later invented **favrile glass**, a new type of glass in which color was built directly into the material itself. By adding metallic oxides into molten glass, he created shimmering **iridescent** surfaces that reflected changing colors when exposed to light. Because the color existed within the glass rather than painted on its surface, the material retained its natural transparency and allowed light to pass through more brilliantly. In *Magnolias and Irises* (11.9.3), Tiffany used a wide variety of colored and textured glass to create a richly decorative memorial window. The magnolia flowers were formed from folded **opalescent glass**, while the irises displayed multiple shades and hues. The upper white glass sections demonstrate Tiffany's "confetti" technique, where tiny pieces of embedded glass create additional sparkle and texture. Large rough-cut pieces of glass add depth and dimensionality to the composition. Through his experimentation with color, texture, and light, Tiffany revolutionized stained-glass design and helped elevate decorative arts into a major form of artistic expression during the late 19th and early 20th centuries.

Figure \(\PageIndex{3}\): Magnolias and Irises (1908, leaded favrile glass, 153 x 106.7 cm) (Public Domain)

Alfonse Mucha

Alphonse Mucha was one of the most famous illustrators and designers associated with **Art Nouveau**. Born in a region that is now part of the Czech Republic, Mucha showed artistic and musical talent from an early age. He later moved to Paris, where he became interested in illustration after meeting established artists and publishers. Through his work creating posters, advertisements, decorative panels, and product labels, Mucha gained international recognition for his distinctive artistic style. Mucha's posters became famous for their vivid colors, flowing lines, floral patterns, and elegant depictions of women. In works such as *Poetry* (11.9.4), he combined decorative garden motifs with graceful female figures framed by swirling, organic designs. His compositions often resembled the theatrical posters of Henri de Toulouse-Lautrec, but Mucha added more flowing curves and decorative natural forms characteristic of Art Nouveau.

In *Bieres de la Meuse* (11.9.5), Mucha portrayed an elongated female figure surrounded by flowers and ornamental lines. The title curves above her head while floral forms flow through her hair and clothing, creating a unified decorative composition. Her calm and slightly amused expression reflects the elegant and idealized beauty common in Mucha's illustrations. Mucha's use of organic forms, flowing **linear lines**, decorative patterns, and idealized women became defining features of Art Nouveau and continue to influence graphic design and illustration today.

Figure \(\PageIndex{4}\): *Poetry* (Public Domain)

Figure \(\PageIndex{5}\): *Bieres de la Meuse* (Public Domain)

Alphonse Mucha: Art Nouveau Visionary and the NC Museum of Art

Czech-born Alphonse Mucha (1860–1939) was one of the most celebrated artists in Paris at the turn of the 20th century. As an influential force behind the art nouveau movement, he created sumptuous posters and advertising—promoting such everyday products as cigarette papers and tea biscuits—that transformed the streets of Paris into open-air art exhibitions. Alphonse Mucha: Art Nouveau Visionary celebrates the Mucha Trust Collection's first major U.S. tour in 20 years, featuring a vast array of posters, illustrations, ornamental objects, and rarely seen sculpture, photographs, and self-portraits. Additional works from the NCMA's collection highlight the American interpretation of the European aesthetics that influenced Mucha as well as his close friendship with French sculptor Auguste Rodin.

Gustav Klimt

Gustav Klimt was an Austrian artist associated with **Art Nouveau** and the Vienna Secession movement. Born in Austria, Klimt studied at the Vienna School of Decorative Arts and initially worked painting murals in a traditional classical style for public buildings in Vienna. Around the age of thirty-five, however, he joined other artists who wanted to break away from academic traditions and create more modern and experimental art independent of established standards. Although Klimt painted landscapes, he became most famous for his richly decorative figure paintings. In 1894, he received a commission to create murals for the University of Vienna. The paintings were criticized as radical and pornographic because of their symbolic imagery and sensual themes, and they were never installed in the university. Tragically, the murals were later destroyed by retreating Nazi SS forces during World War II.

After the controversy in Vienna, Klimt entered what is often called his **"golden phase."** Inspired by the shimmering **Byzantine mosaics** he saw while traveling in Italy, Klimt began incorporating **gold leaf** into his paintings. This style brought him great success and attracted wealthy patrons. In *The Kiss* (11.9.6), one of Klimt's most famous paintings, a couple embraces within a glowing field of gold. The man's robe is decorated with rectangular patterns, while the woman's dress contains circular floral forms, creating visual contrast between masculine and feminine shapes. The woman's face is fully visible while the man's face disappears into the kiss, increasing the sense of intimacy and mystery. The gold leaf, layered patterns, and flower-filled setting combine sensuality with decorative beauty. In *Portrait of Adele Bloch-Bauer* (11.9.7), Klimt blended realistic facial features and hands with elaborate geometric and mosaic-like designs made from gold and silver leaf. The chair, dress, and background dissolve into decorative patterns that shimmer across the surface of the painting. By combining realism with ornamentation, Klimt created luxurious and visually complex works that became defining masterpieces of Art Nouveau and early modern art.

Figure \(\PageIndex{6}\): *The Kiss* (1907-1908, oil and gold leaf on canvas, 180 x 180 cm) (Public Domain)

Figure \(\PageIndex{7}\): *Adele Bloch-Bauer's Portrait* (1907, oil, silver, and gold on canvas, 138 x 138 cm) (Public Domain)

Antoni Gaudi

Antoni Gaudí was born in the Catalonia region of Spain and became one of the most innovative architects associated with **Art Nouveau**. As a child, Gaudí suffered from poor health, which limited his physical activity but allowed him to spend long periods observing nature. These observations strongly influenced his later architectural designs, which often incorporated flowing organic forms inspired by plants, animals, and natural structures. Gaudí studied architecture and the humanities, quickly gaining recognition for his creative abilities and receiving important commissions. A wealthy patron helped support his career, allowing him to experiment with highly original architectural ideas. In 1883, Gaudí was placed in charge of constructing the cathedral **La Sagrada Família** (11.9.8) in Barcelona. Although earlier plans already existed, Gaudí completely redesigned the structure according to his own artistic vision.

By 1910, Gaudí devoted himself entirely to the cathedral, eventually living in the workshop on-site while overseeing construction. Deeply religious, he viewed the cathedral as both a spiritual and artistic mission. When he died in 1926, the building remained unfinished, and construction has continued into the present day. One of the first major sections Gaudí designed was the **Nativity Façade** (11.9.8), richly covered with ornate sculptures and decorative carvings. The façade faces east toward the rising sun and contains three large porticos symbolizing faith, hope, and charity. Four towering steeples are dedicated to saints and rise above the elaborate surface decorations. Gaudí intended the Nativity Façade to serve as a guide for future architects and artisans so they could continue constructing the cathedral according to his vision after his death. Through his use of organic forms, intricate ornamentation, and symbolic design, Gaudí transformed architecture into a dramatic and highly imaginative artistic experience.

The ceiling of Sagrada Família (11.9.10) is one of the most breathtaking examples of modern architecture and was created to resemble a forest canopy. Gaudí designed the massive columns to branch outward like trees, giving visitors the feeling of standing within a sacred forest rather than a traditional church. The ceiling is filled with intricate geometric shapes, stars, and skylights that

allow natural light to flow throughout the basilica. Colorful light from the stained-glass windows reflects across the ceiling and changes throughout the day, creating a spiritual and almost otherworldly atmosphere. Gaudí believed nature was the perfect source of inspiration for architecture, and the ceiling symbolizes heaven, creation, and the harmony between nature and religion. The extraordinary height, detailed patterns, and innovative engineering make the ceiling one of the most admired features of the basilica.

Figure \(\PageIndex{8}\): Sagrada Familia (90 x 60 x 45 meters) (CC BY-SA 4.0)

Figure \(\PageIndex{9}\): Nativity façade (Public Domain)

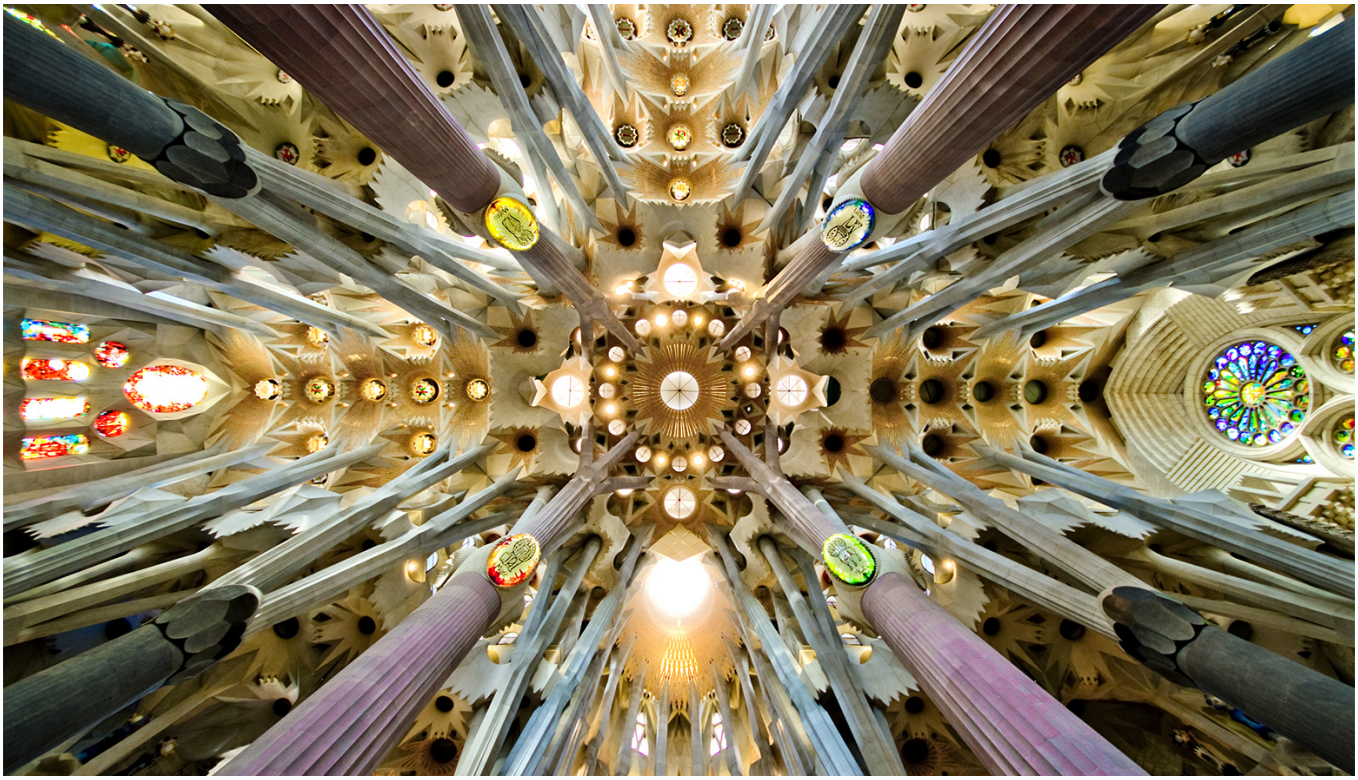


Figure \(\PageIndex{10}\): Interior Ceiling (CC BY-SA 2.0)

[1] Retrieved from https://www.vam.ac.uk/articles/intro...d8Fj6DYVAy4Z2R

[2] Retrieved from https://www.clevelandart.org/art/1953.330

11.10: Photography (Since 1826)

Definition: Term

- **Photography** – The process of capturing images by recording light onto a light-sensitive surface or digital sensor.
- **Light-sensitive material** – A substance that reacts to light and records an image, such as photographic film or coated metal plates.
- **Photographic film** – A thin material coated with chemicals that capture images when exposed to light.
- **Digital image sensor** – An electronic device in digital cameras that records light and converts it into an image.
- **Exposure** – The amount of time light is allowed to reach a photographic surface or sensor.
- **Pewter plate** – A smooth metal plate made from a tin alloy used in some early photographic processes.
- **Visual documentation** – The recording of people, places, or events through images.
- **Scientific discovery** – New knowledge or inventions developed through scientific research and experimentation.
- **Image capture** – The process of recording a visual scene through photography or other imaging technology.
- **National Geographic** – A media organization known for publishing photography and articles about nature, science, and world cultures.
- **Photographic process** – The methods and techniques used to create photographs.
- **Visual reality** – The appearance of the world as seen and recorded through images.
- **19th century** – The time period from 1800 to 1899 marked by major industrial, scientific, and artistic changes.

Photography is the process of capturing an image at a specific moment in time by recording light onto a **light-sensitive material** such as photographic film or a digital image sensor. The invention of photography during the early 19th century became one of the most important scientific and artistic developments of the modern world, permanently changing how people viewed and documented reality.

Before photography, most visual information came from paintings, drawings, or printed illustrations. Photography allowed people to see accurate images of distant places, cultures, landscapes, and events for the first time. Publications such as National Geographic later expanded this impact by sharing photographs from around the world, introducing audiences to unfamiliar environments, wildlife, and societies. The first surviving photograph was created by Nicéphore Niépce, a French chemist and inventor. Niépce produced the image using a polished pewter plate coated with light-sensitive material and exposed it to sunlight for approximately eight hours. The resulting image was faint and hazy, yet it marked the beginning of photography as a new way to record and preserve visual reality.

The familiar phrase, “A picture is worth a thousand words,” reflects photography’s ability to communicate information, emotion, and experience instantly through a single image.

Louis Daguerre

Louis Daguerre was a French Romantic artist and inventor who developed the **daguerreotype**, one of the earliest successful photographic processes. His invention created highly detailed and realistic images by exposing light onto a polished silver-plated copper sheet, permanently recording the scene. Early daguerreotypes required very long **exposure** times, sometimes lasting around ten minutes. Because people and objects moving during the exposure would blur or disappear, only stationary subjects were usually visible in the final image. As a result, early photographs often appeared empty or motionless.

In *Boulevard du Temple* (11.10.1), Daguerre positioned his camera overlooking a busy Paris street in 1838. Although the boulevard was normally crowded with pedestrians and traffic, the long exposure time caused most moving figures to vanish from the image. One of the only visible people is believed to be a man standing still while having his shoes polished, remaining motionless long enough to appear in the photograph. Daguerre’s invention revolutionized visual culture by introducing a new method of accurately recording reality, laying the foundation for the future development of modern photography.

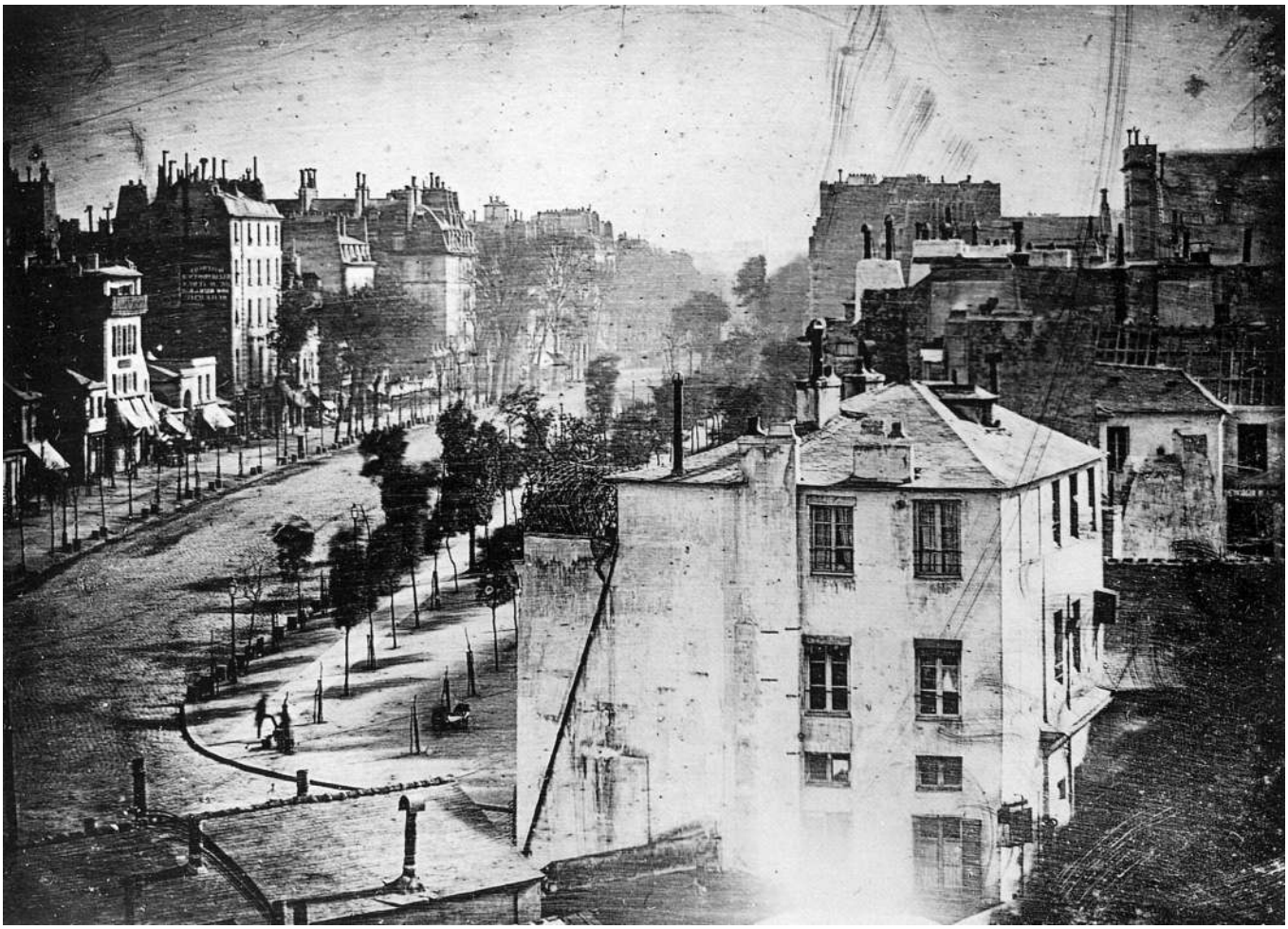


Figure \(\PageIndex{1}\): *Boulevard du Temple* (1838) (Public Domain)

Early Photography: Making Daguerreotypes

The daguerreotype is a one-of-a-kind, highly detailed photographic image on a polished copper plate coated with silver. It was the first popular photographic medium and enjoyed great success when it was introduced in 1839.

Eadweard Muybridge

Eadweard Muybridge became one of the most important early photographers to study movement through sequential photography. After arriving in San Francisco in 1867, Muybridge gained recognition for his photographs of Yosemite National Park and the landscapes surrounding San Francisco Bay. He also documented the construction of the San Francisco Mint by taking photographs every day and creating an early form of **time-lapse** photography that recorded the building's progress over time. Muybridge later met Leland Stanford, the former governor of California, railroad tycoon, and racehorse owner. Stanford hired Muybridge to solve a long-debated question about horse movement: during a gallop, does a horse ever lift all four feet off the ground at the same time?

To answer the question, Muybridge designed an innovative photographic experiment using multiple cameras lined along a racetrack fence. As the horse ran past, the cameras were triggered in sequence, capturing rapid images of each stage of motion. He also placed lines on the ground and background to help analyze movement more accurately. The resulting series, *The Horse in Motion* (11.10.2), proved that a galloping horse does indeed lift all four feet off the ground simultaneously during part of its stride. Muybridge's experiments transformed the scientific study of motion and became an important foundation for the later development of film and motion pictures.

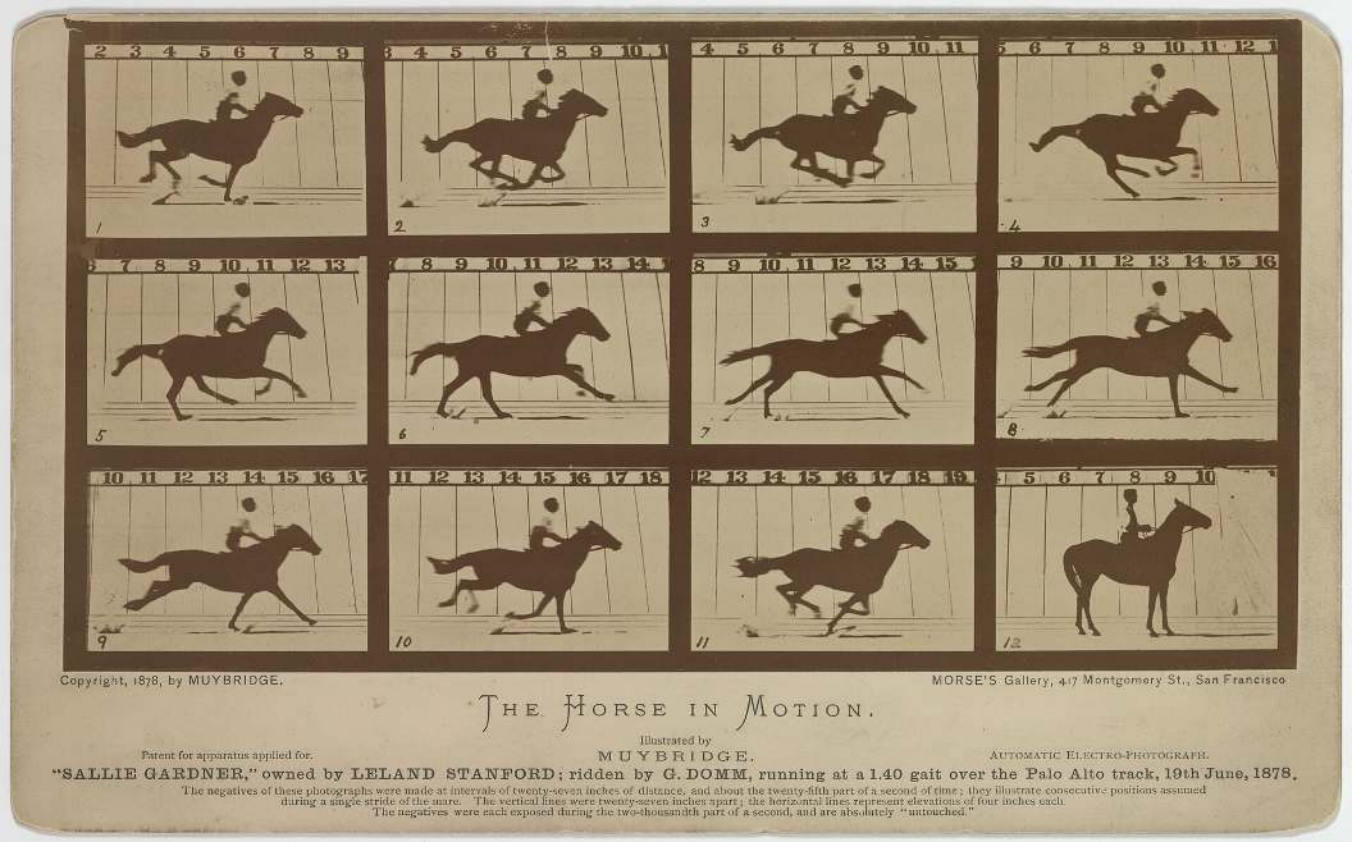


Figure \(\PageIndex{2}\): *The Horse in Motion* (Public Domain)

The horse in motion

The horse in motion (1878) Eadweard Muybridge

e horse in motion (Eadweard Mu
nnel Stop
Watch on YouTube

11.11: Conclusion

The 19th century was a period of extraordinary artistic transformation as artists around the world experimented with new ideas, technologies, materials, and techniques. Movements such as **Romanticism**, **Realism**, **Impressionism**, **Post-Impressionism**, **Art Nouveau**, the **Hudson River School**, the **Shanghai School of Art**, and Japanese **Ukiyo-e** each reflected changing social conditions and new ways of seeing the world. Artists moved beyond strict academic traditions and began exploring emotion, movement, light, color, symbolism, and modern life.

Technological developments, including portable paint tubes, industrial pigments, woodblock printing innovations, and photography, encouraged artists to work outdoors, study movement, and capture fleeting moments in time. At the same time, cultural exchange between Europe, America, China, and Japan expanded artistic influences and inspired new visual styles. Artists such as Claude Monet, Vincent van Gogh, Paul Cézanne, Katsushika Hokusai, and Gustav Klimt created works that remain among the most recognizable images in art history today.

Across the different movements, artists experimented with **brushstrokes**, color, composition, and perspective in distinctive ways. The Hudson River School emphasized detailed realism and dramatic skies to express the sublime power of nature, while Impressionists used loose brushwork and changing light to capture temporary moments. Post-Impressionists pushed color and emotion further, creating expressive and symbolic imagery. Artists in the Shanghai School and Edo Japan blended traditional methods with innovation, while Art Nouveau artists incorporated flowing organic forms inspired by nature.

The sky often became a major expressive element in landscape painting, helping establish mood, atmosphere, and emotional intensity. Whether through the glowing skies of the Hudson River School, the atmospheric weather effects in Ukiyo-e prints, or the swirling night skies of Van Gogh, artists used space, light, and color to guide the viewer's emotional response.

Photography also transformed visual culture by allowing artists and the public to study movement, reality, and distant places with unprecedented accuracy. The invention of photography influenced painting composition, cropping, perspective, and the study of motion, helping move art into the modern era.

Together, these artists and movements reshaped the future of art. Their experimentation with color, emotion, realism, symbolism, movement, and design opened the door for the modern art movements of the 20th century and permanently changed how artists interpreted the world around them.

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CHAPTER OVERVIEW

12: The Modern Art Movement (1900 CE – 1930 CE)

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12.2: American Modernism (1900 – 1930s)
12.3: Fauvism (1900 – 1935)
12.4: Expressionism (1905 – 1930)
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12.10: Conclusion

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12.1: Overview

The early 20th century was marked by global conflict, including world wars and civil wars, creating political instability and social upheaval that strongly influenced the direction of art. National borders and territories were repeatedly altered, especially after the First and Second World Wars, and artists responded to these dramatic changes by rejecting traditional artistic rules and searching for new ways to express modern life.

The **Modern Art Movement** became a period of artistic freedom and experimentation in which artists focused less on realistic representation and more on interpretation, emotion, and personal vision. Rather than painting exactly what they saw, modern artists explored inner emotions, abstract ideas, psychological experiences, and symbolic meanings. Distorted figures, exaggerated forms, unusual colors, and fragmented compositions became powerful artistic and political statements that challenged traditional concepts of beauty and realism.

Building on the innovations of **Post-Impressionism**, modern artists embraced experimentation with **brushstrokes**, vibrant color, overlapping forms, and abstract compositions. Artists sought to evoke emotion and intellectual response instead of creating photographic realism. New artistic techniques also emerged, including **collage**, in which fragmented pieces of paper, fabric, or other materials were layered into artworks to create texture and complexity.

Industrialization continued to influence art through the development of synthetic materials such as plastics, chemical dyes, new types of paper, textiles, and innovative architectural materials. Artists increasingly experimented with nontraditional media and modern industrial products.

Chapter 12, *The Modern Art Movement (1900 CE–1930 CE)*, explores artists who expanded the meaning of art by emphasizing imagination, abstraction, social commentary, cultural identity, and innovation. Some artists rebelled against racism and social injustice, others celebrated new ideas about identity and modern life, while architects and designers created revolutionary forms suited to the rapidly changing modern world.

Figure \(\PageIndex{1}\): Caldor (CC BY-SA 2.0)

12.2: American Modernism (1900 – 1930s)

Definition: Term

- **American Modernism** – A 20th-century artistic and cultural movement in the United States focused on innovation, modern life, and new forms of expression.
- **Modernism** – A movement that rejected traditional artistic rules and embraced experimentation, abstraction, and modern ideas.
- **Realism** – An artistic style that attempts to represent subjects accurately and truthfully.
- **Abstraction** – Art that simplifies or alters realistic forms to emphasize shapes, colors, and ideas.
- **Middle class** – Social groups between the wealthy upper class and working class, often associated with economic growth and urban life.
- **Industrialization** – The expansion of factories, machines, and modern industry within society.
- **Urbanization** – The growth and development of cities and urban environments.
- **Emotional expression** – The communication of feelings and mood through artistic elements such as color, line, and form.
- **Geometric composition** – The arrangement of shapes and forms using geometric patterns and structures.
- **Still life** – A work of art depicting arranged objects such as fruit, flowers, or household items.
- **Modern architecture** – Architectural styles emphasizing simplicity, new materials, and functional design suited to modern life.
- **Innovation** – The introduction of new ideas, methods, or artistic techniques.
- **Harmony** – A pleasing arrangement of colors, shapes, or forms that creates visual balance and unity.

American Modernism was a cultural and artistic movement in the United States that reflected the rapid changes, optimism, and social transformation of the early 20th century. As the middle class continued to grow, artists, architects, and designers explored new ways to represent modern life and the evolving identity of America. Modernism embraced innovation in painting, sculpture, architecture, and design, focusing on the experiences of life in the modern world. American artists portrayed a wide variety of subjects, including industrial development, urban city life, rural landscapes, still lifes, factories, technology, and everyday activities. Rather than emphasizing strict **realism**, many modernist artists focused on emotional expression, simplified forms, bold design, and the harmony of shapes and colors.

American Modernists experimented with abstraction, geometric composition, and expressive techniques to explore the complexity and diversity of American society. Their work reflected both excitement about technological progress and concern about the social changes brought by industrialization and urban growth. Through these innovations, American Modernism helped establish a distinct national artistic identity while connecting American art to the larger international modern art movement.

Modernism wasn't just a style. It was a way of thinking, a way of life. Hear curator Jessica Smith talk about the era that inspired "Modern Times: American Art 1910–1950."

Georgia O'Keeffe

Georgia O'Keeffe became one of the most important artists associated with **American Modernism** and helped move American art toward **abstraction** and personal expression. As modern homes and lifestyles changed during the 20th century, artists like O'Keeffe created works that departed from traditional realism and explored simplified forms, emotional interpretation, and self-reflection. O'Keeffe experimented with color, scale, and composition to develop her distinctive artistic style. She became especially known for her large-scale close-up paintings of flowers, leaves, bones, and natural forms. By enlarging ordinary objects and isolating details, she transformed familiar subjects into highly abstract and powerful images.

Her paintings often focused on extreme close-up views of flowers, making petals and organic shapes fill the canvas in bold, flowing forms. O'Keeffe also painted desert landscapes, trees, and combinations of animal skulls and flowers, creating symbolic connections between life, death, and the natural world. Through simplified forms and expressive color, she encouraged viewers to look at nature in new and deeply personal ways. O'Keeffe's innovative style helped establish a uniquely American form of modern art and made her one of the most influential painters of the 20th century. "I found I could say things with color and shapes that I couldn't say any other way."[1]

Georgia O'Keeffe eventually grew tired of life in New York City and began traveling to New Mexico, where she became deeply inspired by the desert landscape, dramatic cliffs, and animal bones scattered across the dry terrain. The Southwest profoundly influenced her work and became one of the central subjects of her paintings. In *Cow's Skull: Red, White, and Blue* (12.2.1), O'Keeffe painted a bleached animal skull she encountered in the desert. For O'Keeffe, the bones symbolized the enduring beauty and strength of the Southwest rather than death alone. She positioned the skull against the red, white, and blue colors of the American flag, creating a symbolic tribute to the spirit and identity of America. The simplified forms and bold colors reflect the influence of **American Modernism** and **abstraction**.

In *Ram's Head, White Hollyhock, and Little Hills* (12.2.2), O'Keeffe combined several of her favorite Southwestern subjects into one composition: flowers, desert landscapes, and animal skulls. The ram's skull and white flower float dramatically against a swirling sky, while the mountains and cliffs stabilize the background. The cliffs resemble formations that frequently appeared in her New Mexico landscapes. Through these unusual combinations of natural elements, O'Keeffe transformed ordinary desert objects into symbolic and emotionally powerful images, emphasizing the mystery, beauty, and spiritual quality of the American Southwest.

Figure \(\PageIndex{1}\): *Cows Skull: Red, White, and Blue* (1931, oil on canvas, 101.3 x 91.1 cm) (CC BY-NC 2.0)

Figure \(\PageIndex{2}\): *Ram's Head White Hollyhock and Little Hills* (1935, oil on canvas, 76.2 x 91.44 cm) (Public Domain)

In *Blue and Green Music* (12.2.3), Georgia O'Keeffe explored the relationship between music, emotion, and visual form through **abstraction**. Using cool colors from the blue and green side of the color wheel, O'Keeffe created flowing shapes and rhythmic movement that suggest the emotional experience of listening to music rather than depicting a realistic subject. The painting translates sound and feeling into color, line, and form, demonstrating how modern artists sought to express inner emotion and

sensation visually. *Red Canna* (12.2.4) became one of O'Keeffe's earliest and most famous close-up flower paintings. By enlarging the flower until it filled the canvas, she transformed an ordinary natural form into an abstract composition of curving lines and vibrant red color. O'Keeffe often used extreme close-up views and bold singular colors in many of her flower paintings, encouraging viewers to observe details they might normally overlook.

Some viewers interpreted these enlarged flower images as erotic because the abstracted forms resembled parts of the female body. Although critics frequently associated her work with female sexuality, O'Keeffe herself emphasized that she intended to make people slow down and truly look at the beauty and structure of flowers and nature. Through scale, color, and abstraction, she challenged traditional ways of seeing everyday objects. O'Keeffe stated, "Well – I made you take time to look at what I saw and when you took time to really notice my flower you hung all your own associations with flowers on my flower and you write about my flower as if I think and see what you think and see of the flower – and I don't."[2] She did not care about the realistic pose, color, or shape of the flower and stated, "I paint because color is significant."[3]

Figure \(\PageIndex{3}\): *Blue and Green Music* (c. 1919-1921, oil on canvas, 58.4 x 48.3 cm) (Public Domain)

Figure \(\PageIndex{4}\): *Red Canna* (1924, oil on canvas, 73.7 x 45.7 cm) (Public Domain)

How to see more and care less: The art of Georgia O'Keeffe

Feeling disconnected from creating art within classical conventions, artist Georgia O'Keeffe began experimenting with abstract drawings that defied easy classification. Using the shapes and rhythms of nature to capture her internal world, these experiments became the cornerstone of the movement known as American Modernism. Iseult Gillespie explores the works of the elusive painter and sculptor.

Edward Hopper

Edward Hopper was an American realist painter known for his quiet and emotionally powerful scenes of modern American life. Born in New York, Hopper later traveled to Europe, where he studied the work of **Impressionist** and **Post-Impressionist** artists. Although influenced by European painting, Hopper developed a distinctly American style centered on urban isolation, silence, and everyday experiences. In *The Girl at a Sewing Machine* (12.2.5), Hopper created a classic **genre scene** portraying an ordinary moment of modern life. The woman sits alone in quiet concentration, illuminated by light entering the room. Hopper used strong contrasts of light and shadow to create mood and psychological depth rather than dramatic action.

Hopper's *New York City Restaurant* (12.2.6) similarly reflects his fascination with urban solitude. His paintings often feature quiet streets, empty rooms, nighttime settings, and sharply angled shadows stretching across buildings and figures. These shadows became one of Hopper's defining visual elements, helping create feelings of stillness, separation, and emotional distance. Before becoming a full-time painter, Hopper studied illustration and graphic design, skills that influenced his careful compositions and simplified forms. Many of his paintings depict nighttime scenes with only a few isolated figures, intensifying the sense of loneliness and silence. Faces are often partially hidden or expressionless, allowing viewers to project their own emotions onto the scene. Through his use of light, shadow, and sparse compositions, Hopper captured the psychological atmosphere of modern American life and became one of the most influential American realist painters of the 20th century.

Figure \(\PageIndex{5}\): *Girl at a Sewing Machine* (1921) (Public Domain)

Figure \(\PageIndex{6}\): *New York City Restaurant* (1922, oil on canvas, 61 x 76.2 cm) (Public Domain)

"In place of meaningful interactions, the four characters inside the diner of Edward Hopper's *Nighthawks* (12.2.7) are involved in a series of near misses. The man and woman might be touching hands, but they aren't. The waiter and the smoking man might be conversing, but they're not. The couple might strike up a conversation with the man facing them, but somehow, we know they won't. And then we realize that Hopper has placed us, the viewer, on the city street, with no door to enter the diner, and yet in a position to evaluate each of the people inside. We see the row of empty counter stools nearest us. We notice that no one is making eye contact with anyone else. Up close, the waiter's face appears to have an expression of horror or pain. And then there is a chilling revelation: each of us is completely alone in the world."[4]

Edward Hopper used light as one of the most powerful elements in his paintings. In *New York City Restaurant* (x.x), the fluorescent light inside the restaurant becomes the only source of illumination, sharply contrasting with the surrounding darkness of the city at night. The bright interior light draws the viewer’s attention directly toward the isolated figures inside while emphasizing the emptiness and silence outside the building. Hopper carefully designed the angled windows so viewers can observe the people from multiple perspectives, almost as if watching a private moment from the street. The figures appear emotionally distant and disconnected despite sharing the same space, reinforcing Hopper’s recurring themes of solitude and isolation in modern urban life.

The painting also evokes a sense of nostalgia and the passing of time. The quiet late-night atmosphere, nearly empty streets, and stillness create the feeling of a fleeting moment suspended in time, reflecting aspects of American life that seem distant from the modern world today. Hopper’s use of light, shadow, and composition transforms an ordinary restaurant scene into a powerful reflection on loneliness, memory, and modern existence.

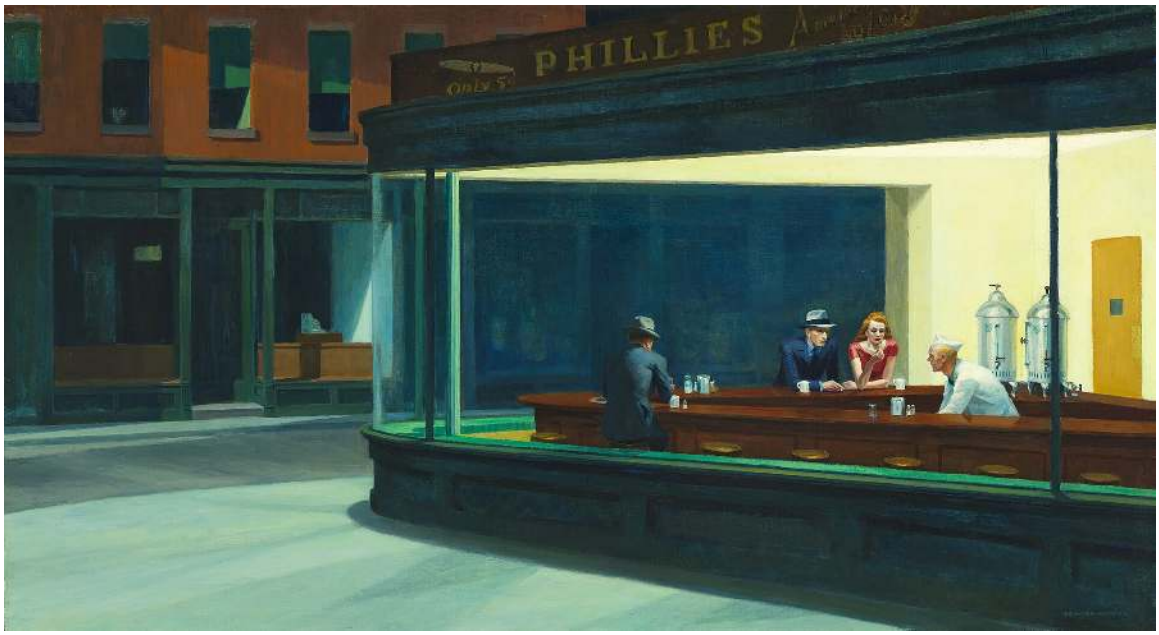
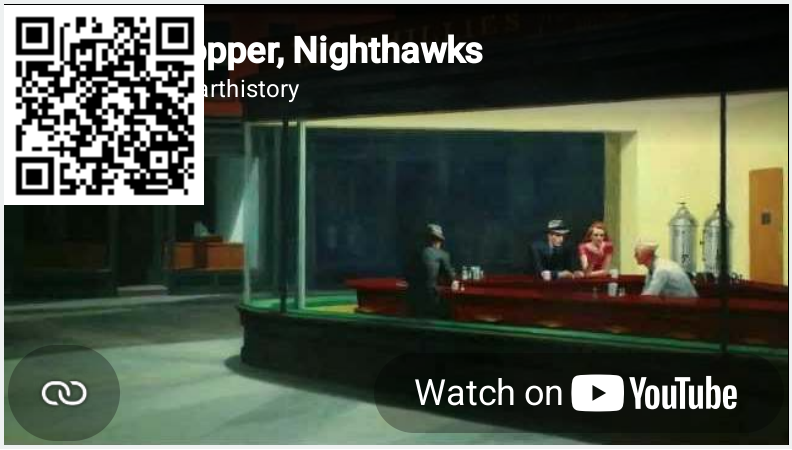


Figure \(\PageIndex{7}\): *Nighthawks* (1942, oil on canvas, 84.1 x 152.4 cm) (Public Domain)

Hooper, Nighthawks

Edward Hopper, Nighthawks, 1942, oil on canvas, 84.1 x 152.4 cm / 33-1/8 x 60 inches (The Art Institut of Chicago)



Thomas Hart Benton

Thomas Hart Benton was an important American Modernist painter known for depicting scenes of everyday life in the American Midwest. Born in Missouri, Benton developed a style strongly connected to rural America, agriculture, labor, and regional identity. His paintings often combined storytelling, dramatic movement, and symbolic imagery to reflect American culture and history.

In the large mural *Achelous and Hercules* (12.2.8), painted for a department store in the Midwest, Benton used a mythological story to symbolize the strength and productivity of American agriculture after World War II. The painting references the Greek myth of Hercules wrestling the river god Achelous, represented as a bull. Benton transformed the myth into a modern American allegory in which human strength and determination control powerful rivers in order to cultivate fertile farmland and produce abundance. The story also connects to the origin of the **cornucopia**, a symbol of prosperity and agricultural richness.

Benton filled the mural with intense colors, muscular forms, and energetic movement, giving the scene a dramatic and heroic quality. His exaggerated figures and flowing compositions reflect both **Regionalism** and elements of modern artistic experimentation. In *Madison Square Park in New York City* (12.2.9), Benton shifted from rural mythology to urban modern life. Using a more muted color palette and somewhat **surrealist** atmosphere, he portrayed the busy intersection surrounding Madison Square Park. People rush through the city streets while recognizable landmarks, including the Seward statue, the Eternal Light

Flagpole, and the Worth Obelisk, anchor the scene in a specific modern urban environment. Through both rural and urban subjects, Benton explored American identity during the 20th century, combining realism, symbolism, and dynamic composition to capture the energy and complexity of modern American life.

Figure \(\PageIndex{8}\): *Achelous and Hercules* (1947, tempera and oil on canvas, 159.7 x 264.1 cm) (Public Domain)

Figure \(\PageIndex{9}\): *Madison Square Park in New York City* (1920, oil on canvas) (Public Domain)

Henry Ossawa Tanner

Henry Ossawa Tanner became the first African American painter to achieve international recognition in the art world. Born in Pennsylvania, Tanner grew up in an educated and politically active family. His father was a bishop and college graduate, while his mother may have escaped enslavement in Virginia before settling in Pennsylvania. Tanner studied at the Pennsylvania Academy of the Fine Arts, where he was the only Black student at the time.

Tanner developed a strong interest in landscape and religious painting, but racism in the United States limited his opportunities. Seeking greater artistic freedom and acceptance, he moved to Paris, where he was welcomed by French artistic circles and the official **Salons**. In France, Tanner refined his style and became known for his masterful use of light and color. Tanner carefully studied the interaction of color and illumination, often using cool tones of indigo, turquoise, and blue, shades sometimes referred to as **"Tanner blues."** These colors created atmospheric and emotional effects within his paintings.

In *The Banjo Lesson* (12.2.10), Tanner portrayed an intimate scene between an older man and a child learning to play the banjo. Rather than presenting harmful stereotypes of Black Americans as entertainers, Tanner focused on a quiet family moment filled with dignity, warmth, and human connection. Soft natural light from an unseen source illuminates the room and highlights the figures against the lighter background. In *Spinning by Firelight* (12.2.11), Tanner again used light as a central artistic element. The glow of the fire becomes the primary source of illumination, creating warmth and atmosphere within the darkened room. Tanner's

paintings emphasized the humanity, emotion, and everyday experiences of his subjects while demonstrating his extraordinary skill with color, light, and composition. *"I was extremely timid and to be made to feel that I was not wanted, although in a place I had every right to be, even months afterwards, caused me sometimes weeks of pain."*[5]

Figure \(\PageIndex{10}\): *Banjo Players* (Public Domain)

Figure \(\PageIndex{11}\): *Spinning by Firelight* (Public Domain)

Henry Ossawa Tanner: A collection of 153 paintings

"Henry Ossawa Tanner was an African American painter. Belonging to a religious family, he developed an interest towards art when he was a teenager. His ability to depict landscapes and biblical themes earned him international fame. While on a tour to Europe, he visited Paris. What attracted him most in Paris was the freedom from racial discrimination of its artistic world. There he studied under renowned academic painters like Jean-Paul Laurens and Benjamin Constant for a brief period. His early paintings like ‘The Banjo Lesson’ and ‘The Thankful Poor’ reflect the influence of realist artist Thomas Eakins on him. His ‘The Banjo Lesson’ denotes sharing of knowledge through its simple drawing style. Most of his famous works are his depiction of the daily life of blacks and each of these art works represent the black people in a dignified manner. His visit to places like Tangier and the Holy Land inspired him to create paintings with religious themes. His paintings with religious themes include ‘Daniel in the Lions’ Den’. The painting of ‘The Disciples See Christ Walking on the Water’ mirrors his sense of photography. As an artist, he was the recipient of numerous prestigious honours like the Order of the Legion Honor."

Marion Hasbrouck Beckett

Marion Hasbrouck Beckett was an American artist born into wealth in New York after inheriting her father's fortune at a young age. Her financial independence allowed her to participate in influential artistic and social circles during the early 20th century. Beckett became known primarily as a portrait painter and was associated with important figures in American Modernism. She exhibited her work at the famous 291 Gallery, an influential modern art gallery owned by Alfred Stieglitz. The gallery played a major role in introducing modern European and American art to the United States and supported experimental artistic movements.

Beckett also became involved in a highly publicized scandal connected to her relationship with Edward Steichen, an important photographer and artist associated with Stieglitz and the modern art world. Edward Steichen's wife filed a lawsuit against Beckett, accusing her of having an affair with her husband and seeking significant financial damages. During the court proceedings, Beckett was portrayed as dressing in a highly artistic and theatrical style intended to attract attention. The scandal reflected the fascination and controversy surrounding artists, modern lifestyles, and changing social expectations during the early 20th century. Despite the notoriety of the case, Beckett remained part of the modern artistic community connected to the development of American Modernism.

Beckett often traveled to Voulangis, France, to visit artist Edward Steichen and his wife Clara. During these visits, Beckett painted portraits and became closely connected to the artistic and social circle surrounding the Steichens. At the outbreak of World War I in 1914, Beckett was staying at the Steichens' home when German soldiers were advancing toward the region. Historical accounts note that they evacuated only two days before German troops arrived in Voulangis. *Mrs. Eduard J. Steichen* (12.2.12) is a portrait painted around 1915 and the painting reflects Beckett's modernist portrait style through its soft brushwork, simplified forms, and elegant composition. Clara Steichen is portrayed with refinement and quiet sophistication, emphasizing mood and personality rather than strict realism. Beckett was part of Alfred Stieglitz's influential artistic circle and exhibited this portrait in the famous 1913 Armory Show, which introduced modern art to a wider American audience. The *Eduard J. Steichen* (12.2.13) portrait demonstrates the transition from traditional portraiture toward modernism through its looser handling of paint and focus on emotional presence rather than precise detail.

Figure \(\PageIndex{12}\): *Mrs. Eduard J. Steichen* (Public Domain)

Figure \(\PageIndex{13}\): *Eduard J. Steichen* (Public Domain)

[1] Retrieved from https://www.youtube.com/watch?v=4KQeu_mTYTQ

[2] Claxton, Mae Miller (Spring 2003). "'Untamable Texts': The Art of Georgia O'Keeffe and Eudora Welty". *Mississippi Quarterly*: 315–30. Retrieved from https://en.wikipedia.org/wiki/Red_Canna_(paintings)

[3] https://www.pafa.org/museum/collection/item/red-canna

[4] Retrieved from https://smarthistory.org/hopper-nighthawks/

[5] Retrieved from https://stellagracelyons.co.uk/the-f...ossawa-tanner/

12.3: Fauvism (1900 – 1935)

Definition: Term

- **Fauvism** – An early 20th-century art movement known for bold, unrealistic colors and expressive brushwork.
- **Avant-garde** – Innovative and experimental art that challenges traditional ideas and styles.
- **Les Fauves** – French for “the wild beasts,” a nickname given to Fauvist artists because of their intense use of color.
- **Expressionism** – An artistic movement emphasizing emotion and personal feeling over realistic representation.
- **Abstraction** – Art that simplifies or alters realistic forms to emphasize color, shape, and emotion.
- **Emotional expression** – The communication of feelings and mood through artistic elements such as color and form.
- **Vivid colors** – Bright, intense, and highly saturated colors.
- **Non-realistic color** – Colors used symbolically or emotionally rather than matching real-life appearance.
- **Brushwork** – The visible application of paint with a brush that creates texture, movement, and style.
- **Modern art** – Art movements that rejected traditional artistic rules and explored new ideas and techniques.
- **Composition** – The arrangement of shapes, colors, and objects within a work of art.
- **Spontaneity** – Creating art with a sense of freedom, immediacy, and unplanned expression.

Fauvism was one of the earliest **avant-garde** movements of the 20th century and played an important role in the development of modern art. Emerging between 1900 and 1910, with its most active years from 1904 to 1908, Fauvism rejected realistic color and traditional artistic rules in favor of bold experimentation and emotional expression. The artists associated with the movement used vivid, exaggerated colors freely and energetically, often applying paint in ways that ignored natural appearance. Because of their wild use of color and expressive style, critics called them **Les Fauves**, meaning “the wild beasts” in French. Rather than trying to imitate reality accurately, Fauvist artists used color to create mood, movement, and emotional intensity. Henri Matisse became the leading figure of Fauvism and greatly influenced later modern artists. Fauvist painters embraced artistic freedom, spontaneity, and imagination, helping open the door to future movements such as **Expressionism** and abstraction. *Creativity takes courage*.[1]

Henri Matisse

Henri Matisse was one of the leading figures of **Fauvism** and one of the most influential artists of modern art. Born in France, Matisse originally studied law in Paris and worked as a court administrator before turning to art. While recovering from appendicitis, his mother gave him painting supplies to occupy his time, an experience Matisse later described as discovering “paradise.” Inspired by painting, he abandoned his legal career and enrolled in art school. Matisse became famous for his bold use of color, expressive **brushwork**, and experimental compositions. His painting *Woman with a Hat* (12.3.1), a portrait of his wife Amélie, caused major controversy when it was exhibited at the 1905 Salon. Instead of using realistic skin tones and traditional color schemes, Matisse painted the portrait with vivid greens, blues, oranges, and reds applied in loose, energetic strokes.

The painting shocked critics and audiences because of its unconventional appearance and exaggerated use of color. One newspaper critic described the exhibition using the phrase “Donatello chez les Fauves” (“Donatello among the wild beasts”), comparing the traditional sculpture in the room to the wildly colored paintings surrounding it. The phrase led to the name **Les Fauves**, or “the wild beasts,” which became the defining label for the Fauvist movement. Through works like *Woman with a Hat*, Matisse helped redefine modern painting by showing that color could be used emotionally and expressively rather than realistically. And one critic said, "A pot of paint has been flung in the face of the public."[2]

The loose **brushwork**, vivid colors, and seemingly unfinished appearance of Henri Matisse’s paintings shocked many viewers and critics during the early 20th century. The emotional reaction provoked by these unconventional techniques was exactly what the artists of the **Fauvist** movement intended. Rather than creating realistic images, Fauvist artists used exaggerated color and expressive forms to evoke feeling and energy. Matisse’s *Blue Nude* (12.3.2) further reinforced the idea of artistic “shock value.” Originally conceived as a sculpture, the work was later transformed into a painting after the sculpture broke apart. The figure is simplified and abstracted, painted with bold blue tones and distorted forms that challenge traditional ideals of beauty and realism.

In *Atelier Rouge* (12.3.3), Matisse painted his studio filled with furniture, paintings, sculptures, and decorative objects from his personal workspace. The room is dominated by an intense red color applied across nearly the entire surface, flattening the space and minimizing traditional **perspective**. Objects appear outlined rather than fully modeled, creating a decorative and abstract quality that emphasizes color and composition over realism. Matisse developed a close friendship and artistic rivalry with Pablo Picasso. Both artists became central figures in modern art and frequently interacted with influential writers, collectors, and artists,

including Gertrude Stein, Paul Cézanne, and Georges Braque. Their discussions and experimentation helped shape the direction of modern art in the early 20th century.

Figure \(\PageIndex{1}\): *Woman with a Hat* (Public Domain)

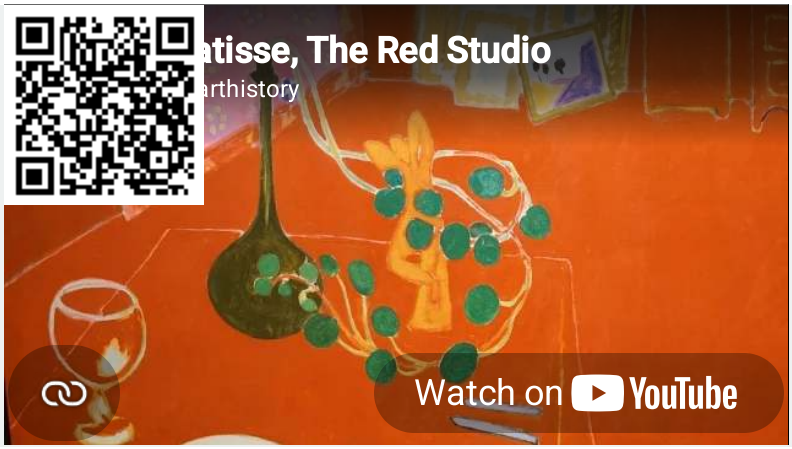
https://human.libretexts.org/@go/page/308354

Figure \(\PageIndex{2}\): *Blue Nude* (Public Domain)

Figure \(\PageIndex{3}\): *Atelier Rouge* (Public Domain)

Matisse, The Red Studio

Henri Matisse, The Red Studio, 1911, oil on canvas, 181 x 219.1 cm (The Museum of Modern Art).



Albert Marquet

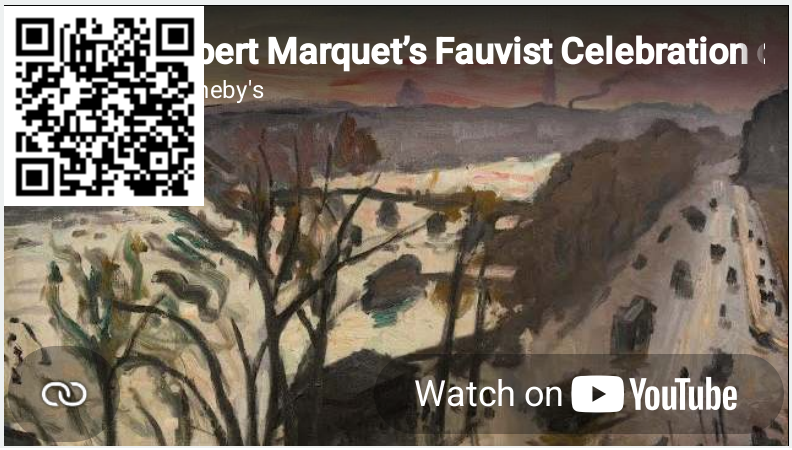
Albert Marquet was a lifelong friend of Henri Matisse and associated with the **Fauvist** movement, although his style remained more restrained and realistic than many other Fauvist painters. While Marquet embraced bright colors and freer **brushwork**, he generally maintained a more naturalistic approach to landscapes and figures. Unlike many Fauvist artists who rejected traditional **perspective**, Marquet often included a sense of natural depth and spatial organization in his paintings. His work balanced elements of realism with abstraction, creating scenes that appeared modern yet still recognizable.

In *The Beach at Sainte-Adresse* (12.3.4), Marquet used loose, almost **calligraphic** brushstrokes to depict beachgoers and activity along the shoreline. With only a few dark lines and simplified forms, he suggested figures, movement, and structure without relying on heavy detail. Marquet frequently used muted or grayed tones along with black accents to contrast with lighter colors and create balance within the composition. Through his subtle combination of abstraction, simplified forms, and atmospheric color, Marquet developed a quieter and more observational interpretation of Fauvism while still participating in the modern artistic experimentation of the early 20th century.

Figure \(\PageIndex{4}\): *The Beach at Sainte-Adresse* (Public Domain)

Albert Marquet's Fauvist Celebration of the City of Lights

In this episode of Anatomy of An Artwork, discover Albert Marquet's revolutionary Paris, Quai Du Louvre, Soleil d'Hiver, offered as a highlight of Sotheby's Impressionist & Modern Art Day Sale. Painted at the height of the artist's groundbreaking Fauve period, Paris, Quai Du Louvre is one of the most important works in his seminal series of Parisian cityscapes. Muted blocks of color, capturing the haziness of the Parisian air, interact with rhythms created by the bold outlines of trees on the riverbank. With his quick application of pigment, Marquet moves towards an abstracted version of reality.



Amedeo Modigliani

Amedeo Modigliani was an Italian artist who worked primarily in France and became associated with the modern movements surrounding **Fauvism** and early modern art. He became especially famous for his portraits featuring elongated figures, tilted heads, simplified facial features, and elegant, flowing lines. In works such as *Bride and Groom* (12.3.5) and *Portrait of Moïse Kisling* (12.3.6), Modigliani portrayed people with stretched necks, narrow faces, almond-shaped eyes, and distorted proportions. The tilted faces and simplified features resemble some aspects of **Cubism**, although Modigliani maintained a softer and more lyrical style focused on emotional expression and graceful form.

Modigliani was an extremely prolific draftsman and often produced dozens of drawings in a single day. In addition to painting, he studied sculpture and traveled to examine African art, which strongly influenced his artistic style. Many of his sculptures feature elongated heads, simplified shapes, and stylized facial structures inspired by African masks and carvings. Throughout his life, Modigliani suffered from tuberculosis and struggled with poor health. He frequently used alcohol and other substances to cope with pain and illness, circumstances that contributed to his early death in 1920. Despite his short life, Modigliani created a distinctive and recognizable style that became highly influential in modern art.

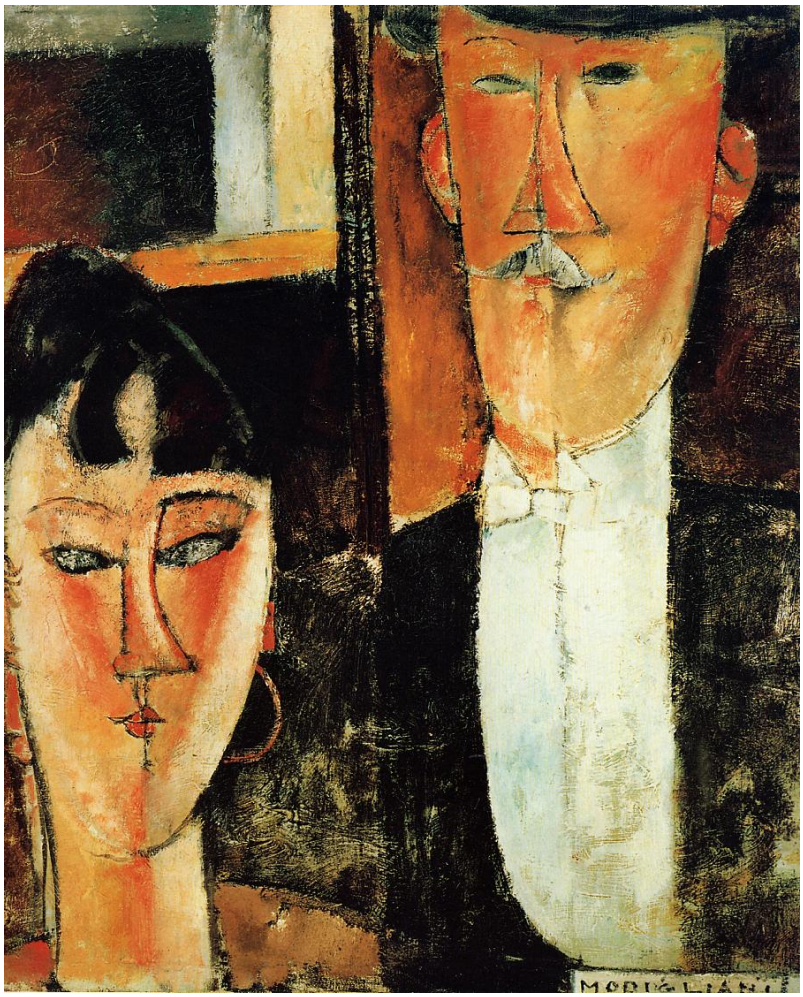


Figure \(\PageIndex{5}\): *Bride and Groom* (Public Domain)

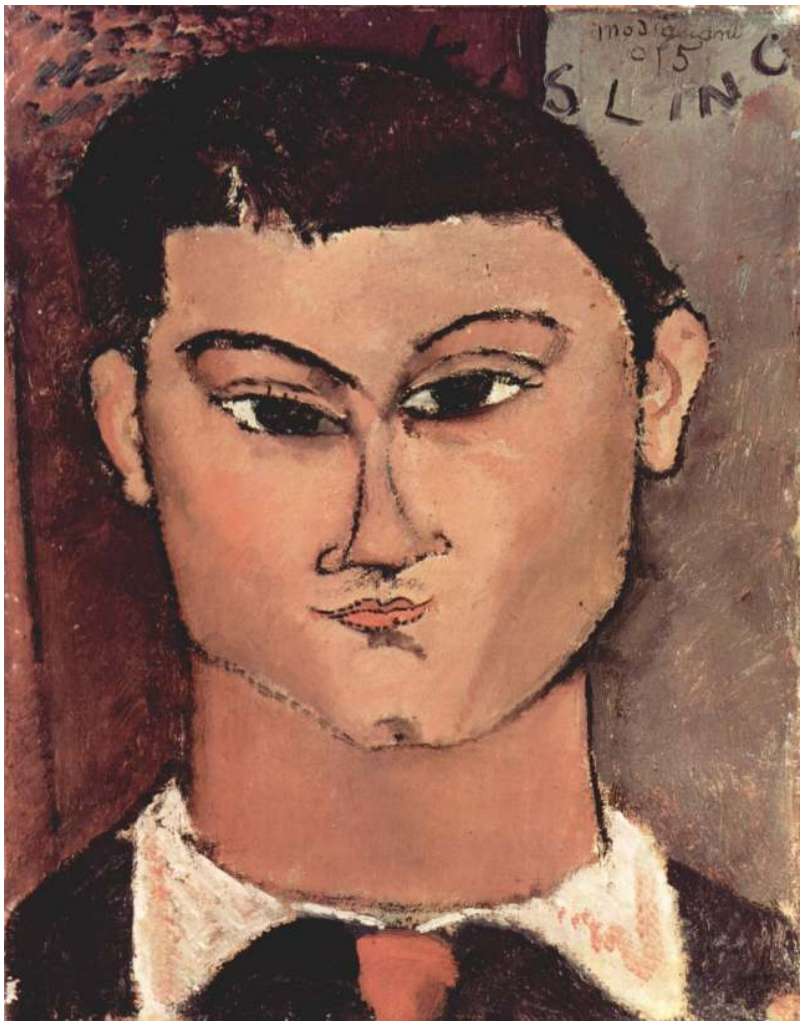


Figure \(\PageIndex{6}\): *Portrait of Moise Kisling* (Public Domain)

Modigliani, Young Woman in a Shirt

Amedeo Modigliani, Young Woman in a Shirt, 1918, oil on canvas (Albertina, Vienna)

Alice Bailly

Alice Bailly was a Swiss artist who became involved with the modern art movements developing in Paris during the early 20th century. After moving to Paris, she formed friendships with many modern painters and became interested in the bold experimentation of **Fauvism**. Originally working in wood carving, Bailly later embraced vivid colors, expressive lines, and

unconventional space inspired by Fauvist artists. In her *Self-Portrait* (12.3.7), she used elongated and curving forms combined with intense reds and oranges to create an energetic and emotionally expressive image. The painting broke away from traditional realistic portraiture and reflected the modernist interest in abstraction and emotional interpretation.

After World War I, Bailly returned to Switzerland, where she developed an innovative technique known as **"wool paintings."** Instead of applying paint with a brush, she used short strands of colored yarn arranged side by side to imitate painterly brushstrokes and texture. This unusual method combined elements of textile art and painting, expanding the materials and techniques associated with modern art. Like several artists of the period, Bailly suffered from tuberculosis, a widespread disease during the late 19th and early 20th centuries. Despite health challenges, she became an important contributor to early modern art through her experimentation with color, line, and alternative artistic media.

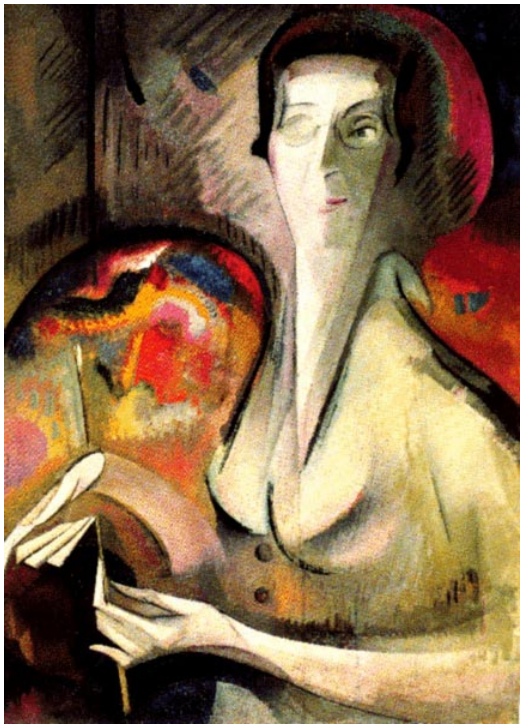


Figure \(\PageIndex{7}\): *Self-Portrait* (Public Domain)

Natalia Goncharova

Natalia Goncharova was a Russian modern artist known for her work as a painter, costume and set designer, writer, and illustrator. Although she came from a wealthy family, opportunities for women in formal art education were limited, so she studied in private studios and later attended the Fourth Women's Gymnasium in Moscow, where she explored multiple academic disciplines before focusing on art. Early in her career, Goncharova became associated with Russian **avant-garde** artists whose experimental styles were often criticized as radical and unconventional. She drew inspiration from traditional Russian culture, peasant life, religious icons, and folk art while combining these influences with modern artistic experimentation.

In *Circular Dance* (12.3.8), Goncharova depicted peasants dancing in traditional Russian clothing painted in bright, expressive colors. Most of the figures lack detailed facial features, emphasizing movement, rhythm, and collective energy rather than individual identity. One figure turns outward toward the viewer, creating a connection between the audience and the dancers. In *Blue Cow* (12.3.9), Goncharova combined influences from Russian folk traditions, Byzantine mosaics, and modern painting styles. The cow appears energetic and almost animated through fragmented forms and bold, exaggerated colors. While parts of the animal remain natural brown, much of the figure is painted blue, reflecting the modernist rejection of realistic color. The overlapping shapes and shifting forms create multiple viewpoints within the image, suggesting the influence of Henri Matisse and other Fauvist artists. Through her use of vivid color, folk imagery, and experimental composition, Goncharova became one of the leading figures of the Russian avant-garde and an important contributor to modern art.

Figure \(\PageIndex{8}\): *Circular Dance* (1910, oil on canvas, 100 x 133 cm) (Public Domain)

Figure \(\PageIndex{9}\): *Blue Cow* (1911, oil on canvas) (CC BY-SA 4.0)

Andre Derain

André Derain was an important member of the **Fauvist** movement and one of the early collaborators of Henri Matisse. Born near Paris, Derain studied art while also training in engineering, combining technical understanding with artistic experimentation. He later traveled with Matisse to the coastal town of Collioure, where the two artists developed many of the bold stylistic qualities associated with Fauvism. Derain and Matisse exhibited their paintings together at the Salon d'Automne, where their intense colors and expressive techniques shocked critics and audiences. Derain later traveled to England and created a series of paintings of London that used vivid colors and unusual forms very different from traditional depictions of the city.

In *Fishing Boats* (12.3.10), painted during his time in Collioure, Derain demonstrated his energetic use of color and composition. He arranged the boats and sails diagonally across the painting to create a sense of **perspective** and movement. The tilted, overlapping sails curve along the shoreline, while figures in the foreground observe the busy harbor activities. Derain emphasized strong outlines and dark lines, especially in the foreground, while filling the composition with bold blues, reds, oranges, and yellows characteristic of Fauvism. His expressive use of color and simplified forms transformed an ordinary coastal scene into a vibrant and emotionally charged modern painting.

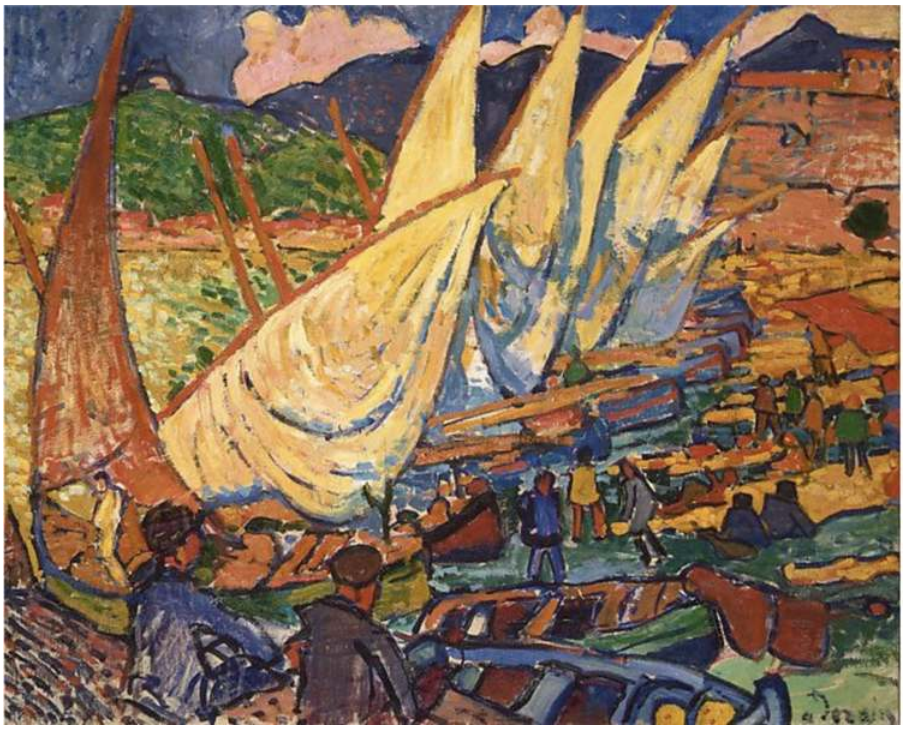


Figure \(\PageIndex{10}\): *Fishing Boats Collioure* (1905, oil on canvas, 81 x 100.3 cm) (Public Domain)

When André Derain traveled to London in 1906, he filled sketchbooks with observations of the city's busy streets, architecture, and crowds. After returning to his studio in Paris, he transformed these sketches into vivid Fauvist paintings that reimagined London through bold color and expressive design rather than realistic representation. In *Regent Street, London* (12.3.11), Derain combined intense colors with areas of softer blues and muted tones to create atmospheric depth within the crowded urban scene. Heavy dark lines outline the buildings, figures, horses, and vehicles, emphasizing movement and structure throughout the composition.

The streets appear packed with activity, reflecting the energy and rapid growth of modern London during the early 20th century. Rather than carefully detailing every figure, Derain used simplified shapes and expressive color contrasts to suggest the movement and excitement of a large modern city. His dynamic use of color and line transformed an ordinary street scene into a vibrant example of **Fauvism** and modern urban life.

Figure \(\PageIndex{11}\): *Regent Street, London* (1906, oil on canvas, 66 x 99.4 cm) (Public Domain)

[1] Retrieved from https://www.henrimatisse.org/

[2] Chilver, I. (2004). Fauvism, The Oxford Dictionary of Art, Oxford University Press. Retrieved from https://en.Wikipedia.org/wiki/Henri_Matisse

12.4: Expressionism (1905 – 1930)

Definition: Term

- **Expressionism** – A modern art movement focused on expressing emotion and inner feelings rather than realistic appearance.
- **Modernism** – An artistic movement that rejected traditional styles and encouraged experimentation and innovation.
- **Impressionism** – A movement emphasizing light, atmosphere, and fleeting visual impressions from everyday life.
- **Distortion** – The deliberate alteration or exaggeration of forms and figures for emotional or artistic effect.
- **Abstraction** – Art that simplifies or changes realistic forms to emphasize emotion, color, and design.
- **Perspective** – A technique used to create the illusion of depth and space in art.
- **Subjective expression** – Art based on personal feelings, emotions, and individual interpretation.
- **Bold colors** – Bright, intense colors used to create emotional impact.
- **Flattened forms** – Figures or objects painted with little illusion of depth or three-dimensional space.
- **Avant-garde** – Experimental and innovative art that challenges traditional ideas.
- **Weimar Republic** – The German government that existed between World War I and the rise of Nazi Germany.
- **Degenerate art** – A term used by the Nazis to condemn modern art movements they considered unacceptable.
- **Nazi regime** – The government led by Adolf Hitler in Germany from 1933 to 1945.
- **Propaganda** – Information or imagery used to influence public opinion or promote political ideas.
- **Confiscation** – The act of officially seizing property, artwork, or materials.
- **Looted art** – Artwork stolen or illegally taken, especially during war or political conflict.
- **Emotional intensity** – Strong emotional force or feeling expressed in artwork.

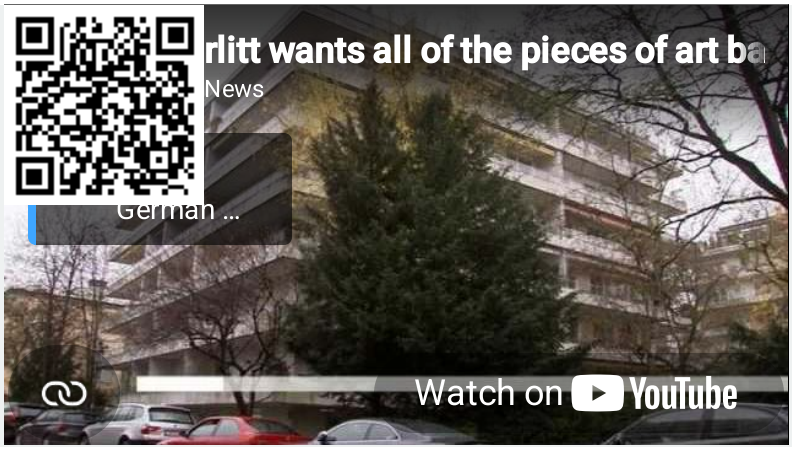
Expressionism developed after **Fauvism** as a major modernist movement centered primarily in Germany and Austria during the early 20th century. Expressionist artists believed that art should communicate emotion and inner experience rather than accurately represent reality. Their goal was often described as “paint what you feel, not what you see,” making the movement a reaction against the observational focus of **Impressionism**. Expressionist artists intentionally distorted forms, exaggerated shapes, and used bold, unnatural colors to express feelings such as anxiety, fear, isolation, tension, and emotional intensity. Paintings frequently featured flattened forms, little or no traditional **perspective**, and highly subjective interpretations of people and objects. Emotional impact became more important than realism.

Germany became the center of the Expressionist movement during a period of political instability surrounding the Weimar Republic. When the Nazi Party rose to power under Adolf Hitler, modern art movements such as Expressionism were condemned as “degenerate art.” The Nazi regime falsely associated modern art with racial and political ideas they opposed and considered these works corrupt, dangerous, and un-German. The Nazis organized campaigns to suppress modern art by removing paintings from museums, banning artists, burning books, and destroying thousands of artworks. Museums, galleries, and bookstores were raided in an attempt to eliminate modern artistic expression. Some works were confiscated and hidden by Nazi officials or private collectors during World War II, while others disappeared or were destroyed entirely.

After the war, surviving Expressionist artworks became the subject of legal and historical investigations as courts and governments attempted to determine ownership and return looted art to the families and institutions from which it had been taken. Despite persecution, Expressionism remained one of the most influential modern art movements of the 20th century because of its powerful emotional intensity and bold artistic experimentation.

Gurlitt wants all of the pieces of art back

The 80-year-old owner of some 1,400 artworks, many of them believed to have been lost or stolen in the Nazi era, has given a defiant interview. Cornelius Gurlitt said his father had acquired the vast collection legally.



Franz Marc

Franz Marc was one of the leading figures of the **Expressionist** movement in Germany and a graduate of the Academy of Fine Arts in Munich. Marc became especially famous for his paintings of animals, particularly horses, which he used symbolically to express emotion, spirituality, and harmony with nature. Among his most recognized works are *Blue Horse* (12.4.1) and *Der Turm der Blauen Pferde* (*The Tower of Blue Horses*) (12.4.2). Marc painted animals in vivid, unrealistic colors and simplified forms, emphasizing emotional meaning rather than realism. His compositions often combined elements of **abstraction**, **Minimalism**, and symbolic color to create deeply emotional and spiritual imagery.

Marc believed colors carried emotional and symbolic significance. He associated blue with masculinity, spirituality, and mysticism; yellow with feminine joy and happiness; and red with violence and aggression. Through these symbolic color choices, Marc attempted to express inner emotions and universal ideas rather than physical reality. During World War I, Marc enlisted in the German army as a cavalryman. While serving, he painted camouflage designs on military equipment and canvas coverings, applying his artistic understanding of color and pattern to wartime purposes. Tragically, Marc was killed in battle in 1916 at a young age. When the Nazi regime later came to power in Germany, Marc's paintings were condemned as **degenerate art** because of their modernist style and abstraction. Many of his works were removed from museums and exhibitions. Despite this persecution, Franz Marc remains one of the most important artists of German Expressionism, celebrated for his emotionally powerful use of color and symbolic imagery.

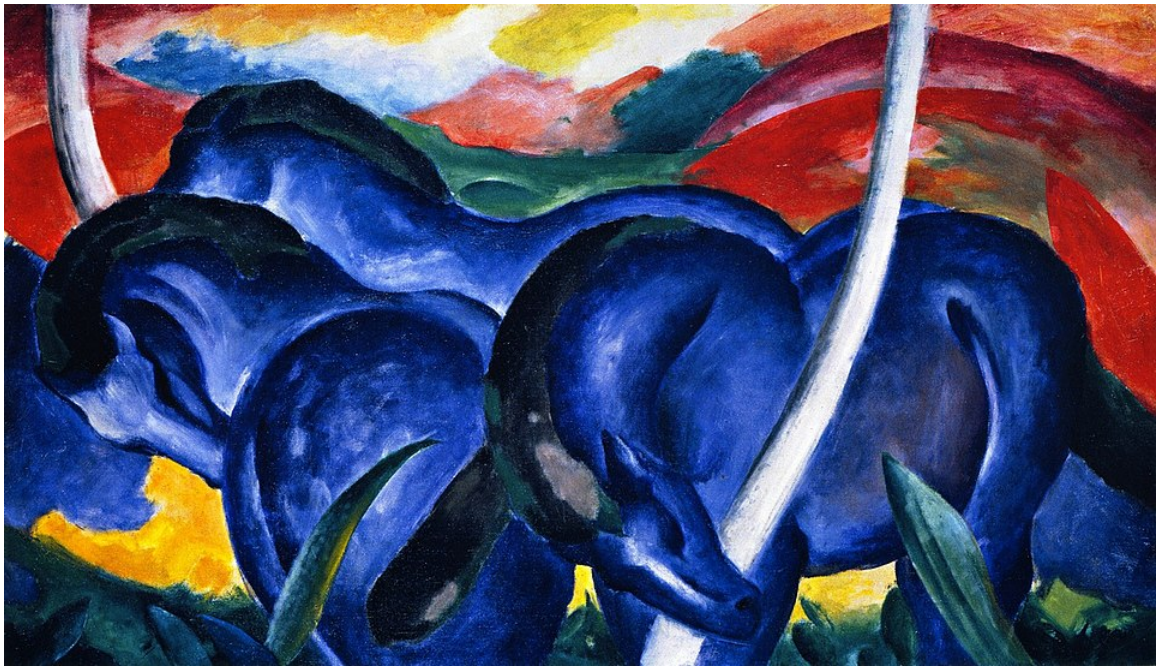


Figure \(\PageIndex{1}\): *Blue Horse* (Public Domain)

Figure \(\PageIndex{2}\): *Der Turm der Blauen Pferde* (Public Domain)

Franz Marc: The Man Who Painted Blue Horse and Yellow Cows

Life and Work of Franz Marc

Paul Klee

Paul Klee was a Swiss-German artist associated with several modern art movements, including **Expressionism**, abstraction, and early modernism. Originally trained as a draftsman, Klee became increasingly interested in experimenting with color and eventually combined drawing, painting, and abstract design into a highly personal artistic style. Klee studied at the Academy of Fine Arts in Munich, where he encountered many modern artists and new artistic ideas. A transformative trip to Tunis in 1914 profoundly influenced his understanding of color and light. The intense sunlight and atmosphere along the Mediterranean coast inspired Klee to focus more deeply on color relationships and abstract forms. After the journey, he famously wrote that color had taken possession of him.

In works such as *Senecio* (12.4.3), Klee simplified the human face into geometric and abstract forms. Using shapes, lines, and carefully balanced colors, he created a stylized image that appears playful yet emotionally expressive. In *Red Balloon* (12.4.4), Klee constructed the composition using rectangles and geometric blocks of color, arranging them into an abstract cityscape-like design. Klee carefully studied **color harmony** and the interaction of **complementary colors**, using combinations from the color wheel to create balance, rhythm, and emotional effect within his paintings. Through his use of abstraction, geometry, and color theory, Klee helped expand modern art into new forms of visual expression that blended imagination, symbolism, and design. *Color has taken possession of me; no longer do I have to chase after it, I know that it has hold of me forever…Color and I are one. I am a painter". – Paul Klee[1]*

Figure \(\PageIndex{3}\): *Senecio* (Public Domain)

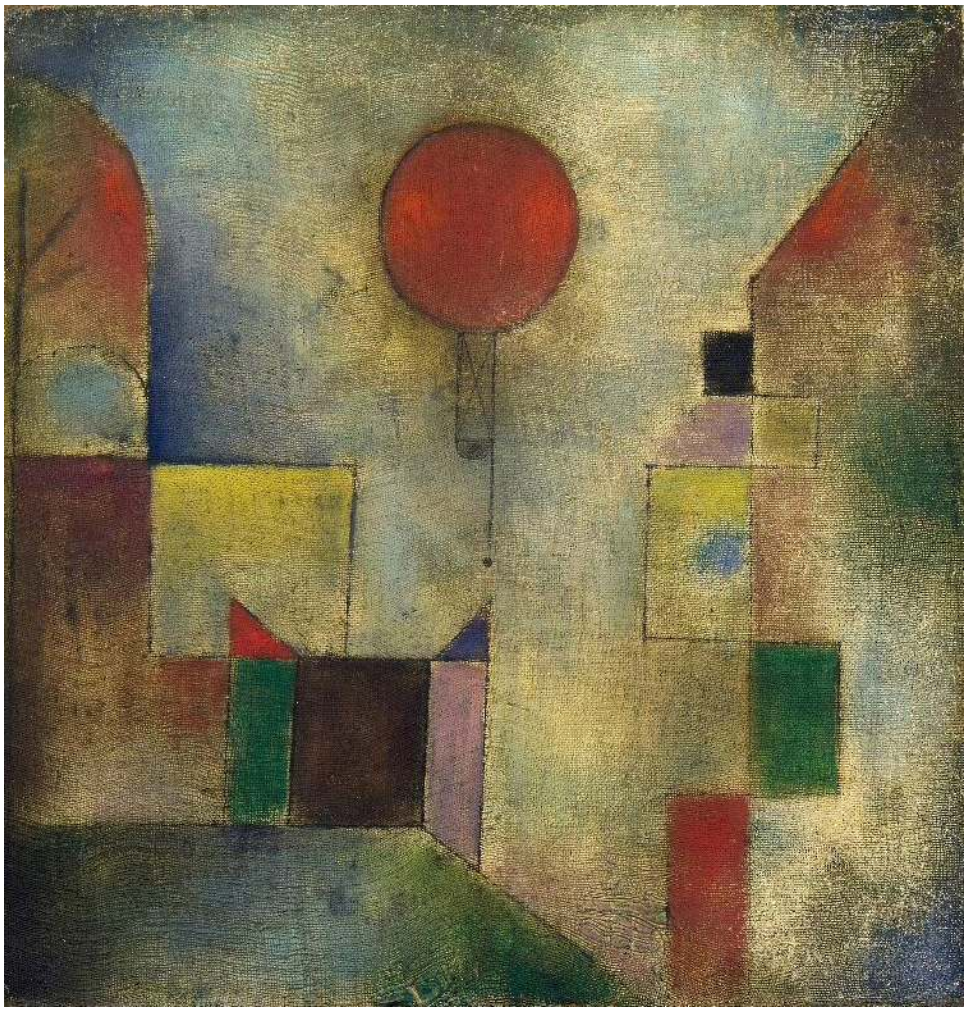


Figure \(\PageIndex{4}\): *Red Balloon* (Public Domain)

Klee, Twittering Machine

Paul Klee, Twittering Machine (Die Zwitscher-Maschine), 1922, 25 1/4 x 19" watercolor, ink, and gouache on paper (MoMA)

Gabriele Münter

Gabriele Münter was an important female artist of the **Expressionist** movement in Germany. Although women were often excluded from traditional German art academies, Münter's financial independence after inheriting her family's fortune allowed her to pursue art freely without relying on marriage or outside support. Determined to become an artist, Münter drew and painted constantly and eventually gained admission to a progressive art school in Munich that accepted women students. There, she studied painting, sculpture, printmaking, and woodcut techniques, building a strong artistic foundation that contributed to her later success in Expressionism.

Münter became known for her landscapes and her bold use of unexpected color combinations. In *Nightfall in St. Cloud* (12.4.5), she painted the landscape using expressive and unrealistic colors, such as a bright banana-yellow sky contrasting with green grass. Rather than portraying nature realistically, Münter used color emotionally and symbolically, a defining characteristic of Expressionism. In *The Countryside Near Paris* (12.4.6), Münter applied broad, overlapping **brushstrokes** of vivid yellows, oranges, and pinks balanced with darker greens and browns. Her energetic application of color and simplified forms transformed ordinary landscapes into emotionally expressive scenes filled with movement and atmosphere. Through her innovative use of color and her independence as a woman artist, Münter became one of the key contributors to German Expressionism and helped expand opportunities for women in modern art.

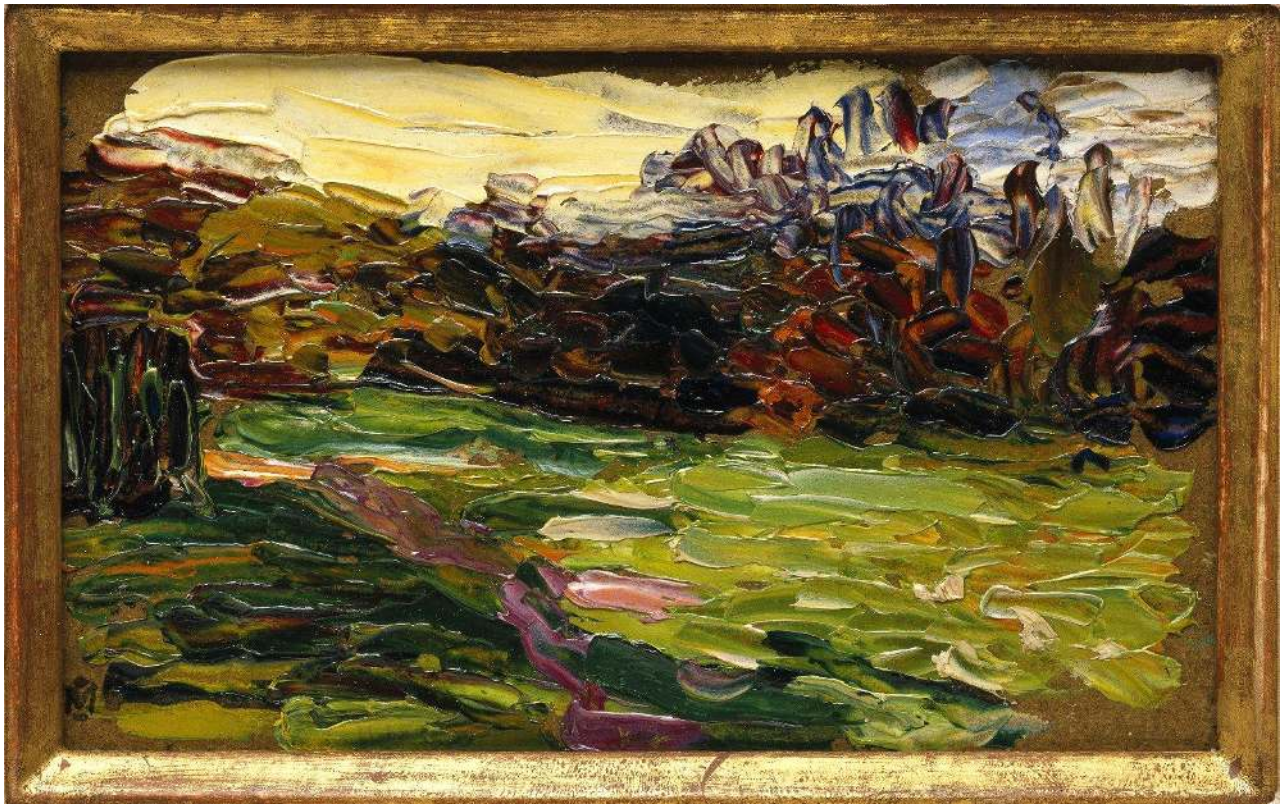


Figure \(\PageIndex{5}\): *Nightfall in St. Cloud* (Public Domain)

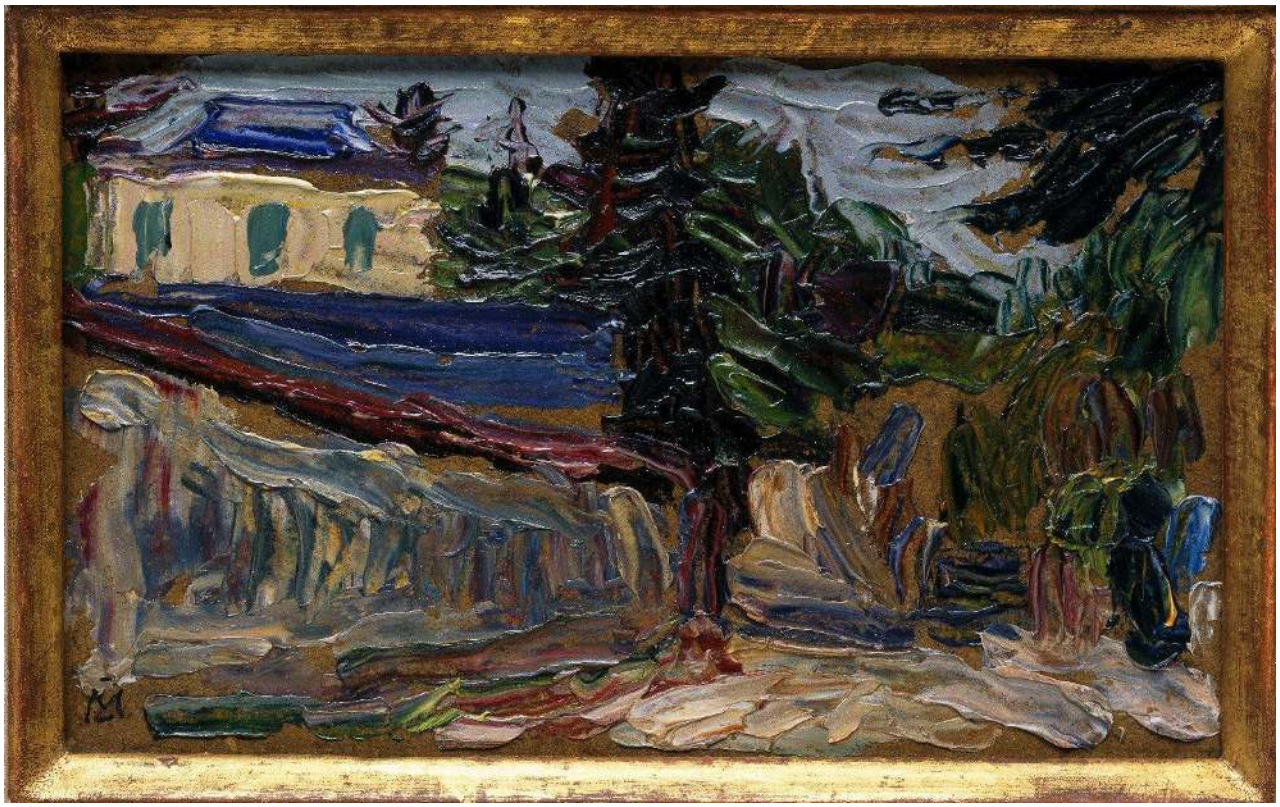


Figure \(\PageIndex{6}\): *Countryside Near Paris* (Public Domain)

Emil Nolde

Emil Nolde was one of the leading artists of the **Expressionist** movement in Germany during the early 20th century. Nolde became known for his emotionally intense paintings, exaggerated figures, and bold use of color. Although he supported the Nazi Party and expressed antisemitic views, the Nazi regime still condemned much of his modern artwork as **degenerate art** because of its Expressionist style. Many of Nolde's paintings were confiscated or destroyed by the Nazis, and he was eventually forbidden to paint publicly. Despite the restrictions, Nolde secretly continued creating hundreds of small watercolor paintings that he hid during this period.

In *The Entombment* (12.4.7), Nolde used exaggerated colors and distorted forms to heighten emotional intensity and spiritual expression. The painting focuses on the grief surrounding the burial of Christ, with dramatic facial expressions and elongated hands and feet emphasizing suffering and sacrifice. Mary's blue clothing symbolizes sorrow and devotion as she mourns her son. Nolde frequently painted religious subjects and completed dozens of works based on sacred themes. In *Wildly Dancing* (12.4.8), Nolde conveyed movement, energy, and joy through vibrant color and expressive forms. The children appear to leap and dance across the composition, their emotions communicated through body movement rather than facial detail. The painting demonstrates the Expressionist goal of expressing emotion and psychological experience through color, rhythm, and distortion instead of realism. Despite the contradictions of his political beliefs and artistic persecution, Nolde remains an important figure in German Expressionism because of his intense emotional style and experimental use of color.

Figure \(\PageIndex{7}\): *The Entombment* (Public Domain)

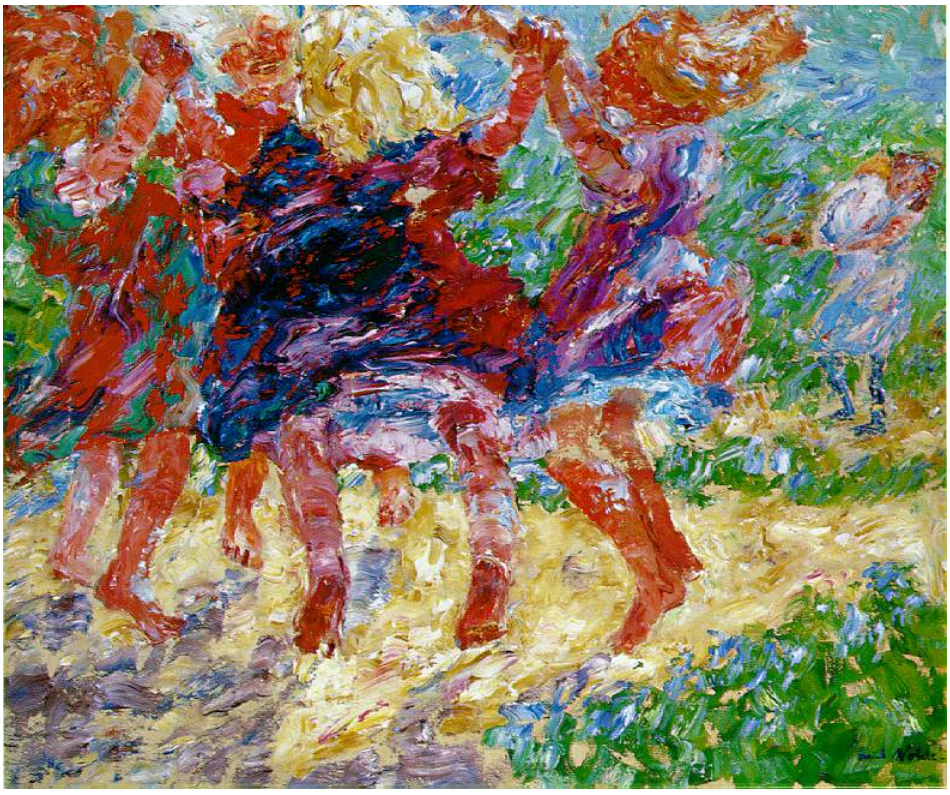


Figure \(\PageIndex{8}\): *Wildly Dancing* (1909) (Public Domain)

Otto Müller

Otto Müller was a German **Expressionist** artist whose work focused on the relationship and harmony between humans and nature. After studying at the Academy of Fine Arts in Munich, Müller moved to Berlin, where his style became increasingly expressionistic through simplified forms, bold colors, and emotional atmosphere. In *Landscape with Yellow Nudes* (12.4.9), Müller

used simplified shapes and soft tonal contrasts to depict women bathing within a natural landscape. The figures blend harmoniously with the surrounding trees and environment, reflecting his belief in the connection between people and nature. Like many Expressionist artists, Müller frequently used blue tones to create mood and emotional depth within the composition.

In *Gypsy Horse at Black Water* (12.4.10), Müller again abandoned realistic color in favor of expressive and symbolic tones. The horse and landscape are rendered with unusual colors and simplified contours, emphasizing emotional atmosphere rather than accurate representation. His paintings often featured flattened forms, flowing outlines, and muted color palettes that created calm, dreamlike scenes. Although Müller served in World War I and was considered a loyal German citizen, the Nazi regime later condemned his work as **degenerate art**. More than three hundred of his artworks were removed from museums, and additional works were stolen from Jewish collectors during the Nazi period. Despite this persecution, Müller remains an important figure in German Expressionism because of his poetic imagery, simplified forms, and exploration of humanity's connection to nature.

Figure \(\PageIndex{9}\): *Landscape with Yellow Nudes* (1919, oil on burlap, 709.2 x 90.8 cm) (Public Domain)

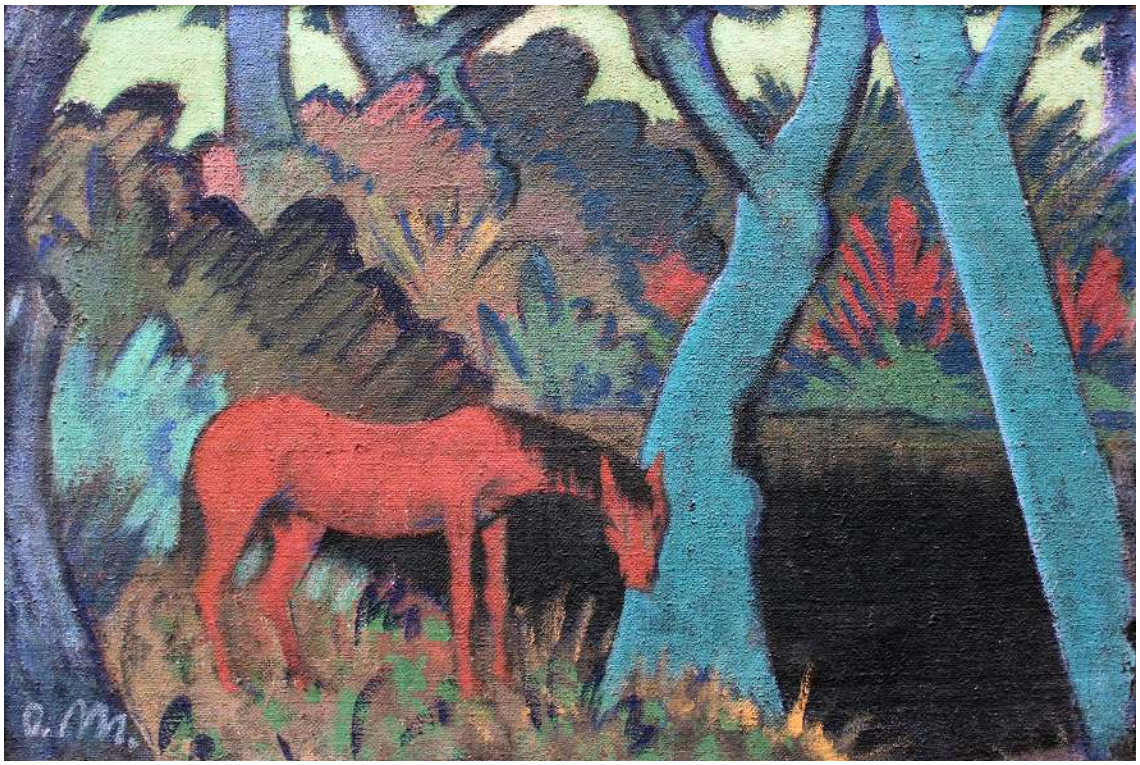


Figure \(\PageIndex{10}\): *Gypsy Horse at Black Water* (1928, tempera, 79.5 cm x 107 cm) (Public Domain)

Marianne von Werefkin

Marianne von Werefkin was a Russian-born **Expressionist** artist who overcame significant personal and social obstacles to pursue her artistic career. She began formal academic training as a teenager, but a hunting accident severely injured her right hand. Determined to continue painting, Werefkin worked persistently to regain her ability to paint despite the impairment. As a woman artist in the late 19th and early 20th centuries, her work was often undervalued, and she faced considerable gender bias within the art world. Nevertheless, Werefkin continued to develop a distinctive Expressionist style focused on emotion, atmosphere, and the psychological condition of modern life.

Many of her paintings portray small, isolated figures weighed down by hardship and emotion. In *Fall, School* (12.4.11), tiny figures walk along a road beneath a dramatic sunset sky. The people appear bent over and burdened as they move through the landscape, emphasizing themes of loneliness and struggle. The glowing sunset contrasts with the subdued foreground, heightening the emotional mood of the painting. In *Storm Wind* (12.4.12), Werefkin used sweeping movement and intense atmospheric effects to depict an approaching storm. The background appears turbulent and chaotic, while a brightly illuminated building provides a sense of refuge and safety. Her frequent use of blues and muted tones strengthened the emotional and symbolic quality of her work. Werefkin often included long roads, distant paths, and isolated figures in her paintings, visual symbols that suggest emotional journeys, uncertainty, and human endurance. Through expressive color and dramatic composition, she became an important contributor to the Expressionist movement.

Figure \(\PageIndex{11}\): *Fall, School* (Public Domain)

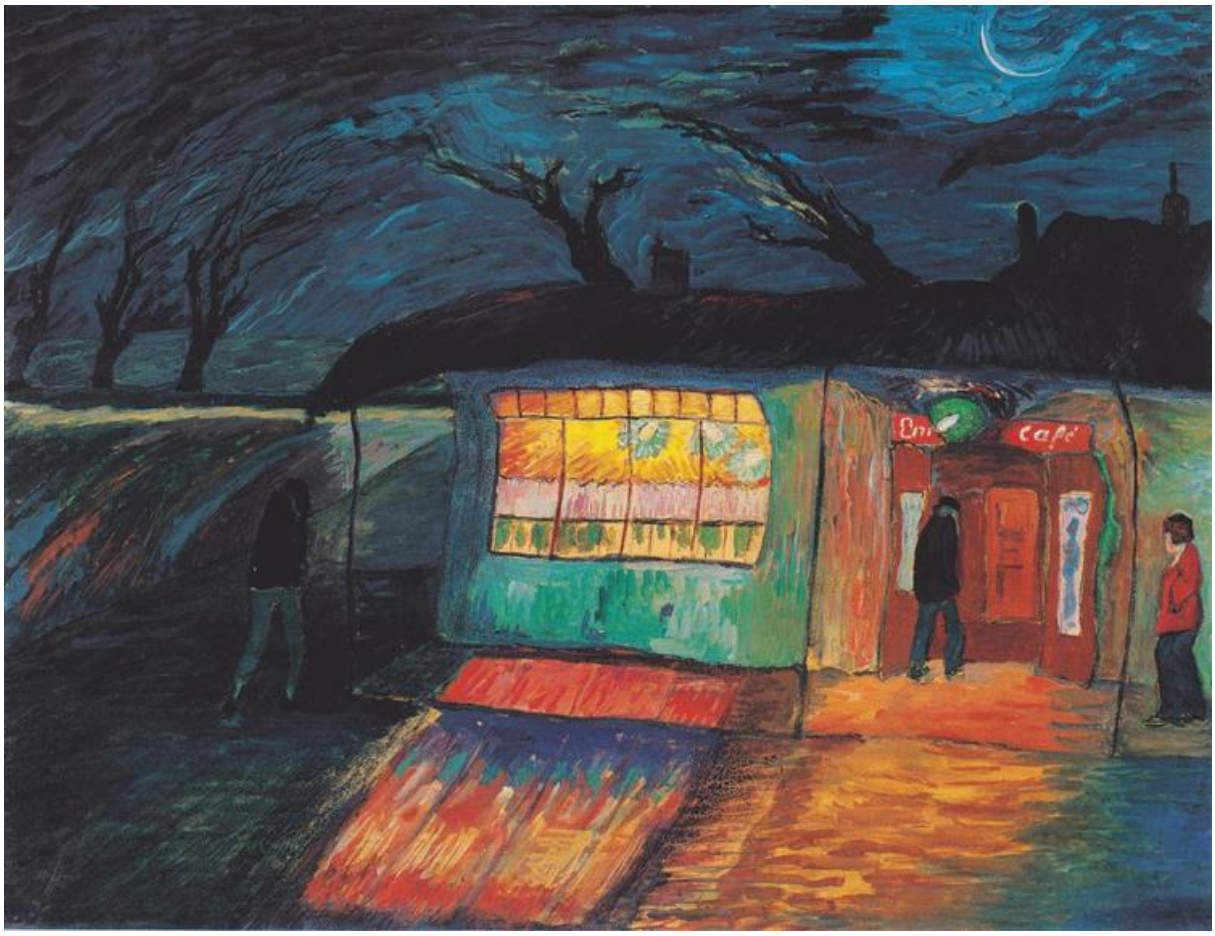


Figure \(\PageIndex{12}\): *Storm Wind* (Public Domain)

Marianne Von Werefkin

"Marianna Wladimirowna Werefkina, a member of ancient Russian nobility, was born on 29 August 1860 in the Russian town of Tula. She was well educated according to Western standards and the young girl's artistic talents were recognised early and encouraged. She had her first private academic drawing lessons at the age of fourteen. She was introduced to Illarion Michailowitsch Prjanischnikow, a member of the "Peredwischniki" (travelling painter), where she began her studies, by the Repin family. When her family moved to St. Petersburg in 1886 Marianne von Werefkin took private lessons under Repin.

Paula Modersohn-Becker

Paula Modersohn-Becker was an important early pioneer of **Expressionism** and one of the first women artists to create nude self-portraits of herself, a highly controversial and unconventional act during the early 20th century. Her work challenged traditional expectations of women in art and helped expand modern artistic expression. Modersohn-Becker developed a distinctive painting style characterized by simplified forms, emotional directness, and earthy color palettes. She frequently used shades of **viridian** (a deep green-blue color), yellow, brown, and white to create soft yet expressive compositions. She also experimented with texture by scratching into wet paint, producing rough surfaces and visible marks that added physical depth to the image.

In *Mädchen mit Kaninchen* (*Girl with Rabbit*) (12.4.13), Modersohn-Becker portrayed the figure with simplified shapes and a calm, natural appearance. The painting reflects her interest in direct observation and emotional sincerity rather than idealized beauty. Her nude self-portrait (12.4.14) was revolutionary because women artists were rarely permitted to study or depict the nude body from a female perspective. By painting herself nude, Modersohn-Becker asserted artistic independence and personal identity in a field traditionally dominated by men. The painting's simplicity, naturalism, and quiet emotional power became important contributions to modern art. Tragically, Modersohn-Becker died only eighteen days after the birth of her daughter. Despite her short life, she left a lasting impact on Expressionism and modern art through her innovative self-portraits, textured surfaces, and emotionally honest style.

Figure \(\PageIndex{13}\): *Madchen mit Kaninchen* (Public Domain)

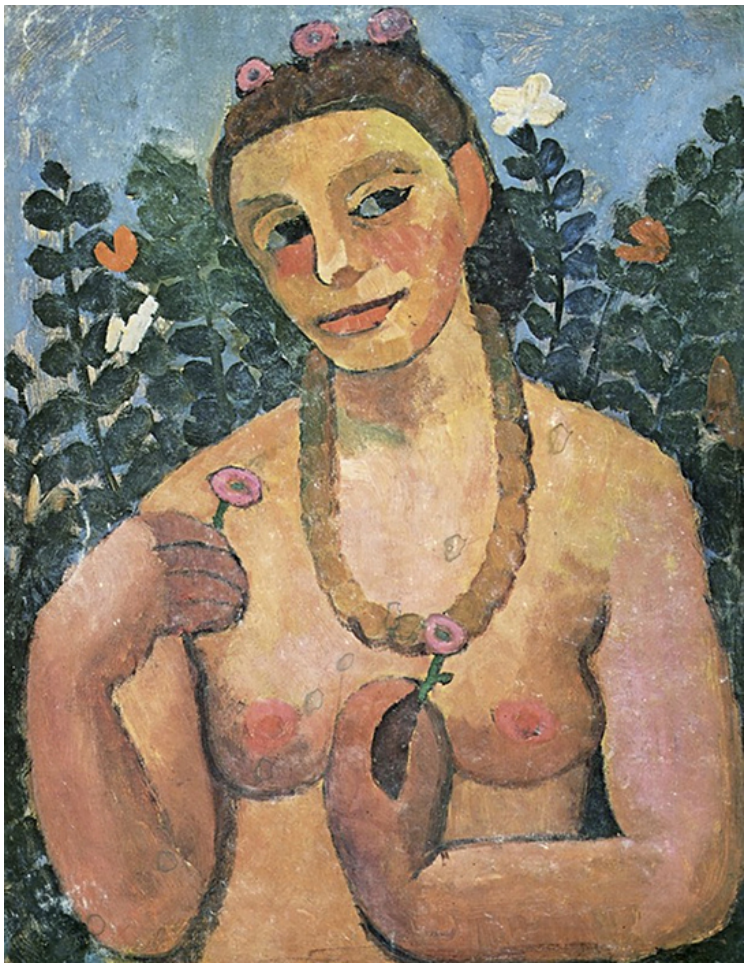
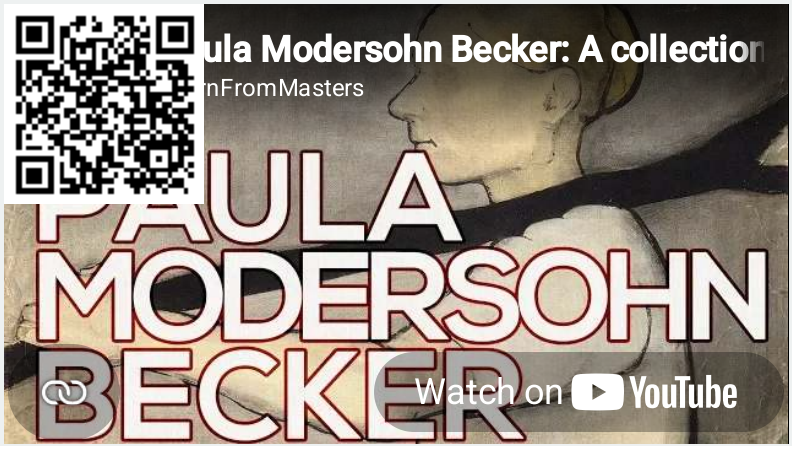


Figure \(\PageIndex{14}\): *Self-portrait, Nude with Amber Necklace Half Length II* (Public Domain)

Paula Modersohn Becker

"Paula Modersohn-Becker, whose career was cut tragically short by her death at 31, was one of the boldest German artists of her epoch. She ranged far beyond the regional nature portrayals of her Worpswede colleagues and anticipated the international artistic developments of the 20th century. Her absolute devotion to her art completely contradicted the norms of feminine behavior of her time; but this “egoistic” determination and self-assertion were the keys to her character and her incredible artistic achievements. She recognized at an early age that “false altruism distracts from one’s great goal.” Her great goal was her creative work: “…I will become something yet. How great or how small I can’t myself say, but it will be something complete in itself. This unswerving racing toward the goal, that’s the most beautiful thing in life.”



[1] Retrieved from http://kristinawentzell.com/default.asp

12.5: Cubism (1907 – 1914)

Definition: Term

- **Cubism** – A modern art movement that fragmented objects into geometric shapes and showed multiple viewpoints at the same time.
- **Geometric shapes** – Shapes such as cubes, rectangles, circles, and triangles used to structure compositions.
- **Fragmentation** – Breaking objects or figures into separate pieces or sections within an artwork.
- **Perspective** – A technique used to create the illusion of depth and space in art.
- **Multiple viewpoints** – Showing different angles of an object simultaneously within one composition.
- **Abstraction** – Simplifying or altering realistic forms to emphasize shape, color, and structure.
- **Composition** – The arrangement of shapes, objects, and colors within a work of art.
- **Two-dimensional** – Having height and width but lacking the illusion of physical depth.
- **Modern art** – Art movements that rejected traditional artistic rules and embraced experimentation and innovation.
- **Analytical Cubism** – An early phase of Cubism that broke objects into complex geometric fragments using muted colors.
- **Synthetic Cubism** – A later phase of Cubism that incorporated brighter colors, collage, and simplified shapes.
- **Collage** – An artistic technique that combines paper, fabric, photographs, or other materials onto a surface.
- **Plane** – A flat surface or area within a composition.
- **Visual perception** – The process of interpreting and understanding what is seen visually.

Cubism emerged around 1907 and became one of the most influential art movements of the 20th century, continuing to shape modern art and design today. Developing during a period of rapid political, social, and technological change, Cubism reflected the modern world's complexity and instability through radically new approaches to painting and representation. Cubist artists rejected traditional **perspective** and realistic depiction. Instead of presenting a subject from one fixed viewpoint, they fragmented objects and figures into geometric shapes and overlapping planes, often resembling cubes and angular forms. This approach gave the movement its name, **Cubism**.

Rather than painting what a subject looked like from a single angle, Cubist artists attempted to represent the essence and structure of objects by showing multiple viewpoints simultaneously within the same composition. Figures, instruments, buildings, and still-life objects were broken into fragmented pieces and rearranged across the surface of the painting. Cubism emphasized flatness, abstraction, geometric composition, and experimentation with space and form. The movement challenged traditional ideas about realism and visual perception, helping transform modern art into a more intellectual and analytical form of expression.

Pablo Picasso and the new language of Cubism

Pablo Picasso, The Guitarist, 1910, oil on canvas, 100 x 73 cm (Centre Pompidou, Paris)

Pablo Picasso

Pablo Picasso is widely considered the founder of **Cubism**, one of the most influential modern art movements of the 20th century. Before developing Cubism, however, Picasso painted in more naturalistic and traditional styles similar to other artists of his time.

In *Au Lapin Agile* (12.5.1), Picasso portrayed the bohemian nightlife of Paris during the early 1900s. The painting depicts figures seated in a cabaret setting using flattened forms and simplified space, while still maintaining recognizable perspective and realistic details. The figures appear slightly stacked and compressed together at the table, hinting at Picasso's growing interest in restructuring space and composition. The work also helped popularize the romantic image of Parisian cabaret culture.

By the time Picasso painted *Girl with a Mandolin* (12.5.2), his style had changed dramatically as he pushed the boundaries of **abstraction** and Cubist experimentation. In this work, the figure is fragmented into overlapping geometric shapes, making the subject only partially recognizable. Picasso reduced the human form into rectangles, curves, and angular planes while using a subdued and largely **monochromatic** color palette to create subtle depth and structure. The painting represents the height of **Analytical Cubism**, a phase in which Picasso and other Cubist artists carefully dissected objects into geometric components and displayed multiple viewpoints simultaneously. Through these innovations, Picasso transformed traditional representation and helped redefine the direction of modern art.

Figure \(\PageIndex{1}\): *Au Lapin Agile* (Public Domain)

Figure \(\PageIndex{2}\): *The Girl with a Mandolin* (Public Domain)

The **Cubist** movement opened the door for increasingly abstract and geometric forms in modern art. Pablo Picasso pushed artistic experimentation further by breaking apart traditional representations of people and objects and reconstructing them through fragmented shapes and multiple viewpoints. *Les Demoiselles d'Avignon* (12.5.3) marked one of the most revolutionary moments in the history of modern art. In this painting, Picasso abandoned traditional ideals of beauty, realistic anatomy, and natural **perspective**. The five female figures are flattened, fractured, and compressed into a crowded, overlapping space filled with sharp angular forms. Some faces were inspired by African masks and Iberian sculpture, reflecting Picasso's interest in non-Western art and abstraction. The painting shocked viewers because of its distorted bodies, confrontational poses, and aggressive geometric style, becoming a major turning point in the development of Cubism.

Picasso later expanded his experimentation into sculpture. The *Chicago Picasso* (12.5.4), located in downtown Chicago, Illinois, became the city's first monumental outdoor modern sculpture. Installed at the Daley Center Plaza, the massive steel sculpture stands over 15 meters (50 feet) tall. The work displays Picasso's characteristic distortion and abstraction, with a face-like form connected to sweeping shapes resembling hair or wings. The sculpture's meaning remains intentionally ambiguous, allowing

viewers to interpret it in different ways. Through both painting and sculpture, Picasso transformed modern art by demonstrating that figures and objects could be represented through abstract geometric forms rather than realistic appearance.

Figure \(\PageIndex{3}\): *Les Demoiselles d'Avignon* (Public Domain)

Figure \(\PageIndex{4}\): *Chicago Picasso* (Public Domain)

Picasso, Les Demoiselles d'Avignon

Pablo Picasso's Les Demoiselles d'Avignon, 1907, oil on canvas, 243.9 x 233.7 cm (The Museum of Modern Art, New York)

Georges Braque

Georges Braque was a French artist who played a central role in the development of **Cubism** alongside Pablo Picasso. Braque initially painted in the bold colors and expressive style of **Fauvism**, but after working closely with Picasso, he became one of the primary innovators of Cubist art. Braque studied how light, perspective, and reflection changed the way objects were seen. Instead of representing objects from a single viewpoint, he fragmented forms into geometric shapes and reconstructed them across the surface of the painting. Although his compositions appeared flattened, Braque carefully arranged planes and tonal variations to create a subtle sense of three-dimensional structure.

His artistic partnership with Picasso was interrupted by World War I when Braque enlisted in the French army and suffered severe injuries in battle. Despite this interruption, Braque continued developing Cubist ideas after the war. In *Violin and Candlestick* (12.5.5), Braque fractured musical instruments and objects into overlapping geometric planes. Using mostly earth-toned browns, grays, and muted colors, he relied on dark black lines to define and separate the fragmented shapes. The painting demonstrates the analytical approach of early **Analytical Cubism**, where recognizable objects are broken apart and reassembled within the composition.

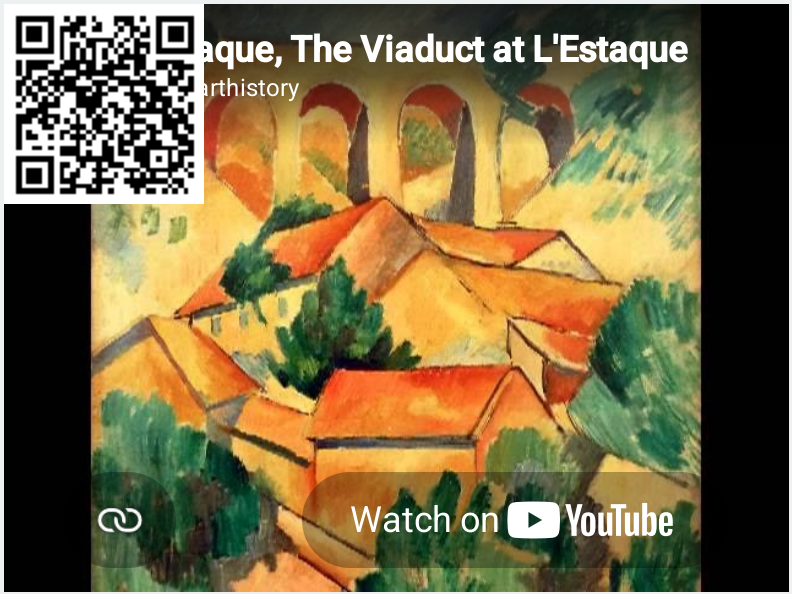
In *Still Life on a Table* (12.5.6), Braque used a common Cubist subject—still-life objects arranged on a table. The drawer and knob at the bottom help orient the viewer within the fragmented space. Heavy black outlines, mottled **brushstrokes**, and subdued browns and grays create depth and texture while maintaining the flattened geometric structure characteristic of Cubism. Through his exploration of form, space, and multiple viewpoints, Braque became one of the most important architects of modern abstract art.

Figure \(\PageIndex{5}\): *Violin and Candlestick* (Public Domain)

Figure \(\PageIndex{6}\): *Still Life on a Table* (Public Domain)

Barque, The Viaduct at L'Estaque

Georges Braque, Le Viaduc à L'Estaque, (The Viaduct at L'Estaque), 1908, oil on canvas, 28-5/8 x 23-1/4 inches or 72.5 x 59 cm (Musée national d'art moderne, Centre Pompidou, Paris)



Juan Gris

Juan Gris was a Spanish painter and sculptor associated with the **Cubist** movement who spent most of his career in France. Gris became known for his precise and carefully organized approach to Cubism, often combining painting materials such as paint, crayon, and textured surfaces to create layered compositions filled with geometric structure. Gris excelled at arranging shapes, textures, patterns, and color into complex yet balanced compositions. By fragmenting and reorganizing objects, he created the illusion of space, depth, and shadow while maintaining the flattened appearance characteristic of Cubism.

One of his best-known works, *Portrait of Picasso* (12.5.7), was painted in 1912 in the style of **Analytical Cubism**. In the painting, Gris deconstructed the figure of Pablo Picasso into overlapping geometric forms organized along diagonal lines. The head, neck, and torso are simplified into angular planes and shapes, while the subdued palette of blues, grays, and browns creates a calm, almost pastel-like atmosphere. In *Still Life with Checked Tablecloth* (12.5.8), Gris painted traditional Cubist subjects such as a

guitar, wine bottle, grapes, newspaper, and tablecloth. However, he fragmented and rearranged these objects into a composition that subtly resembles the shape of a bull's head. The painting uses cooler green tones contrasted by the bright red tablecloth and translucent white highlights to create balance and visual rhythm. Later in his career, Gris simplified his compositions even further, often reducing distinctions between background and object. Through his careful geometry, layered textures, and harmonious color relationships, Juan Gris became one of the most refined and influential artists of the Cubist movement.

Figure \(\PageIndex{7}\): *Portrait of Pablo Picasso* (1912, oil on canvas, 93.3 x 74.4 cm) (Public Domain)

Figure \(\PageIndex{8}\): *Still Life with Checked Tablecloth* (1915, Oil and graphite on canvas, 116.5 x 80.2 cm) (Public Domain)

Fernand Léger

Fernand Léger was a French painter, sculptor, and filmmaker who expanded the ideas of **Cubism** into a more simplified and machine-inspired modern style. Léger became known for transforming Cubist fragmentation into bold, mechanical-looking forms that reflected the industrial and technological world of the 20th century. His work is often considered an important precursor to later movements such as **Pop Art**. World War I deeply influenced Léger's artistic vision. Serving for two years on the front lines, he sketched scenes from the trenches, including soldiers, artillery, airplanes, and the surrounding battlefield. The experience exposed him to the power and structure of modern machines, themes that later became central to his paintings.

In *The City* (12.5.9), Léger demonstrated what is often called his **"mechanical period."** The painting is filled with geometric forms, bold outlines, pipes, signs, ladders, and fragmented architectural shapes that resemble machinery and industrial equipment. Instead of depicting the city realistically, Léger transformed urban life into a rhythmic arrangement of sleek, machine-like forms reflecting the speed and energy of modern society.

In *Mother and Child* (12.5.10), Léger simplified the human figures into smooth, rounded shapes outlined with strong black contours. The figures appear almost mechanical or automated because of their rigid structure and polished surfaces. He used vibrant contrasting colors to emphasize form and visual impact. The unusual proportions, where the child may appear larger than the mother, challenge viewers' expectations and encourage them to reconsider visual perception and scale. Through his bold colors, simplified forms, and industrial imagery, Léger helped move Cubism toward a more modern, mechanical aesthetic that reflected the changing technological world.

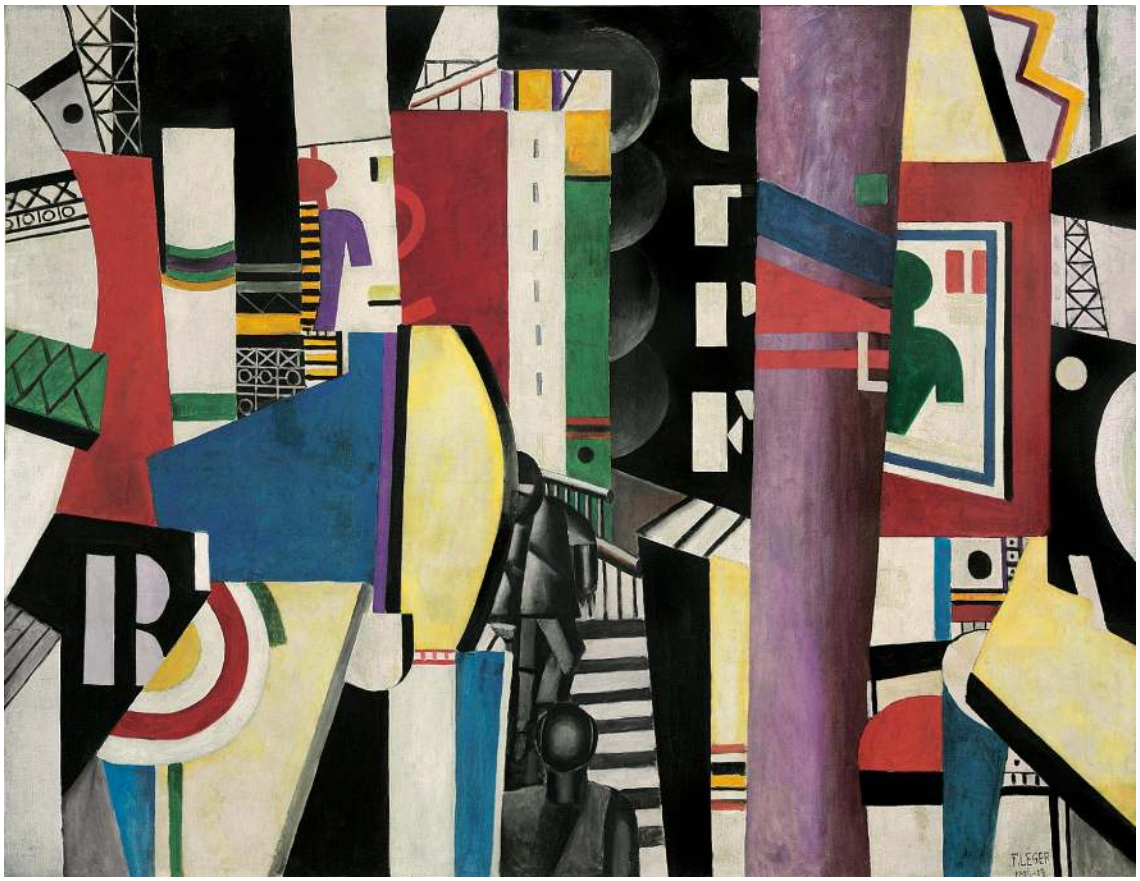


Figure \(\PageIndex{9}\): *The City* (Public Domain)

Figure \(\PageIndex{10}\): *Mother and Child* (Public Domain)

1913 Contrast of Forms by Fernand Léger

1913 Contrast of Forms by Fernand Léger

Maria Blanchard

María Blanchard was a Spanish artist associated with the **Cubist** movement who overcame significant physical challenges throughout her life. Born with multiple health conditions and physical deformities, Blanchard nevertheless pursued art seriously and studied in Madrid, where she learned modern artistic theories, including the principles of Cubism promoted by Juan Gris. After World War I, Blanchard moved to Paris, where she continued developing her own interpretation of Cubism. While influenced by the geometric fragmentation of Cubist art, her paintings often carried strong emotional qualities that distinguished her from other Cubist artists.

As her health declined, Blanchard's paintings became increasingly expressive and emotionally intense. In *Still Life with Red Lamp* (12.5.11), she combined fragmented objects with interlocking geometric forms characteristic of Cubism while also using exaggerated colors and dramatic contrasts to heighten emotional impact. The composition is structured through overlapping shapes and angular planes, yet the thick application of paint adds texture and physical energy to the surface. Blanchard's use of bold color, expressive brushwork, and fragmented structure blended Cubist geometry with emotional expression, making her an important contributor to modern art and one of the notable women artists associated with Cubism.

Figure \(\PageIndex{11}\): *Still Life with Red Lamp* (Public Domain)

Lyubov Popova

Lyubov Popova was a Russian artist, educator, and theorist associated with the modern avant-garde movements that developed after the Russian Revolution. She studied art privately and traveled extensively to learn new artistic styles and techniques. Popova became deeply involved in building the new Soviet cultural system and believed modern art should break completely from traditional artistic conventions. Popova declared, “We are breaking with the past, because we cannot accept its hypotheses,” reflecting the revolutionary spirit that shaped her work. Her paintings were influenced by traditional Russian religious icons as well as modern European artists such as Fernand Léger, particularly his use of tubular and mechanical forms.

Her compositions were built from geometric structures using triangles, rectangles, intersecting lines, cones, and cylinders to create movement and spatial complexity. In *The Model* (12.5.12), Popova divided the figure into fragmented geometric sections outlined with strong black lines characteristic of **Cubism** and Russian modernism. The painting uses bright yellow as a central focal point surrounded by warm browns, while cooler grays and silvers occupy the outer areas of the composition. Although the figure is fractured into abstract forms, the viewer can still identify the model’s body, arms, and legs through the arrangement of shapes and contours. Popova’s work combined Cubist fragmentation with dynamic movement and modern industrial forms, helping shape the development of Russian avant-garde art. Tragically, she died at the age of thirty-five, limiting the amount of work she was able to produce, yet she remains an important figure in modern art history.

Figure \(\PageIndex{12}\): *The Model* (Public Domain)

[1] Retrieved from https://www.moma.org/artists/4694-liubov-popova

12.6: Dada (1916 – 1930)

Definition: Term

- **Dada** – An anti-art movement that rejected traditional artistic values and responded to the horrors of World War I.
- **Anti-art** – Art intended to challenge or oppose conventional ideas about beauty, meaning, and artistic skill.
- **Avant-garde** – Experimental and innovative art that challenges traditional ideas and styles.
- **Satire** – The use of humor, irony, or exaggeration to criticize society, politics, or culture.
- **Nonsense** – Meaningless or irrational content used intentionally in Dada art and literature.
- **Aesthetics** – Principles related to beauty, artistic taste, and visual appearance.
- **Colonialism** – The practice of powerful nations controlling other territories and peoples.
- **Nationalism** – Strong identification with and support for one's nation, sometimes leading to political conflict.
- **World War I** – A global conflict fought from 1914 to 1918 that greatly influenced modern art movements.
- **Collage** – An artistic technique combining paper, photographs, or other materials onto a surface.
- **Conceptual art** – Art in which the idea or concept is more important than traditional visual appearance.
- **Performance art** – Artistic expression using live actions, movement, or theatrical performance.
- **Absurdity** – The quality of being irrational, illogical, or intentionally meaningless.
- **Conventional values** – Traditional social, cultural, or artistic beliefs accepted by society.
- **Surrealism** – A later modern art movement exploring dreams, imagination, and the unconscious mind.

Dada was an avant-garde art movement that emerged around 1916 during World War I as a reaction to the violence, destruction, and political failures that many artists believed had caused the war. Beginning in Europe and later spreading to New York City, Dada rejected traditional artistic standards and questioned the values of modern society. Dada artists viewed nationalism, colonialism, materialism, and middle-class social values as contributing causes of World War I. In response, they created an **anti-art** movement that deliberately opposed conventional ideas about beauty, logic, and artistic skill. Instead of producing harmonious or realistic works, Dada artists embraced chaos, absurdity, satire, and nonsense.

The movement intentionally sought to shock, offend, and challenge audiences. Dada artists ignored traditional **aesthetics** and often created works that appeared irrational, humorous, or destructive. Art, poetry, theatre, performance, and collage were used to criticize society and undermine established cultural norms. Dada artists believed that if society had produced a devastating war, then traditional cultural values and artistic conventions also deserved to be questioned and dismantled. Through experimentation, irony, and rebellion, Dada helped pave the way for later modern movements such as **Surrealism** and conceptual art.

Jean Arp

Jean Arp, originally named Hans Peter Wilhelm Arp, was born in the Alsace-Lorraine region, an area whose control shifted between Germany and France after the Franco-Prussian War and World War I. When the region returned to French control after World War I, French law required him to change his German first name, Hans, to the French form, Jean. Arp studied art early in life and moved to Switzerland before World War I to avoid military service in the German army. In Zurich, he became an important member of the **Dada** movement, joining the Zurich Dada group where he met fellow artist Sophie Taeuber-Arp, whom he later married. Arp's early Dada works frequently used **collage**, torn paper, painted wood, and relief sculpture. He often experimented with chance arrangements and organic abstract forms, rejecting traditional realism and conventional artistic rules. Many of his artworks explored playful ambiguity, allowing viewers to interpret multiple meanings within the same shapes.

In *Shirt Front and Fork* (12.6.1), Arp created relief forms using simplified abstract shapes. The fork and shirt front can also resemble parts of a human figure or face, reflecting the Dada interest in visual ambiguity and reinterpretation. Arp frequently used black, white, and gray tones because he believed these colors resembled written language and symbolized communication. In *Pagoda Fruit* (12.6.2), Arp created rounded, stacked, bulbous forms that suggest natural growth and organic movement. His smooth, simplified shapes became an important influence on later abstract sculpture and modern design. Through abstraction, collage, and organic forms, Jean Arp helped define the playful, experimental spirit of Dada and later modern art movements. Arp believed the lower part looked like the fruit, while the upper section reminded him of the roof seen on pagodas. Arp stated, "art is a fruit growing out of man like the fruit out of a plant, like the child out of the mother…reason has cut man off from nature."[1] He believed man was going to his death by mechanization.

Figure \(\PageIndex{1}\): *Shirt Front and Fork* (1922, painted wood) (CC BY-SA 3.0)

Figure \(\PageIndex{2}\): *Pagoda Fruit* (1949, bronze, 88.9 x 67.9 x 76.2 cm) (CC BY-SA 3.0)

Hannah Hoch

Hannah Höch was an important German artist associated with the **Dada** movement and one of the pioneers of **photomontage**. She studied at the School of Applied Arts in Berlin and became known for creating politically and socially critical artworks during the unstable period following World War I. Höch's photomontages were made by cutting, appropriating, and rearranging photographs, newspaper clippings, printed text, and images from magazines into fragmented compositions. Through these layered images, she commented on politics, gender inequality, modern society, and the contradictions of postwar Germany.

Her photomontage (12.6.3) works combined seemingly unrelated images into satirical and often chaotic scenes that reflected the confusion and instability of the modern world. Rather than creating traditional realistic art, Höch used fragmentation and collage to challenge social conventions and expose hypocrisy. In one of her works, she included a map identifying countries where women had gained the right to vote. By inserting this political element into the composition, Höch highlighted ongoing gender inequality and criticized the social limitations placed on women. Her art frequently explored the role of women in modern society and questioned traditional expectations about gender and identity. Through her innovative use of photomontage and social critique, Hannah Höch became one of the most influential women artists of the Dada movement and an important voice in modern feminist art history.

Figure \(\PageIndex{3}\): *Cut with a Kitchen Knife* (Public Domain)

Hannah Höch, Cut with the Kitchen Knife Dada Through the Last Weimar Beer-Belly Cultural Epoch of Germany, collage, mixed media, 1919-1920

Sophie Taeuber-Arp

Sophie Taeuber-Arp was a Swiss artist known for her remarkable versatility as a painter, sculptor, textile designer, furniture designer, and dancer. She became one of the most important artists associated with **Dada** and modern geometric abstraction. Trained in multiple artistic disciplines, Taeuber-Arp embraced the experimental spirit of the Dada movement developing in Switzerland during World War I. Unlike some Dada artists who emphasized chaos and satire, Taeuber-Arp brought a sense of harmony, rhythm, and playfulness to abstraction through carefully arranged geometric forms and color relationships.

Her work explored the interaction of shapes, lines, and color using simplified geometric compositions. In *Oval Composition with Abstract Motifs* (12.6.4), Taeuber-Arp arranged repeated blocks and curved forms within an oval structure. Bright reds and yellows interact rhythmically across the composition, creating movement and visual balance. In *Composition with Diagonals and Cross* (12.6.5), she used sharp angles, intersecting lines, and contrasting dark and light tones to produce dynamic tension and structure. The carefully organized geometry reflects her interest in abstraction, design, and mathematical balance. Through her innovative use of geometric abstraction across painting, textiles, dance, and design, Sophie Taeuber-Arp became one of the leading modern artists of the early 20th century and helped expand Dada beyond traditional fine art into multiple creative disciplines.

Figure \(\PageIndex{4}\): *Oval Composition with Abstract Motifs* (Public Domain)

Figure \(\PageIndex{5}\): *Composition with Diagonals and Cross* (Public Domain)

Raoul Hausmann

Raoul Hausmann was an Austrian-born artist and writer who became one of the leading figures of the Berlin **Dada** movement. After moving to Berlin as a teenager, he first studied painting under his father before attending art school. Hausmann initially worked as an **Expressionist** painter and writer, criticizing traditional artistic institutions and promoting radical new artistic ideas. During and after World War I, Hausmann became deeply involved in Dada philosophy, believing society needed to destroy outdated political, social, and artistic systems in order to rebuild new forms of culture. He wrote essays, books, and articles encouraging artists to move beyond traditional painting and experiment with new materials, sound, language, and collage techniques.

Hausmann actively organized Dada exhibitions and performances to spread the movement's anti-traditional ideas. One of his most famous works, *ABCD* (12.6.6), reflects the Dada interest in fragmentation and reconstruction. The artwork combines photographs, printed text, typography, and symbols into a chaotic but carefully organized composition. Hausmann's own face dominates the upper portion of the image, with the letters "ABCD" appearing at his mouth as if spoken aloud. Later, Hausmann developed experiments with **phonemes** and "sound poetry," which he described as **optophonetics**, or visible speech sounds. He cut apart printed words and rearranged letters into new combinations intended to be performed vocally. The size, placement, and boldness of the letters suggested different sounds, rhythms, and vocal intensities. These reconstructed words were often read aloud at Dada poetry events, creating unusual and experimental performances that challenged conventional language and communication. Through collage, typography, sound poetry, and photomontage, Hausmann expanded Dada beyond visual art into performance, language, and multimedia experimentation.

Figure \(\PageIndex{6}\): *ABCD* (1923-24, photomontage) (Public Domain)

[1] Retrieved from https://time.com/archive/6806521/art-strange-fruit/

12.7: The Bauhaus (1919-1933)

Definition: Term

- **Bauhaus** – A German art and design school founded in 1919 that united art, architecture, and craftsmanship.
- **Walter Gropius** – German architect and founder of the Bauhaus school.
- **Modern design** – Design emphasizing simplicity, functionality, and clean geometric forms.
- **Architecture** – The art and science of designing buildings and structures.
- **Industrial design** – The creation of products intended for mass production and everyday use.
- **Functionalism** – The principle that design should prioritize usefulness and purpose.
- **Geometric forms** – Shapes such as squares, rectangles, circles, and triangles used in design and art.
- **Minimalism** – A style emphasizing simplicity and reducing forms to essential elements.
- **Typography** – The design and arrangement of printed letters and text.
- **Craftsmanship** – Skilled handwork used in creating artistic or functional objects.
- **Mass production** – Manufacturing large quantities of products efficiently using machines.
- **Avant-garde** – Experimental and innovative art or design that challenges tradition.
- **Modernism** – A movement embracing innovation, experimentation, and rejection of traditional artistic styles.
- **Industrialization** – The growth of machine production, factories, and modern industry.
- **Functional art** – Art or design intended to serve a practical purpose while remaining aesthetically pleasing.
- **Weimar Germany** – The period of German government between World War I and the rise of Nazi Germany.

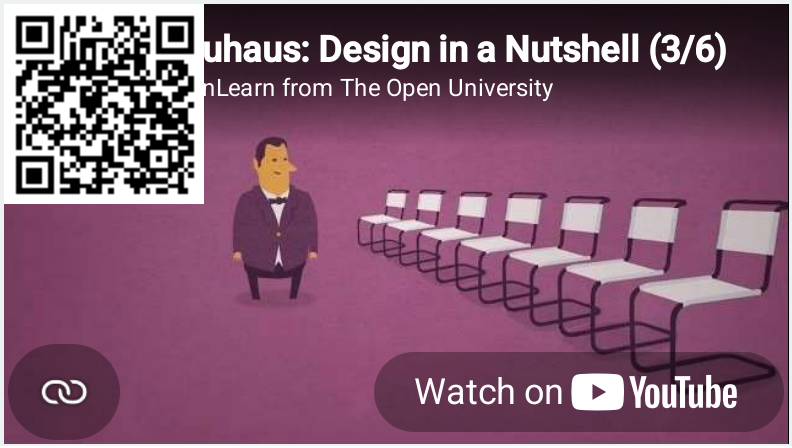
After World War I, Germany struggled with political instability, economic hardship, and social division as the country attempted to recover from the devastation of war. Traditional bourgeois industry and militarism coexisted uneasily with the rising influence of Russian Communism and the growing threat of Nazi nationalism and racism. During this turbulent period, modern art and design movements emerged that sought to rebuild society through creativity, innovation, and functional design. One of the most influential developments was the founding of the **Bauhaus** school in 1919 by Walter Gropius. The name *Bauhaus* (12.6.1), meaning “building house” in German, reflected the school’s goal of uniting art, architecture, craftsmanship, and design into a single modern vision. The Bauhaus promoted the idea that art should serve modern life and that beautiful design could also be functional and accessible. The school encouraged experimentation with materials, geometry, industrial production, and simplified forms. Artists, architects, sculptors, designers, and craftspeople worked together to develop new approaches to architecture, furniture, textiles, typography, and visual art.

The Bauhaus rejected excessive decoration and historical imitation in favor of clean lines, geometric structure, and practical design suited to the modern industrial world. Its influence spread internationally and became one of the foundations of modern architecture and modern design in the 20th century. Walter Gropius said, "The school would be open to "any person of good repute, regardless of age or sex, and even went on to clarify that there were to be 'no differences between the fairer sex and the stronger sex,' in a time when women could not attend college."[1] The Bauhaus was open for only fourteen years before it was closed by the Nazis; however, the ideas continued and influenced future artists and companies.

Figure \(\PageIndex{1}\): Bauhaus (Public Domain)

Bauhaus: Design in a Nutshell

Bauhaus was a totally different type of art school, training students in many art and design disciplines, with the ultimate aim of unifying art, craft, and technology.



Walter Gropius

Walter Gropius was a German architect and the founder of the **Bauhaus**, one of the most influential schools of modern art, architecture, and design in the 20th century. During World War I, Gropius served in the German military and was awarded the Iron Cross twice for his service. After the war, Gropius established the Bauhaus in 1919 with the goal of uniting art, architecture, craftsmanship, and industrial design into a single modern approach. The school quickly became internationally respected and attracted many important modern artists and designers, including Paul Klee, László Moholy-Nagy, and Wassily Kandinsky.

Gropius also designed the Bauhaus school buildings (12.6.2), which became landmarks of **modern architecture**. The structures emphasized geometric forms, open space, glass walls, clean lines, and functional design without unnecessary decoration. These ideas helped redefine architecture for the modern industrial age. As the Nazi regime rose to power and increasingly persecuted artists, intellectuals, and Jewish communities, Gropius and his family fled Germany, first to England and later to the United States.

Gropius designed his own home in Germany (12.6.3) according to Bauhaus principles of simplicity, efficiency, and beauty. Later, the Gropius House in Massachusetts (x.x) applied similar ideas and introduced **International Modernism** to American

architecture. The house combined modern materials, functional planning, and simple geometric design suited to contemporary living. In the United States, Gropius became an influential architect and educator whose Bauhaus ideas profoundly shaped modern architecture, industrial design, and art education worldwide.

Figure \(\PageIndex{2}\): Gropius House in Germany (CC BY-SA 4.0)

Figure \(\PageIndex{3}\): Gropius House in Massachusetts (CC BY-SA 3.0)

Ludwig Mies van der Rohe

Ludwig Mies van der Rohe was one of the most influential architects of the **Bauhaus** movement and a major pioneer of modern architecture. Known for the philosophy “less is more,” Mies believed architecture and design should emphasize simplicity, functionality, clean lines, and high-quality craftsmanship. From 1930 to 1933, Mies served as the final director of the Bauhaus school before it was forced to close under pressure from the Nazi regime. During this period, Bauhaus artists and designers promoted minimalist forms and the integration of art, architecture, and industrial production. One of Mies’s most famous designs is the *Barcelona Chair* (12.6.4), created in 1929. The chair became an iconic example of modern industrial design, combining elegant simplicity with fine craftsmanship. Its sleek metal frame and cushioned leather seating reflected Bauhaus ideals of functional beauty and modern materials.

After the Nazis shut down the Bauhaus, Mies emigrated to the United States and settled in Chicago, where he became a leading architect of **International Modernism**. His American projects helped redefine urban architecture during the 20th century. Among his important buildings is the IBM Plaza (12.6.5) in Chicago, which reflects his characteristic use of steel, glass, and geometric simplicity. He also designed the Martin Luther King Jr. Memorial Library (12.6.6) in Washington, D.C., one of the city’s few major examples of modernist architecture, constructed with steel, brick, and glass. Perhaps his most influential skyscraper design was the Seagram Building (12.6.7) in New York City. The building transformed modern skyscraper design by being set back from the street to create an open plaza, emphasizing space, proportion, and urban openness. Its bronze exterior and dark glass façade became defining features of modern corporate architecture. Through his minimalist philosophy and innovative use of modern materials, Mies van der Rohe helped shape the appearance of modern cities and architecture around the world.

Figure \(\PageIndex{4}\): Barcelona chair (CC BY-SA 3.0)

Figure \(\PageIndex{5}\): IBM Plaza (CC BY 4.0)

Figure \(\PageIndex{6}\): Seagram Building (CC BY-SA 2.0)

Figure \(\PageIndex{7}\): Martin Luther King Jr. Library (CC BY-SA 4.0)

Seagram Building

Ludwig Mies van der Rohe, Seagram Building, 375 Park Avenue, New York City (1958) Speakers: Dr. Matthew Postal, Dr. Steven Zucker. Note: In the video we call Le Corbusier a French architect, but he was born in Swizerland and became a French citizen in 1930.

Peter Behrens was an influential German architect and designer whose work helped shape the development of modern industrial architecture and later influenced the **Bauhaus** movement. Behrens combined elements of traditional **classicism** with modern industrial materials and engineering, creating designs that balanced functionality with monumental visual impact. One of his most important works was the *AEG Turbine Factory* (12.6.8), completed in 1909 for the German electrical company AEG. The building was revolutionary because it treated an industrial factory as an architectural statement rather than merely a functional structure.

The factory featured massive steel framing combined with enormous glass windows stretching approximately 100 meters long and 15 meters high along both sides of the building. The extensive use of steel and glass allowed natural light to flood the interior workspace while emphasizing openness, efficiency, and modern industrial power. Although the building served a practical industrial purpose, Behrens designed it with strong geometric structure and monumental proportions, giving the factory the appearance of a modern industrial temple. His innovative integration of architecture, engineering, and industrial design became highly influential for later modern architects and Bauhaus designers. Behrens also mentored several important modern architects, including Walter Gropius and Ludwig Mies van der Rohe, helping shape the future of modern architecture in the 20th century.

Figure \(\PageIndex{8}\): AEG Turbine Factory (CC BY-SA 3.0)

Peter Behrens also designed functional everyday household and industrial objects, helping establish the modern idea that practical items could also be works of art. His industrial clocks (12.6.9), designed for AEG factories, reflected the modern emphasis on simplicity, efficiency, and geometric clarity. Rather than adding unnecessary decoration, Behrens focused on clean forms and practical usability suited to industrial environments. His tea kettles (12.6.10) further demonstrated the Bauhaus ideal of combining beauty with function. Produced in different sizes, the kettles featured modern conveniences such as removable electrical cords that allowed the kettles to be washed more easily. The designs emphasized streamlined forms, industrial materials, and efficient construction while remaining aesthetically elegant.

When the **Bauhaus** officially closed in 1933 under pressure from the Nazi regime, many of its students and teachers emigrated to other countries and continued spreading the principles of modern design internationally. Bauhaus ideas influenced architecture, furniture, typography, industrial products, textiles, and graphic design throughout the world. The Bauhaus philosophy transformed the understanding of everyday objects by promoting the idea that useful items could also possess artistic value. Its influence continues today in modern furniture, architecture, household appliances, graphic design, and minimalist aesthetics that emphasize simplicity, functionality, and clean geometric forms.

Figure \(\PageIndex{9}\): Clock (CC BY-SA 3.0)

Figure \(\PageIndex{10}\): Tea kettles (CC BY-SA 3.0)

Although the male leaders of the **Bauhaus** became internationally recognized figures in modern art and architecture, many women who studied and worked at the school made equally important contributions that were often overlooked in traditional art history. Women artists at the Bauhaus worked beside the men and helped shape groundbreaking developments in modern design, textiles, photography, architecture, and industrial arts. Despite the school's progressive reputation, women were frequently directed toward the weaving workshop rather than encouraged to pursue painting, architecture, sculpture, or industrial design, fields considered more suitable for men. Many administrators believed women were better suited to two-dimensional decorative arts instead of large-scale architectural or technical work.

Even within these limitations, Bauhaus women artists demonstrated remarkable determination, creativity, and resilience. They expanded weaving into a modern art form by experimenting with abstract patterns, industrial materials, geometric design, and functional textiles. Others moved beyond traditional expectations to become architects, photographers, graphic designers, furniture designers, and industrial artists. These women helped establish many of the foundations of modern design and visual culture while challenging gender barriers within the art world. Their persistence and innovation paved the way for future generations of women artists and designers, ensuring that the Bauhaus legacy included not only architecture and industrial design, but also important advances in textiles, photography, and modern visual communication.

Otti Berger

Otti Berger (1898-1944) was born in Zmajevac, Croatia, and enrolled in the Royal Academy of Arts and Crafts before continuing her studies at the Bauhaus in 1926. Heralded as one of the "most talented weavers," Berger started "experimenting with methodology and materials during her studies at the Bauhaus to eventually include plastic textiles intended for mass production." [2] Otti Berger continually developed an innovative and expressive approach to weaving while studying and teaching at the **Bauhaus**. She challenged the common belief that weaving was merely "women's work" by demonstrating that textile design could be a serious modern art form equal to painting, sculpture, and architecture. After Gunta Stölzl stepped down as head of the weaving workshop, Berger assumed a leadership role within the department. She expanded the possibilities of textile design by experimenting with industrial materials, texture, color, and pattern.

Her *Sample Textile Book* (12.6.11) collected many of her most successful weaving experiments from her Bauhaus years. Berger used materials such as mercerized cotton and synthetic dyes to create intricate geometric patterns and modern abstract designs. The

samples demonstrated that the loom could function not only as a practical tool for producing fabric, but also as a medium for artistic experimentation and innovation. Berger's work reflected Bauhaus ideals that united craftsmanship, industrial production, and modern aesthetics. Through her textiles, she helped elevate weaving into a respected modern art and design discipline, contributing significantly to the Bauhaus legacy and the advancement of women in modern art and design.

Figure \(\PageIndex{11}\): Textile sample book (Public Domain)

[1] Billard, J. (2018). The other art history: the forgotten women of the Bauhaus. https://www.artspace.com/magazine/ar...-bauhaus-55526

[2] Weibel, P. (2005). Beyond art: a third culture. A comparative study in cultures, art and science in 20th century Austria and Hungry. Vienna: Springer-Verlag.

12.8: Harlem Renaissance (1920 – 1930)

Definition: Term

- **Harlem Renaissance** – A cultural movement from about 1918 to 1937 celebrating African American art, music, literature, and identity.
- **Renaissance** – A rebirth or revival of culture, creativity, and intellectual activity.
- **African American culture** – The traditions, artistic expression, history, and experiences of African Americans.
- **Jazz** – A musical style developed largely by African American musicians featuring improvisation and rhythm.
- **Blues** – A musical genre expressing emotion, struggle, and personal experience through song.
- **Literature** – Written works such as poetry, novels, essays, and plays.
- **Visual arts** – Creative arts such as painting, sculpture, photography, and printmaking.
- **Theater** – Dramatic performances presented on stage before an audience.
- **Cultural identity** – A sense of belonging to a cultural group based on shared traditions and experiences.
- **Stereotype** – An oversimplified or generalized belief about a group of people.
- **Segregation** – The enforced separation of racial groups in society.
- **Intellectual movement** – A period of shared ideas and creative thought among writers, artists, and scholars.
- **Creative expression** – The communication of ideas, emotions, or identity through artistic activity.
- **Modern American art** – Artistic styles and movements that developed in the United States during the modern era.
- **Migration** – The movement of people from one place to another, often for economic or social opportunities.
- **Cultural influence** – The impact one culture or movement has on society, art, music, or ideas.

The **Harlem Renaissance** was a major cultural movement that flourished from approximately 1918 to 1937 and transformed African American art, literature, music, and intellectual life in the United States. Centered in the Harlem neighborhood of New York City, the movement became the most influential African American cultural awakening of the early 20th century and later spread throughout the nation. The Harlem Renaissance celebrated African American identity, creativity, history, and cultural expression at a time when racial segregation and discrimination were widespread in American society. Artists, writers, musicians, actors, and intellectuals sought to challenge racist stereotypes and redefine how Black life and culture were represented in American art and literature.

The movement included achievements in poetry, novels, painting, sculpture, theater, jazz, blues, and performance. It encouraged African Americans to participate actively in shaping and representing their own culture rather than being defined through white-controlled depictions and stereotypes. Harlem became a vibrant center of Black intellectual and artistic life, attracting talented writers, musicians, scholars, and visual artists from across the country. The movement had a lasting influence on American culture by expanding opportunities for African American artists and reshaping the direction of modern American art, music, and literature.

The Harlem Renaissance

With a Jim Crow south alive and well, many black Americans migrated north. This migration resulted in the formation of a creative urban hub in Harlem, New York, and the Harlem Renaissance became a time where black Americans flourished creatively. From writing to art, blues to jazz, a once suppressed black community greeted this newfound freedom by cultivating artistic expression in ways they were prohibited from doing before. Visionaries like Duke Ellington and Zora Neale Hurston thrived during this cultural revolution, and the Harlem Renaissance symbolized the power of the freed black mind in America.

William Johnson

William H. Johnson was an African American artist associated with the **Harlem Renaissance** and modern American art. Born in South Carolina, Johnson later moved to New York City, where he studied at the National Academy of Design. Throughout his career, he traveled to Europe and Africa, experiences that strongly influenced his artistic development and understanding of culture and identity. Johnson's work shifted between realism and **Expressionism**, eventually developing into a highly distinctive **folk-art** style characterized by flattened figures, bold outlines, simplified forms, and vibrant colors. Influenced by modernism, he portrayed everyday African American life with energy, dignity, and emotional expression. He frequently depicted ordinary people engaged in daily activities in both urban and rural settings. Johnson also worked as a teacher at the Harlem Community Art Center through the WPA (Works Progress Administration), where he absorbed the colors, movement, and rhythms of Harlem street life.

In *Street Musicians* (12.8.1), Johnson portrayed two men performing on a street corner, likely playing music to earn money. The figures are highly stylized with angular forms and exaggerated eyes that become focal points within the flattened composition. Although simplified, the figures still convey movement and energy through their posture and rhythm. In *Three Friends* (12.8.2), Johnson painted three women using strong contrasting colors and decorative patterns. Their matching clothing and simplified facial features create unity within the composition, while the women appear to gaze outward toward something beyond the viewer's sight. In *Sowing* (12.8.3), Johnson returned to themes from his South Carolina childhood and rural farming life. Although the painting uses brilliant, joyful colors, the composition also contains underlying emotional tension, reflecting the complexity of labor, survival, and African American life in the rural South. Through his bold color palette, flattened forms, and celebration of Black culture and everyday experience, William H. Johnson became one of the important visual artists connected to the Harlem Renaissance and modern American art. The plow the man grips is stained with red streaks of iron-suffused earth. The woman's hand is tightly clenched as she holds the seed above the soil before releasing it. A ghost moon in the sky hints at things both visible and unseen."[1]

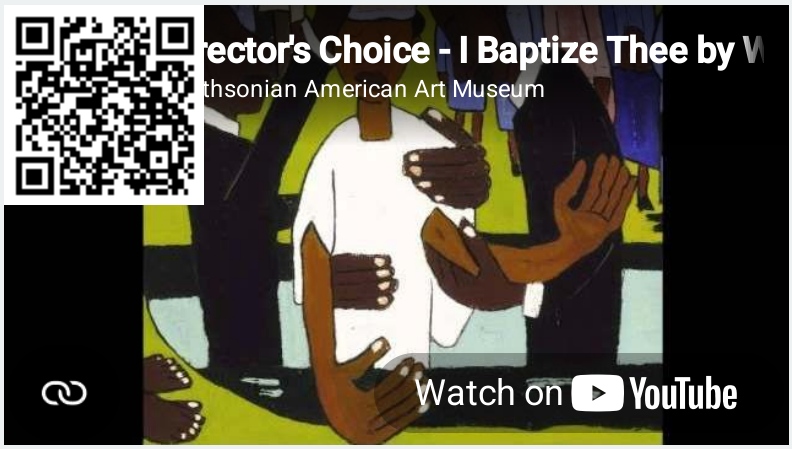
Figure \(\PageIndex{1}\): *Street Musicians* (1939-40, screenprint on paper, 45.5 x 35 cm) (Public Domain)

Figure \(\PageIndex{2}\): *Three Friends* (Public Domain)

Figure \(\PageIndex{3}\): *Sowing* (1940, oil on burlap, 97.8 x 116.2 cm) (Public Domain)

Director's Choice: I Baptize Thee by William H. Johnson

Smithsonian American Art Museum Director Elizabeth Broun shares her thoughts about personal favorites from the museum collection.



Jacob Lawrence

Jacob Lawrence was an influential African American artist associated with the **Harlem Renaissance** and modern American painting. Born in New Jersey to parents who had migrated from the rural South, Lawrence grew up during a time when many African Americans were relocating from Southern states to Northern cities in search of better economic opportunities and freedom from racial discrimination. As a teenager, Lawrence attended arts and crafts programs and later studied at the Harlem Art Workshop, an important center for African American artistic development in New York City. There, he began developing the bold narrative style that would define his career.

Lawrence became especially famous for his series of sixty tempera paintings known as *The Migration Series* (12.8.4). Each painting was created on small hardboard panels measuring approximately 45.7 by 30.4 centimeters and collectively told the story of the **Great Migration**, during which millions of African Americans moved from the rural South to Northern cities during the early 20th century. Using flattened forms, strong outlines, geometric compositions, and bold areas of color, Lawrence narrated scenes of travel, labor, hardship, discrimination, and hope. The paintings combine modernist design with storytelling, creating a powerful

visual history of African American experience and resilience. Through his narrative approach and vivid visual language, Jacob Lawrence became one of the most important chroniclers of African American history and culture in modern American art.

"*The Migration Series* is marked by a distinctive style; abstracted, expressive figures with masklike faces act out causes and consequences in stage-like spaces. A consistent palette of blue-green, orange, yellow, and gray-brown ensures the visual integrity of the whole. The first half of the series illustrates the economic hardships and social injustices of the South; the second half describes the life the migrants found when they reached the North."[2] His series was all painted in bright colors, depicting abstract forms of people. He used a light sky blue-gray color in the background, perhaps illustrating the unknown outcome in each painting.

In the first painting from *The Migration Series*, Jacob Lawrence depicted life in the rural Southern Black Belt, where many African Americans worked as impoverished sharecroppers after the end of slavery. Although legally free, many Black families remained trapped in systems of economic dependence and racial oppression. Sharecroppers were often paid extremely low wages, and much of their earnings returned to landlords through debt and unfair labor arrangements. The painting shows people gathered together waiting to be transported to cotton and tobacco fields for work. Lawrence used his characteristic bold colors, especially yellows and reds, to energize the composition and create emotional intensity. Rather than painting realistic faded clothing colors, he used vivid tones to emphasize the human dignity, struggle, and collective experience of the figures.

In the second painting (12.8.5), Lawrence portrayed crowds moving through doorways labeled with destinations, symbolizing African Americans migrating northward into unfamiliar cities and uncertain futures. The repeated doors and simplified forms create a sense of movement, transition, and anonymity as large numbers of people left the South during the **Great Migration**. The painting reflects both the hope for opportunity and the uncertainty that accompanied relocation to industrial Northern cities. Through simplified shapes, strong geometry, and expressive color, Lawrence transformed historical events into powerful visual narratives about migration, labor, inequality, and perseverance.

Figure \(\PageIndex{4}\): *Migration* series (CC BY-NC 2.0)

Figure \(\PageIndex{5}\): *Migration* series (CC BY 2.0)

Jacob Lawrence, The Migration Series

Jacob Lawrence, The Migration Series, 1940-41, 60 panels, tempera on hardboard (even numbers at The Museum of Modern Art, odd numbers at the Phillips Collection)

Aaron Douglas

Aaron Douglas was one of the most important visual artists of the **Harlem Renaissance** and is often called the "father of Black American art." After earning a bachelor's degree in fine arts from the University of Nebraska, Douglas moved to Harlem, New York, where he became deeply involved in the cultural and artistic energy of the Harlem Renaissance. Douglas developed a highly distinctive artistic style that combined influences from African art, Egyptian mural painting, modernism, and **Art Deco** design. His paintings often featured silhouetted figures, geometric shapes, radiating light patterns, and layered transparent forms that created rhythm and movement within the composition.

In *The Power Plant* (12.8.6), Douglas depicted an industrial scene along the river in New York City. The painting includes boats moving across the water, factory buildings with smokestacks releasing smoke into the sky, and workers laboring along the docks. Through simplified forms and stylized shapes, Douglas transformed an ordinary industrial landscape into a modern visual statement about labor, urban life, and technological progress. His use of strong silhouettes, overlapping circular light beams, and geometric organization reflects the influence of Art Deco and mural painting traditions. Douglas frequently used these stylistic elements to celebrate African American life, history, labor, and cultural identity within modern society. Through his innovative visual language and leadership during the Harlem Renaissance, Aaron Douglas helped establish a new artistic identity for African American art in the 20th century.

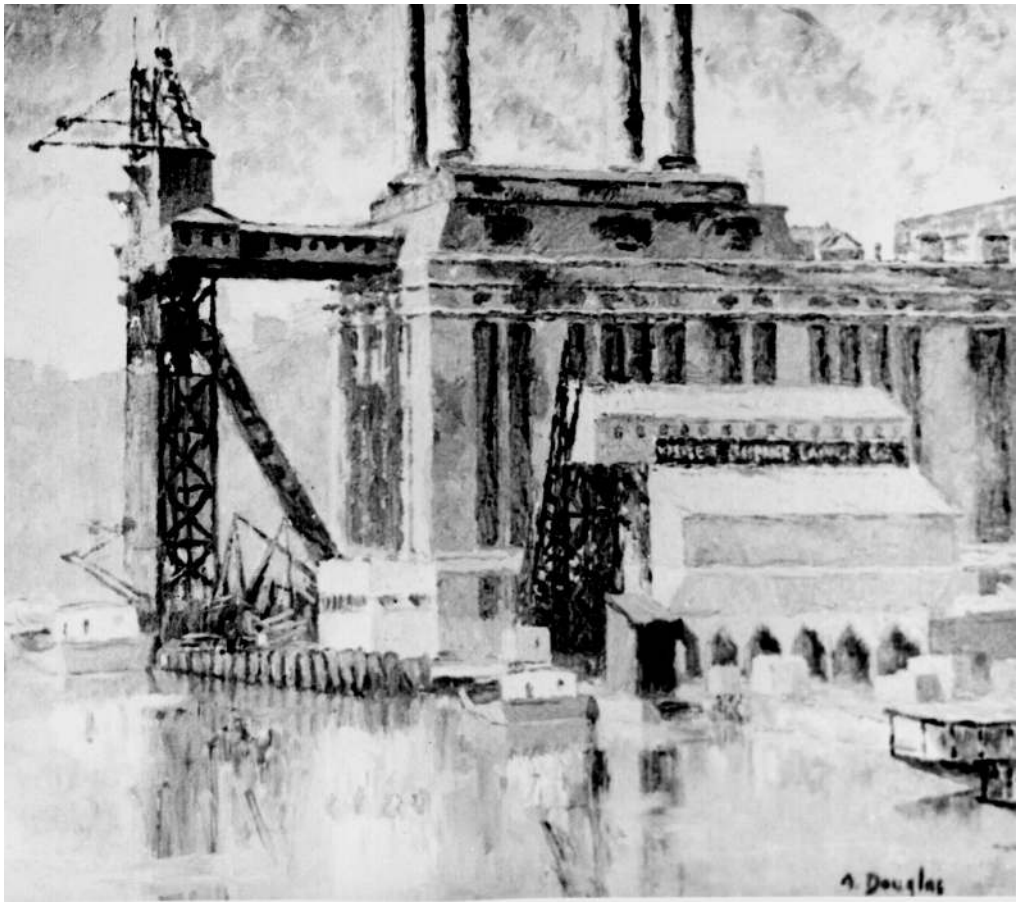


Figure \(\PageIndex{6}\): *Power Plant* (Public Domain)

"We glimpse the harrowing drama unfolding in *Into Bondage* (12.8.6), as if we are crouching by the roots of the tropical foliage and peering through a space between the leaves. Our focus is on the anonymous silhouettes of men and women, their shackles more prominent than their features. They slouch toward waiting ships. We know the tragic outcome of their impending journey: enslavement in a distant country. A pulsating light on the horizon—a star—casts a bright beam on the large figure at the center."[3]

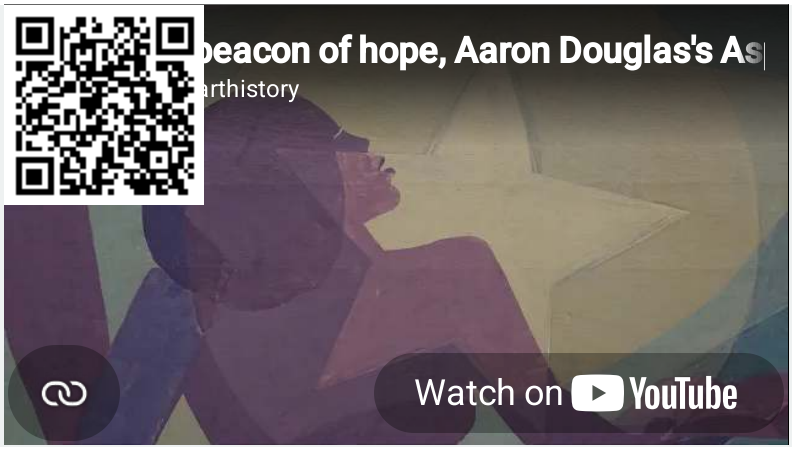
In *Aspiration* (12.8.7), Aaron Douglas portrayed the hopes and ambitions of African Americans during the **Harlem Renaissance** and the era of the **Great Migration**. The painting symbolizes the desire for education, opportunity, and a better future beyond the hardships of rural agricultural life in the South. The figures gaze toward the modern city skyline, where towering skyscrapers represent progress, achievement, and human aspiration. Douglas suggested that urban life, education, and industrial opportunity offered possibilities unavailable within the restrictive conditions of sharecropping and farm labor. Douglas used a muted, dreamlike palette in both *Aspiration* and *The Power Plant* (x.x), creating an atmosphere that feels visionary and symbolic rather than fully realistic. The silhouetted dark figures contrast against soft pastel backgrounds, a stylistic feature characteristic of Douglas's work. His layered shapes, geometric forms, and radiating light patterns combine influences from African art, Egyptian murals, and **Art Deco** design. Through these visual techniques, Douglas transformed scenes of African American life into powerful symbolic images of hope, ambition, struggle, and cultural identity.

Figure \(\PageIndex{7}\): *Into Bondage* (1936, oil on canvas, 153.4 x 153.7 cm) (CC BY 4.0)

Figure \(\PageIndex{9}\): *Aspiration* (1936, oil on canvas, 152.4 x 152.4 cm) (CC BY-NC-SA 2.0)

A beacon of hope, Aaron Douglas's Aspiration

Aaron Douglas, Aspiration, 1936, oil on canvas, 152.4 x 152.4 cm (Fine Arts Museums of San Francisco



Sargent Claude Johnson

Sargent Claude Johnson was an important African American artist who worked primarily in California and became one of the first Black artists to achieve national recognition in the United States. After losing both parents at a young age, Johnson and his siblings were raised by relatives and in orphanages before he eventually moved to San Francisco, where he studied at the California School of Fine Arts. Johnson developed a modern and semi-abstract artistic style while working in a wide variety of materials, including clay, terra cotta, wood, stone, oil paint, and printmaking. His artwork frequently celebrated African American identity, family, dignity, and everyday life while blending modernist simplification with emotional expression.

In *Chester* (12.8.8), Johnson created a terra-cotta sculpture of an African American boy. The sculpture is notable for its simplicity and smooth stylized features. Rather than focusing on detailed realism, Johnson emphasized form, expression, and quiet humanity. He explained that the sculpture was inspired by a young boy who regularly visited his studio and watched him work. In *Forever Free* (12.8.9), Johnson portrayed a mother protectively holding her children. The sculpture symbolizes family strength, protection, and freedom. Johnson created the work by wrapping wood with linen and then covering it with plaster and paint, demonstrating his innovative use of mixed materials and sculptural techniques. Through simplified forms, emotional warmth, and modern abstraction, Sargent Claude Johnson helped establish a distinctive African American modernist style and contributed significantly to American sculpture during the Harlem Renaissance era and beyond.

Figure \(\PageIndex{10}\): *Chester* (Public Domain)

Figure \(\PageIndex{11}\): *Forever Free* (1933, paint, wood) (CC BY-NC-ND 2.0)

Laura Wheeler Waring

Laura Wheeler Waring was a prominent painter of the **Harlem Renaissance** known for her portraits of influential African American leaders, intellectuals, and performers. Born in Connecticut, Waring came from a highly educated family; her father was a minister at one of the first Black churches in the area, and her mother was both a teacher and an artist. Waring attended the Pennsylvania Academy of the Fine Arts and later taught art at Cheyney University for more than thirty years. Her artistic style was strongly influenced by time spent studying in Paris, where she developed an interest in color harmony, portraiture, and modern painting techniques. Waring became especially known for her portrait series titled *Portraits of Outstanding Americans of Negro Origin*, created to honor the achievements and cultural contributions of important African Americans.

One of her portraits depicts James Weldon Johnson (12.8.12), a writer, civil rights activist, and leader of the NAACP. Waring used a combination of broad background brushstrokes and carefully defined facial features to create a dignified image. Tiny illuminated figures in the background reference Johnson's poetry and literary contributions, adding symbolic meaning to the portrait. Waring also painted W. E. B. Du Bois (12.8.13), the influential historian, scholar, and civil rights leader who helped found the NAACP. In the portrait, Du Bois sits at a wooden table holding papers and eyeglasses. Waring used subtle variations of brown tones to model his face and clothing, reflecting her sophisticated understanding of color relationships and skin tones.

Another important portrait portrays Marian Anderson (12.8.14), the internationally acclaimed singer whose historic 1939 performance at the Lincoln Memorial became a landmark event in American civil rights history after she was barred from performing at Constitution Hall by the Daughters of the American Revolution. In Waring's portrait, Anderson appears poised as if singing, wearing a luminous red dress against a soft pastel background. The vibrant red contrasts with Waring's more typical earth-toned palette and emphasizes Anderson's brilliance and stage presence. Through her elegant portraiture and celebration of African American achievement, Laura Wheeler Waring made significant contributions to the visual culture of the Harlem Renaissance and American art history.

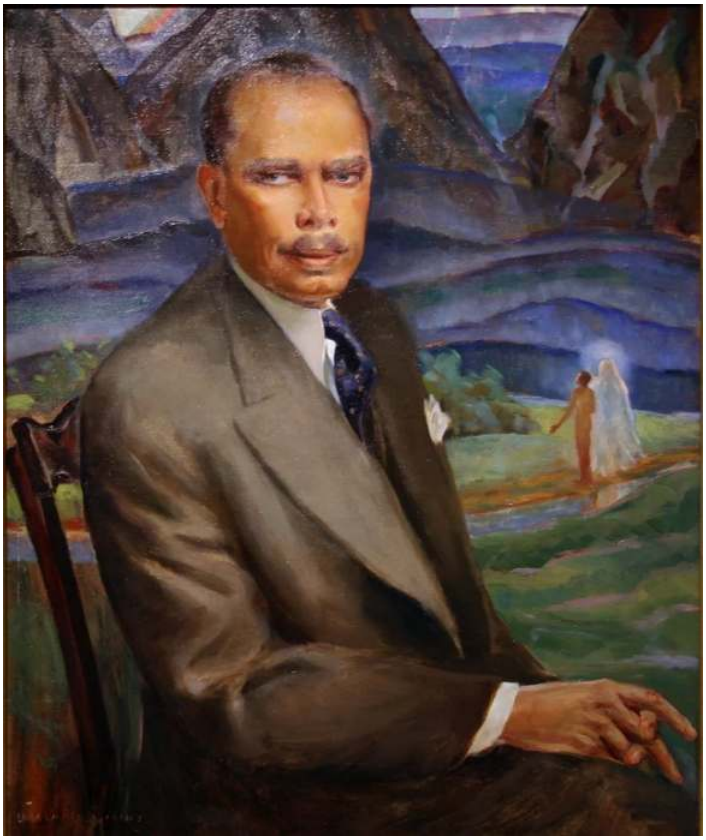


Figure \(\PageIndex{12}\): *James Weldon Johnson* (1943, oil on canvas) (Public Domain)

Figure \(\PageIndex{13}\): *W.E.B.Du Bois* (1948, oil on canvas, 94.6 x 76.5 x 5.1 cm) (Public Domain)

Figure \(\PageIndex{14}\): *Marian Anderson* (1944, oil on canvas, 193 x 102 cm) (Public Domain)

Archibald John Motley Junior

Archibald Motley was an important painter associated with the **Harlem Renaissance**, although he lived and worked primarily in Chicago rather than Harlem. Born in Louisiana and raised in Chicago, Motley studied at the School of the Art Institute of Chicago and became known for his vibrant portrayals of African American social life during the 1920s and 1930s. Motley specialized in portraiture and scenes of urban Black culture, often using brilliant, almost fluorescent colors to create energetic and emotionally charged compositions. His paintings captured music, nightlife, religion, community gatherings, and the complexity of racial identity in America. In *Nightlife* (12.8.15), Motley depicted a crowded jazz club filled with dancing figures and musicians. The room glows with vivid pink lighting while brightly colored clothing in blues, greens, reds, and oranges spreads rhythmically throughout the composition. The bartenders' white clothing sharply contrasts with the dark shelves of bottles behind them, helping organize the busy interior space. Through movement, color, and overlapping figures, Motley created a sense of music, motion, and excitement that draws viewers into the scene.

In *Tongues (Holy Rollers)* (12.8.16), Motley portrayed a religious gathering where worshippers sway, sing, and pray with emotional intensity. Unlike the bright palette of *Nightlife*, this painting uses darker and more subdued tones to create a solemn spiritual atmosphere. The figures' facial expressions and gestures communicate deep emotional involvement, while a woman dressed in

white becomes the focal point of the composition. Motley was also deeply interested in representing the wide range of African American skin tones. In works such as *Self-Portrait* (12.8.17), he carefully varied shades of skin color to reflect the diversity and complexity of racial identity. He understood that skin tone often affected social status and opportunity in American society, and this awareness became an important theme throughout his work. Through his dynamic color, modern urban subjects, and exploration of identity, Archibald Motley became one of the leading visual artists connected to the Harlem Renaissance and modern American art.

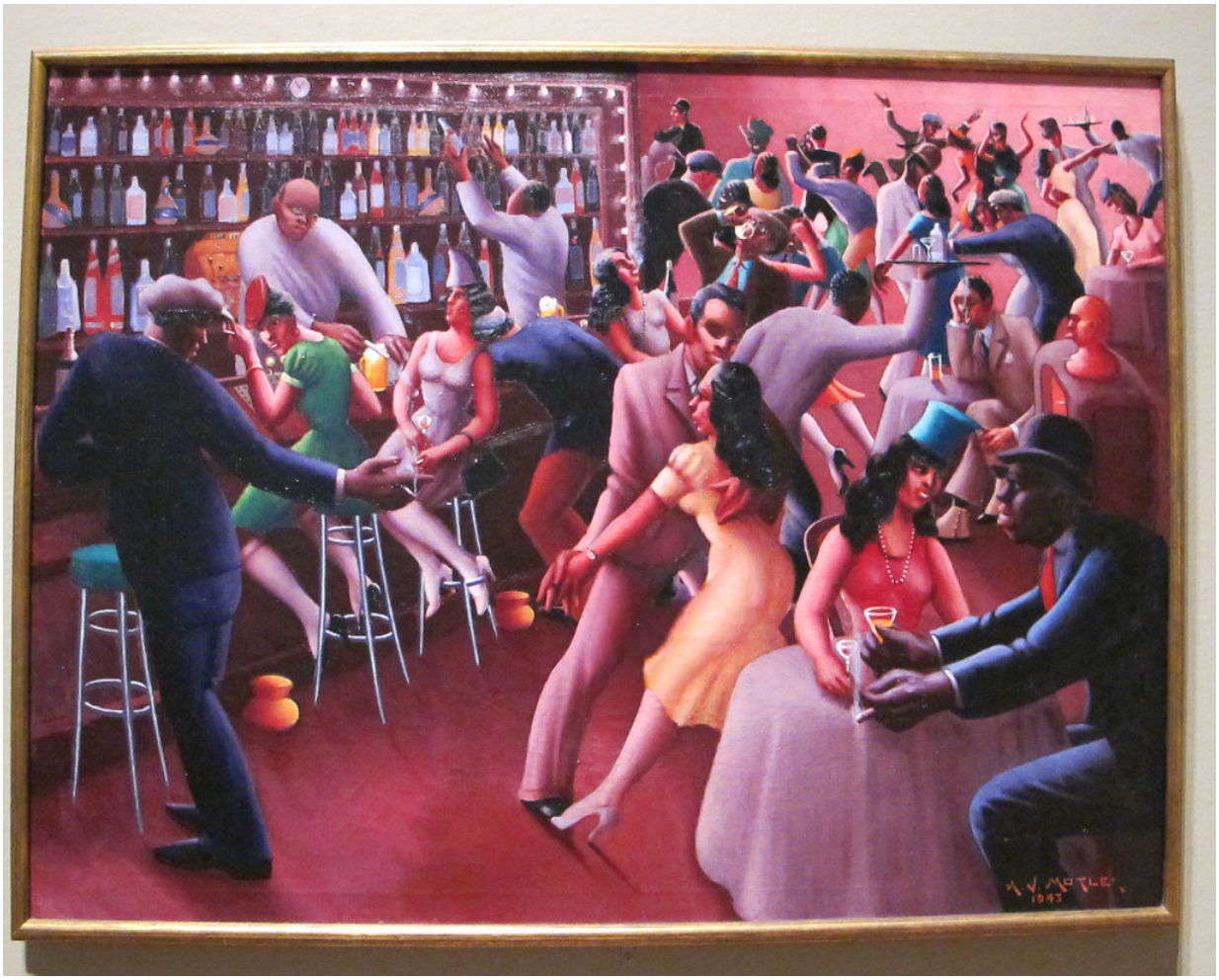


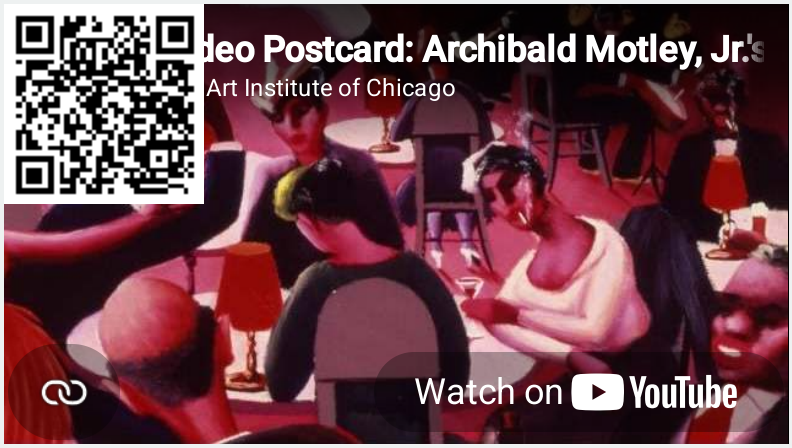
Figure \(\PageIndex{15}\): *Nightlife* (1943, oil on canvas) (CC BY 2.0)

Figure \(\PageIndex{16}\): *Tongues (Holy Rollers)* (1929, oil on canvas, 74.3 x 91.8 cm) (CC BY 2.0)

Figure \(\PageIndex{17}\): *Self-portrait* (c. 1920, oil on canvas, 76.3 x 56 cm) (Public Domain)

Archibald Motley Jr's Saturday Night

Curator Judy Barter takes a close look at one of Archibald Motley, Jr."s paintings set in Bronzeville in the 1930s. It is on view until September 18 in the exhibition "America after the Fall: Painting in the 1930s."



James Richmond Barthé

Richmond Barthé was an important African American sculptor associated with the **Harlem Renaissance**, celebrated for his sensitive portrayals of Black subjects and his exploration of spirituality, movement, and human emotion. Born in Mississippi, Barthé developed a love for drawing as a child, but racial segregation initially prevented him from attending certain art schools reserved for white students. In the 1930s, Barthé was finally able to study at the School of the Art Institute of Chicago before

moving to New York City, where he became part of Harlem's flourishing artistic community. His sculptures often emphasized graceful movement, emotional expression, and the dignity of African American life.

Inspired by the Cuban featherweight boxer Kid Chocolate, Barthé created *The Boxer* (12.8.18), a bronze sculpture portraying the athlete balanced lightly on the balls of his feet in a poised fighting stance. The sculpture captures both physical strength and elegant fluidity, qualities often compared to the rhythm and movement of jazz music. Barthé carefully modeled the lean muscular body to suggest motion, balance, and controlled energy. In *The Blackberry Woman* (12.8.19), Barthé depicted an African American woman carrying baskets while dressed in a long, simple garment. The figure likely represents an ordinary working woman Barthé observed in local marketplaces. The sculpture's elongated and simplified linear forms reflect the influence of West African sculpture, blending realism with stylized abstraction. Barthé also sculpted portraits and busts of prominent African American leaders and historical figures. His bust of Booker T. Washington (12.8.20) is one example of his many commemorative works honoring influential Black Americans. Through graceful form, emotional sensitivity, and celebration of African American identity, Richmond Barthé became one of the leading sculptors of the Harlem Renaissance and modern American art.

Figure \(\PageIndex{18}\): *The Boxer* (1942, bronze, 46.4 x 17.8 x 30.5 cm) (CC BY-SA 2.0)

Figure \(\PageIndex{19}\): *Blackberry Woman* (1932, bronze, 90.1 x 31.1 x 41.3 cm) (Public Domain)

Figure \(\PageIndex{20}\): *Booker T. Washington* (1946, bronze) (Public Domain)

[1] Retrieved from https://americanart.si.edu/artwork/sowing-12027

[2] Retrieved from https://www.moma.org/calendar/exhibitions/444

[3] Retrieved from https://www.nga.gov/artworks/166444-bondage

12.9: Canadian Group of Seven (1920 – 1933)

Definition: Term

- **Group of Seven** – A collective of Canadian artists known for creating paintings inspired by the Canadian landscape.
- **Landscape painters** – Artists who specialize in painting natural scenery such as mountains, forests, rivers, and lakes.
- **Canadian art** – Artwork created in Canada or reflecting Canadian culture, history, and identity.
- **Algonquin Provincial Park** – A large park in Ontario, Canada, famous for its forests and lakes that inspired many Canadian artists. Algonquin Provincial Park
- **Brushstrokes** – The visible marks and movements made by a painter's brush on a surface.
- **Textures** – The surface quality or appearance in art that may look rough, smooth, thick, or layered.
- **Landscape painting** – A type of art focused on natural scenery and outdoor environments.
- **National identity** – The shared culture, values, and characteristics that connect people within a nation.
- **Canadian wilderness** – The vast natural environment of Canada, including forests, mountains, rivers, and lakes.
- **Canadian Group of Painters** – A larger Canadian art association formed after the Group of Seven disbanded in the 1930s. Canadian Group of Painters
- **World War I** – A global conflict fought from 1914 to 1918 involving many nations around the world. World War I

The Canadian **Group of Seven** was a collective of Canadian **landscape painters** who worked together from 1910 to 1933. The artists shared a common goal of creating a distinctly Canadian style of art inspired by the nation's vast and rugged landscapes. Living and painting near Algonquin Provincial Park, they found endless inspiration in Canada's forests, lakes, and changing seasons. Their paintings often featured bold colors, expressive **brushstrokes**, tactile **textures**, and simplified yet vibrant forms that emphasized the beauty and power of the Canadian wilderness.

The group temporarily disbanded during World War I but reunited after the war. At the time, **landscape painting** was not widely considered an important subject for fine art; however, the Group of Seven transformed public and critical perceptions of Canadian art with their first exhibition in 1920. Throughout the 1920s, their romanticized depictions of untouched forests and wilderness came to symbolize Canadian strength, independence, and **national identity**. Critics sometimes noted that the paintings rarely included people or buildings, portraying nature as it existed before human settlement. By the 1930s, the artists had achieved significant success and eventually expanded into a broader organization known as the Canadian Group of Painters, which continued to hold exhibitions for many years.

Alexander Young Jackson

Alexander Young Jackson (1882–1974) was a founding member of the **Group of Seven** and played an important role in the development of **Canadian art**. Born in Montreal, he first worked at a **lithograph company**, where he began his artistic training before continuing his studies in Chicago and France. After returning to Canada, Jackson developed a bold style known for vivid outdoor **landscapes** and expressive color contrasts.

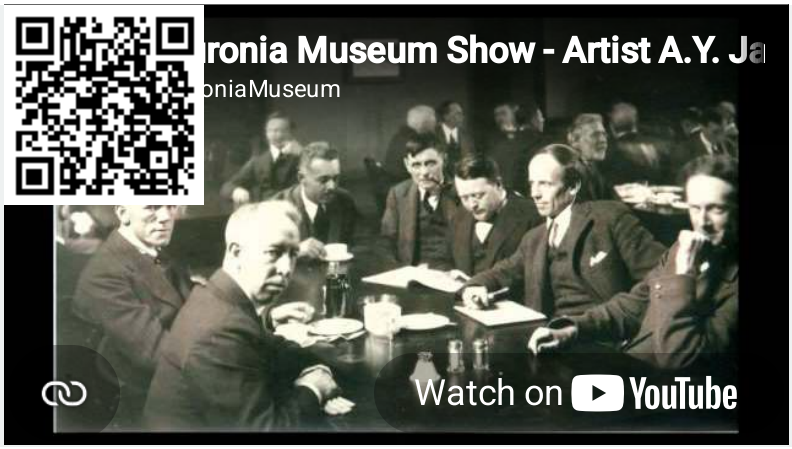
In 1914, Jackson painted *Red Maple* (12.9.1) from sketches made along the Oxtongue River in Algonquin Provincial Park. The painting captures the final red leaves of autumn clinging to delicate branches above the rushing river. The moving water remains unfrozen, suggesting the transition from fall into winter. In contrast, *Frozen Lake, Early Spring, Algonquin Park* (12.9.2) portrays the end of winter, with melting snow, bare trees, and a frozen lake beginning to thaw. Both paintings demonstrate Jackson's use of **bold colors**, strong **contrast**, and rich **texture**, especially in the rippling water and the shadows cast across the snow.

Figure \(\PageIndex{1}\): *Red Maple* (Public Domain)

Figure \(\PageIndex{2}\): *Frozen Lake, Early Spring, Algonquin Park* (1914) (Public Domain)

Huronia Museum Show - Artist A.Y. Jackson

Huronia Museum curator Jamie Hunter describes Group of Seven artist A.Y. Jackson and his paintings of Georgian Bay on display at the museum.



James Edward MacDonald

James Edward Hervey MacDonald (1873–1932) was born in England and moved to Canada as a teenager, returning to his father's homeland. He studied at the Hamilton Art School before working as a **designer**, painting in his spare time. In 1920, MacDonald helped co-found the **Group of Seven**, encouraging artists to paint the Canadian landscape and celebrate the natural beauty of Canada.

MacDonald frequently traveled through the **Canadian Rockies**, creating paintings of dramatic mountain scenery. *Lake McArthur* (12.9.3) depicts a classic Canadian landscape with a glacier-fed **moraine lake** whose bright blue waters are colored by fine glacial silt. Towering mountains rise sharply into the sky and reflect on the calm surface of the lake, while patches of snow remain on the peaks even during summer. In contrast, *Leaves in the Brook* (12.9.4) captures an autumn scene before winter arrives. Brightly colored leaves gather among the rocks as flowing water carries them downstream. MacDonald's paintings are known for their exceptionally vivid colors, energetic **brushstrokes**, and balance between **realism** and **abstraction**. The water in both paintings appears realistic, from the still blue glacial lake to the rippling stream, while the foregrounds become more abstract as color and brush movement dominate the composition.

Figure \(\PageIndex{3}\): *Lake McArthur* (Public Domain)

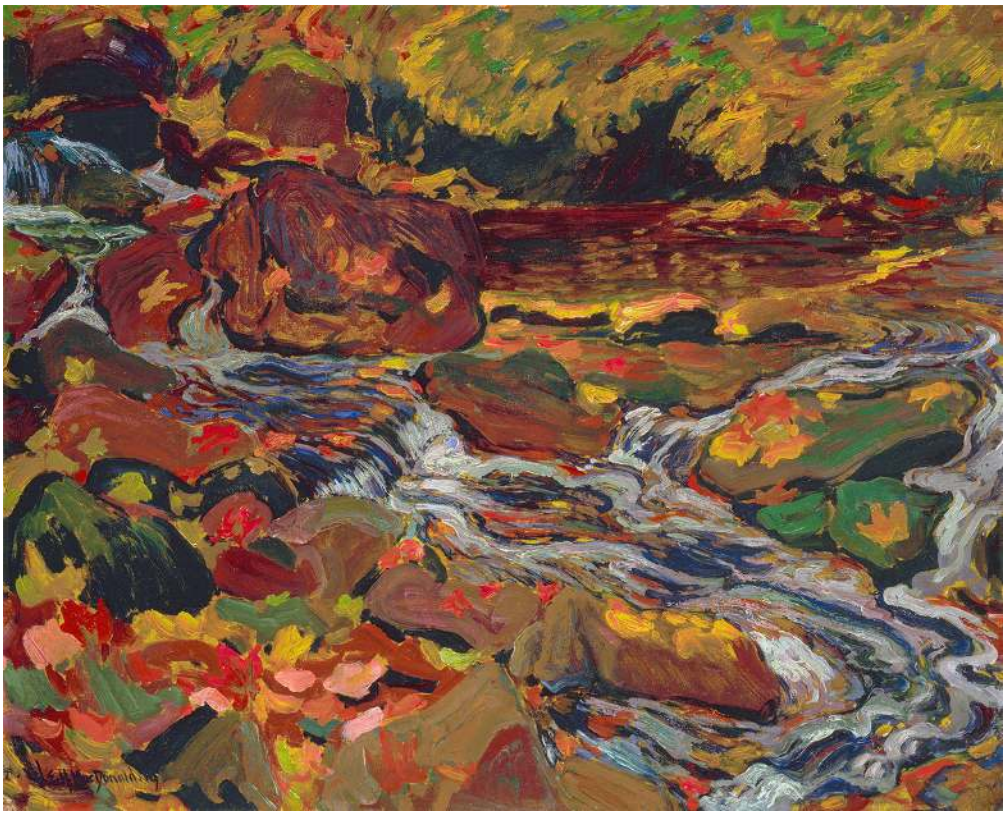


Figure \(\PageIndex{4}\): *Leaves in the Brook* (1919, oil on canvas, 52.7 x 25.5 cm) (Public Domain)

Thomas Thomson

Tom Thomson (1877–1917) was born and raised in rural Ontario. Although his family worked as farmers and showed little interest in art, Thomson eventually attended business school and learned **engraving** techniques using a pen. He later met several artists who would form the **Group of Seven** and began sketching and painting alongside them. Deeply inspired by nature, Thomson developed strong painting skills while spending time canoeing, hiking, and exploring the Canadian wilderness. Although he died young after drowning in 1917, he became recognized as an unofficial member and major influence on the group.

Cottage on a Rocky Shore (12.9.5) portrays a friend's small cottage surrounded by the immense Canadian landscape. The cottage appears tiny against the wide expanse of sky and water, emphasizing the scale of nature. Much of the painting is dominated by a brilliant blue sky filled with distant storm clouds, capturing the dramatic atmosphere of a Canadian summer. In *Algonquin Park* (12.9.6), Thomson used a **Post-Impressionist** style with bold colors and expressive brushwork. The snowy landscape combines signs of autumn and winter, with red leaves still clinging to the trees while fresh snow covers the ground. Dark mountains stretch across the distant horizon, reinforcing the vastness of the Canadian wilderness. Sunlight filters through the trees and reflects across the snow, creating strong **contrasts** between light and shadow, warm red leaves, and cool white snow.

Figure \(\PageIndex{5}\): *Cottage on a Rocky Shore* (1914, oil on panel, 21.6 x 26.7 cm) (Public Domain)

Figure \(\PageIndex{6}\): *In Algonquin Park* (1914-15, oil on canvas, 63.2 x 81.1 cm) (Public Domain)

Emily Carr (1871–1945) was born in British Columbia and grew up in a family that continued to follow traditional English customs after the region joined Canada. One of nine children, Carr showed artistic talent at a young age and later studied art and design in San Francisco, England, and France. After returning to Canada, she became deeply interested in First Nations art and incorporated its themes and visual ideas into her paintings. In *Odds and Ends (*12.9.7), Carr portrays a small group of surviving trees bending in the wind. The tall, thin trees seem alive as they twist beneath a swirling blue sky. Influenced by Post-Impressionism, Carr captured movement and emotion in a single moment. The isolated trees stand among the stumps of cut trees, suggesting destruction and environmental loss.

In *Above the Gravel Pit (*12.9.8*)*, Carr used broad, energetic brushstrokes to create movement throughout the sky and clouds. The clouds blend into the sky itself, creating a dynamic sense of motion. Below, the land appears barren and stripped of life as the earth has been excavated for gravel. In contrast, the remaining trees in the distance symbolize the natural beauty of the landscape before industrial destruction. Carr's use of highly contrasting colors and expressive brushwork creates dramatic visual tension between nature and environmental damage.

Figure \(\PageIndex{7}\): *Odds and Ends* (1939, oil on canvas, 67.4 x 109.5 cm) (Public Domain)

Figure \(\PageIndex{8}\): *Above the Gravel Pit* (1937, oil on canvas, 77.2 x 102.3 cm) (Public Domain)

12.10: Conclusion

The strict standards and expectations about how art should appear changed dramatically during the early twentieth century as artists began experimenting with **abstraction**, emotion, and imagination. In **Fauvism**, artists such as Henri Matisseused bright, unrealistic colors to create emotional impact instead of realistic representations. In works like *Woman with a Hat*, bold greens, blues, and oranges replaced natural skin tones, giving the painting energy and freedom. **Expressionism**pushed art even further away from realism by exaggerating forms and colors to express inner feelings and emotional intensity. Artists such as Franz Marc painted symbolic and emotionally charged scenes, often using unnatural colors to represent spiritual ideas and moods. In **Cubism**, artists like Pablo Picasso and Lyubov Popova fragmented figures and objects into geometric planes, abandoning traditional perspective and showing multiple viewpoints at once. Color became more subdued so the viewer could focus on structure and form. Finally, **Dada** artists completely rejected traditional artistic rules and logic. Artists such as Hannah Höch used **collage**, **photomontage**, and fragmented imagery to challenge society's expectations about art and meaning. As these movements developed, art became increasingly abstract, moving farther from realistic representation and allowing artists to communicate emotion, ideas, and social criticism through color, shape, and experimentation.

Artists associated with **American Modernism**, **Fauvism**, **Expressionism**, **Cubism**, **Dadaism**, and the **Harlem Renaissance** each moved their work away from realism in unique ways. Georgia O'Keeffe simplified flowers, bones, and landscapes into smooth, flowing forms that bordered on abstraction while still maintaining connections to nature. Amedeo Modigliani elongated faces and figures, creating elegant but unrealistic portraits filled with emotional expression. Paul Klee reduced forms into geometric shapes and symbols, using color and line to create playful yet emotional compositions. Pablo Picasso shattered traditional perspective in works like *The Girl with a Mandolin*, presenting the figure as overlapping planes and angular shapes. Sophie Taeuber-Arp removed recognizable imagery almost entirely, focusing instead on abstract forms, patterns, and color relationships. During the **Harlem Renaissance**, artists such as William H. Johnson combined simplified forms, flattened space, and bold colors to celebrate African American life and culture. Across these movements, color became an expressive tool rather than a realistic description, helping artists create mood, symbolism, rhythm, and emotional depth while redefining the purpose and appearance of art.

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CHAPTER OVERVIEW

13: The World is One (1930 – 1970)

From the Modern Art movement, an explosion of art methods, styles and techniques erupted, breaking traditional rules to create modern art. This chapter discusses the art of architecture, sculpture, and photography, introducing the influence of the 20th century. The spirit of experimentation and innovation was enjoyed by the artists as abstraction lead to several new and exciting art periods around the world.

13.1: Overview
13.2: 20th Century Architecture
13.3: Sculptures
13.4: Photography
13.5: Mexican Murals and Social Art
13.6: Works Progress Administration Murals
13.7: Nihonga and Yoga Style
13.8: Surrealism
13.9: Conclusion

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13.1: Overview

From the Modern Art movement, an explosion of art methods, styles, and techniques erupted, breaking traditional rules to create **Modern Art**. This chapter discusses the art of **architecture**, **sculpture**, and **photography**, introducing the influence of the **20th century**. Artists appreciated the spirit of experimentation and innovation, as **abstraction** gave rise to several new and exciting art periods worldwide. **Modern architecture** was defined by the development of buildings designed to meet rapid technological advancements and the growth of emerging cities. Architects emphasized **horizontal and vertical lines** while incorporating new materials to build higher and more unconventional structures. New techniques in welding and concrete allowed architects to push beyond traditional boundaries. Lightweight concrete reduced structural load, increased construction speed, lasted longer, and provided better insulation than brick.

"**Form follows function**" — Frank Lloyd Wright

Modern sculpture reflected society's attempt to understand the new modern era. Artists created sculptures inspired by the same movements that influenced painters, including **Fauvism**, **Expressionism**, **Cubism**, **Dadaism**, and **Surrealism**. Each artistic movement transformed sculpture as artists experimented with abstraction, materials, and form. **Modern photography** emerged as a major art form during the **20th century**. Although photography was invented in the mid-19th century, modern artists broke away from staged images and experimented with radical new ideas. Photographers traveled widely and used improved technology to document social events, political realities, and the beauty of nature.

New materials helped fuel different movements. The first **acrylic paints** were developed by a German company in 1934 and became commercially available in 1950. Acrylic paint, made from pigment suspended in an **acrylic polymer emulsion**, gradually replaced oil paint because it dried quickly and could be cleaned with water instead of chemicals. Acrylics could be mixed easily and thinned with water; however, once dry, they could not be reused or removed from the canvas. The **20th century** also brought **political art** to the forefront of many art movements. Artists created caricatures, election posters, public murals, and installations expressing opinions about government and society. During **World War II**, the Nazi regime labeled many modern artworks as "**degenerate art**," confiscating, destroying, or hiding them. Some masterpieces were later discovered in private collections, including more than a thousand artworks found in Munich in 2012. Many lost works may still remain hidden today.

13.2: 20th Century Architecture

Definition: Term

- **Architecture** — The art and science of designing and constructing buildings and structures.
- **Building** — A structure made for people to live, work, or gather in.
- **Structure** — Anything built or constructed, such as a bridge, tower, or building.
- **City** — A large populated urban area with many buildings and services.
- **Town** — A smaller populated area than a city.
- **Landscape** — The visible features of an area of land, including natural and built environments.
- **Art form** — A creative method of expression, such as painting, sculpture, or architecture.
- **Science** — The systematic study of the physical and natural world through observation and experimentation.
- **Engineering** — The application of science and mathematics to design and build structures, machines, and systems.
- **Construction techniques** — Methods and processes used to build structures safely and efficiently.
- **Structural safety** — The ability of a building or structure to remain stable and secure under stress or disaster conditions.
- **Habitable spaces** — Areas designed to be safe and comfortable for people to live or work in.
- **Fire** — Rapid burning that can damage buildings and structures.
- **Flood** — An overflow of water onto normally dry land.
- **Earthquakes** — Sudden shaking of the earth caused by movement beneath the surface.
- **Natural disasters** — Destructive events caused by natural forces, such as hurricanes, earthquakes, or floods.
- **Architects** — Professionals who design buildings and plan structures.
- **Innovation** — The introduction of new ideas, methods, or designs.
- **Architectural design** — The planning and creative process used to develop buildings and structures.

Architecture is generally described as any creatively designed and constructed **building** or **structure** that enhances a **city**, **town**, or **landscape**. It is both an **art form** and a **science**, combining creativity with **engineering** and **construction techniques** to create buildings that are functional, beautiful, and safe for people to use. Architects must carefully plan for **structural safety**, **habitable spaces**, and protection from **fire**, **flood**, **earthquakes**, and other **natural disasters**. The architects below designed buildings in styles unique to their ideas, **innovation**, creativity, and modern approaches to **architectural design**.

Frank Lloyd Wright (1867–1959) was one of America's premier **architects**, designing more than 1,000 **buildings** during his lifetime. Wright believed that a structure should exist in harmony with both the people using it and the surrounding **environment**. He became a leader of the **Prairie School movement**, a 20th-century architectural style that originated in the Midwestern United States and was loosely inspired by the **Arts and Crafts Movement**. Constructed in 1936, Fallingwater (13.2.1) is one of Wright's most famous homes. The 5,330-square-foot house appears to float above a **waterfall**, extending over the river within a 4,100-hectare **nature preserve**. Interestingly, the waterfall cannot be directly viewed from inside the house. Wright believed the owners should experience the waterfall through the **sound** it created, producing a peaceful and magical atmosphere.

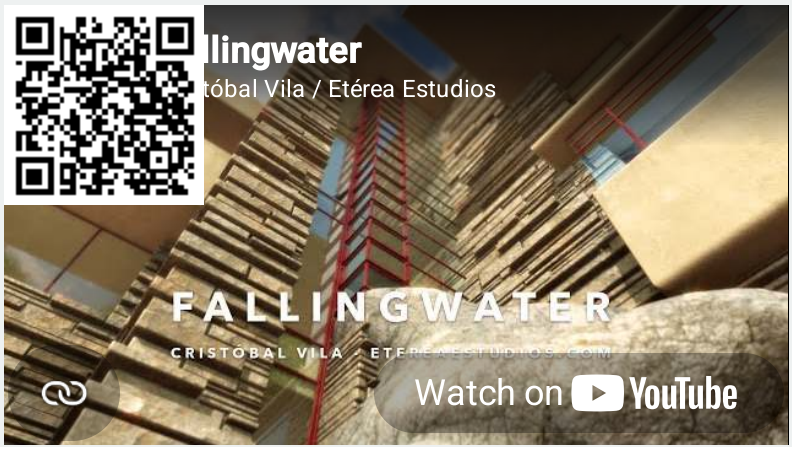
Wright also designed the **furnishings** for the living room (13.2.2), incorporating strong influences from **Japanese design** and **architecture**. The **fireplace** uses the same brick on both the interior and exterior, separated only by glass, creating the feeling of sitting outdoors in nature. The living room itself was built directly around a massive **boulder**, which Wright incorporated into the design. Today, Fallingwater is owned and maintained by the Western Pennsylvania Conservancy.

Figure \(\PageIndex{1}\): *Fallingwater* (Public Domain)

Figure \(\PageIndex{2}\): *Fallingwater interior* (CC BY-SA 3.0)

Falling Water

A CG short movie by Cristóbal Vila featuring the Frank Lloyd Wright masterpiece



Frank Lloyd Wright also designed the Solomon R. Guggenheim Museum (13.2.3) in New York City using a distinctive **cylindrical formation**. Solomon Guggenheim requested only one thing from Wright: to create a unique **museum** unlike any other. Wright envisioned a building that would provide “the best possible atmosphere in which to show fine paintings or listen to music.” Although Wright was raised in the rural farmlands of Wisconsin and considered New York City too noisy and crowded, he

accepted the challenge of designing the museum. The grand interior features a spiraling **ramp gallery** (13.2.4) extending upward from the first floor to a massive **skylight** at the top of the building. When the museum opened in 1959, many **architects**, **artists**, and critics criticized the unconventional design; however, the public celebrated it as innovative and modern.

Figure \(\PageIndex{3}\): *Solomon R. Guggenheim Museum* (CC BY 2.0)

Figure \(\PageIndex{4}\): Museum interior (CC BY-SA 3.0)

The Solomon R. Guggenheim Museum, with its spiral design, influenced Oscar Niemeyer (1907–2012), a Brazilian **architect** and leader in **modern architecture**. In 1960, Niemeyer became well known for designing the planned city of **Brasília**, the new capital of Brazil, as well as helping design the United Nations Headquarters. He embraced **Modernism**, favoring **curved lines** and **organic shapes** that contrasted with the rigid geometric designs common in contemporary architecture.

Niemeyer was also an innovative **engineer** who experimented with **reinforced concrete**, his preferred material. He developed new techniques that increased the material's **plasticity**, allowing architects to move beyond traditional forms and create futuristic designs. Dedicated in 1970, the Cathedral of Brasília (13.2.5) was constructed as a **hyperboloid structure** supported by sixteen massive **concrete columns**, each weighing ninety tons. The columns curve inward and connect at the top, while glass fills the spaces between them. Nearby stand the oval-shaped **baptistry** and a separate **bell tower**. As the official building for Brazil's executive branch, the Palácio do Planalto (13.2.6) became one of Niemeyer's most important works. The four-story structure features elegant tapering **columns** set against expansive **glass walls**. White marble **colonnades** create intersecting lines, while the massive roof appears to float above the pointed supports.

Figure \(\PageIndex{5}\): *Cathedral of Brasilia* (CC BY-SA 4.0)

Figure \(\PageIndex{6}\): *Palacio do Planalto* (CC BY 2.0)

From California, Julia Morgan (1872–1957) was one of the greatest American **architects**. Known for her large **buildings**, often influenced by the **Craftsman style**, she designed more than 700 structures. Hearst Castle in San Simeon, California, is her most famous work, along with Asilomar Conference Grounds near Monterey, California. After graduating from University of California, Berkeley, Morgan became the first woman admitted to the architecture program at the École des Beaux-Arts in Paris. Returning to Northern California, she became the first woman in California to receive an **architectural license**. After opening her own company, one of her first major projects was designing numerous buildings for Mills College.

Morgan later met William Randolph Hearst, who hired her to design the Los Angeles Examiner Building in 1914. In 1919, Hearst commissioned Morgan to create his most ambitious and complex project, Hearst Castle (13.2.7). Morgan designed the **buildings**, **landscaping**, **pools**, and **animal shelters**, overseeing every detail of the project for twenty-eight years. Inspired by the grandeur of European architecture, the estate features a **Mediterranean-style** main house with two ornate twin towers. The famous **Greek Neptune Pool** (13.2.8) is decorated with marble columns and statues, while guest cottages are scattered throughout the gardens. The elaborately decorated **interior rooms** (13.2.9) contain marble **fireplaces**, fine artwork, and richly woven **tapestries** hanging on the walls.

Figure \(\PageIndex{7}\): *Hearst Castle* (CC BY-SA 3.0)

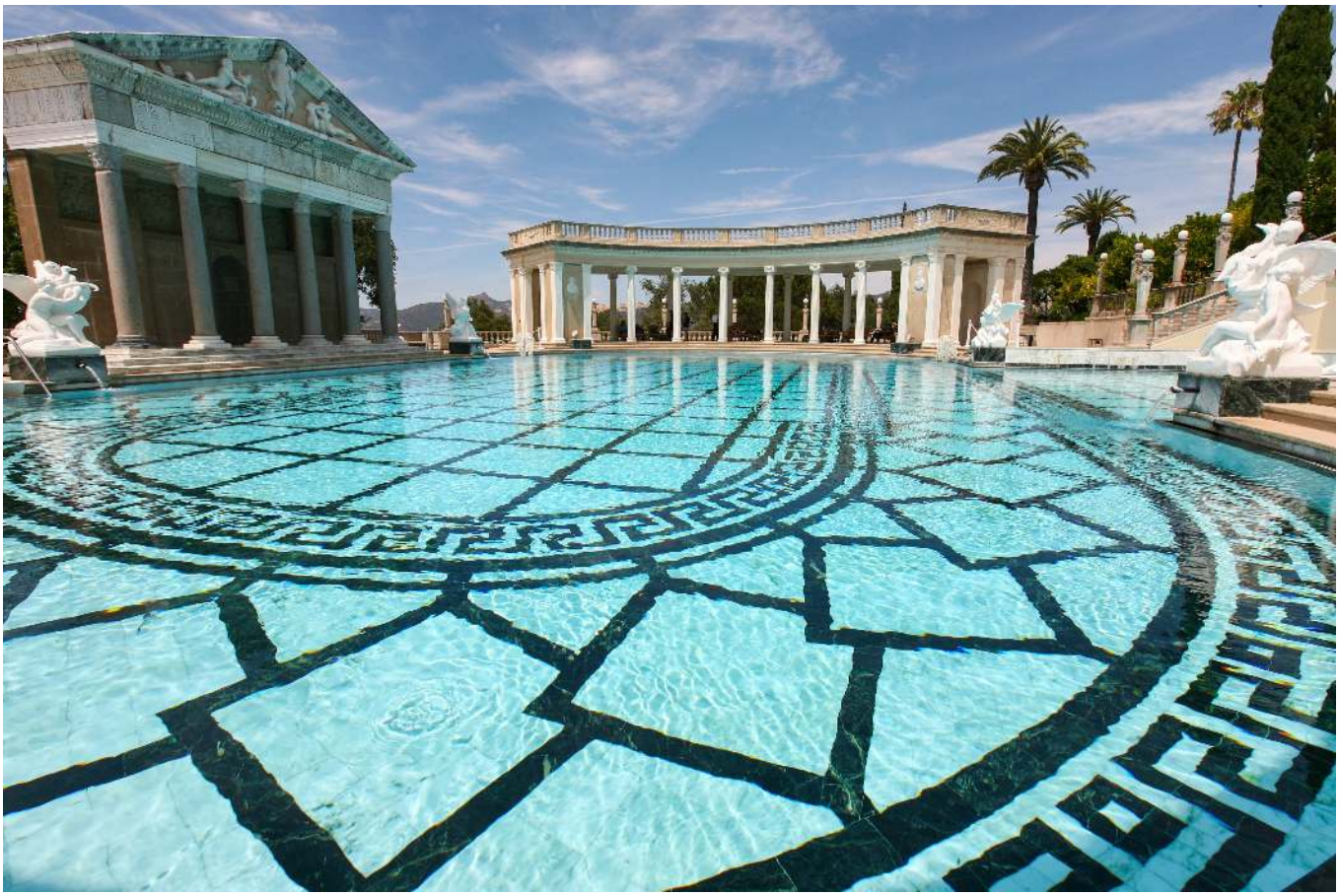
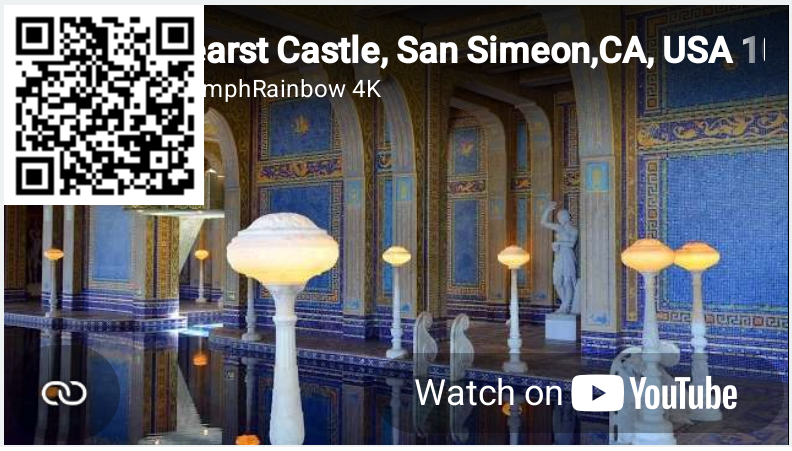


Figure \(\PageIndex{8}\): *Neptune pool* (CC BY 2.0)

Figure \(\PageIndex{9}\): Library (Public Domain)

Hearst Castle, San Simeon, CA, USA

Take a trip inside Hearst Castle designed by Julia Morgan



Located on 107 acres along the beach in Monterey, Asilomar Conference Grounds (13.2.10) was designed primarily by Julia Morgan between 1913 and 1928 in the **Arts and Crafts architectural style**. The **Arts and Crafts Movement** emphasized harmony between **nature** and skilled **craftsmanship**, using local materials to create buildings that blended naturally with the surrounding **landscape**. Originally built for the **YWCA**, Asilomar included sixteen **buildings**, eleven of which still remain today. The property is now owned by California State Parks (13.2.11) and serves as a popular **conference center**. Julia Morgan helped pave the way for future generations of women **architects**.

Figure \(\PageIndex{10}\): *Asilomar* (CC BY-SA 3.0)

Figure \(\PageIndex{11}\): *Merril Hall at Asilomar* (Public Domain)

Eero Saarinen

Ample sweeping **arching curves** are associated with the designs of Eero Saarinen (1910–1961), a Finnish-American **architect** and **industrial designer** known for his **neo-futuristic style**. Saarinen designed the iconic Gateway Arch (13.2.12), the TWA Flight Center at JFK Airport, and the Milwaukee Art Museum.Saarinen designed the **Gateway Arch** to rise beside the **Mississippi River**, symbolizing the "gateway to the West." The TWA Flight Center (13.2.13), which opened in 1962, used **Modernist** elements and emphasized **human movement**, reflecting Saarinen's vision of air travel as grand and exciting. Viewed from above, the structure resembles a bird in flight, echoing the TWA logo. The 31,700-square-meter Milwaukee Art Museum (13.2.14), opened to the public in 1957, is a dramatic structure designed to resemble soaring wings in motion.

Figure \(\PageIndex{12}\): *Saint Louis Arch* (CC BY-SA 3.0)

Figure \(\PageIndex{13}\): *TWA terminal at JFK Airport* (CC BY-SA 4.0)

Figure \(\PageIndex{14}\): *Milwaukee Art Museum* (Public Domain)

Dogon

The Dogon people settled near the **Niger River** during the 13th century and continue to follow the **religious traditions** of their ancestors. These traditions are reflected in their **dance masks**, elaborate **wooden sculptures**, and distinctive **architecture**. The Dogon villages (13.2.15) are made up of groups of unique **mud buildings**, each created for a specific purpose. Their **granaries** feature pointed roofs covered with woven **thatch** and are used to store the owner's possessions. Separate granary structures exist for men and women. The male granary stores **pearl millet** and other grains, while the female granary serves as a storage hut for personal belongings and goods for sale, including woven cotton and **pottery**.

Figure \(\PageIndex{15}\): *Dogon village* (Public Domain)

Figure \(\PageIndex{16}\): *Togu na* (CC BY 2.5)

Although each of the Dogon people villages is arranged somewhat differently, the overall **architecture** of the village is based on the form of a human body lying stretched across the ground, with the head facing north where the **togu na** is located. The **togu na** (13.2.16) is a building used by men as a place to rest during the heat of the day and discuss village affairs. Its roof is intentionally built very low to the ground to discourage fighting during conversations by forcing the men to remain seated. Women who are menstruating stay in a separate **house** located outside the village for five days before returning to their families. The home of the **Hogon**, the village elder and spiritual leader, occupies the highest position within the settlement. Many structures include carved **human figures**, each carrying symbolic meaning. The support **pillars** or **columns** are often made from tree trunks carved into human forms.

Cliff of Bandiagara

The Bandiagara site is an outstanding landscape of cliffs and sandy plateaux with some beautiful architecture (houses, granaries, altars, sanctuaries and Togu Na, or communal meeting-places). Several age-old social traditions live on in the region (masks, feasts, rituals, and ceremonies involving ancestor worship). The geological, archaeological and ethnological interest, together with the landscape, make the Bandiagara plateau one of West.

[1] Retrieved from https://www.guggenheim.org/teaching-...genheim-museum

13.3: Sculptures

Definition: Term

- **Modern sculpture** — A style of sculpture that broke away from classical traditions and explored new forms, materials, and ideas.
- **Renaissance** — A European cultural movement from the 14th–17th centuries focused on classical learning, realism, and humanism.
- **Modern materials** — Newly developed industrial or artistic materials used in modern art, such as steel, concrete, glass, or plastics.
- **Design ideologies** — Theories or beliefs about how art and structures should be designed.
- **Sculptor** — An artist who creates three-dimensional works of art.
- **Allegory** — A work of art that uses symbols or figures to represent ideas or moral meanings.
- **Mythology** — Traditional stories and legends, often involving gods, heroes, or supernatural beings.
- **Human body** — The physical form of a person often studied and represented in art.
- **Realism** — An artistic style focused on accurate and lifelike representation.
- **Physicality** — The emphasis on the body's physical presence, strength, or form.
- **Personality** — The unique emotional or individual qualities expressed by a figure or artwork.

Modern sculpture brought major changes to the art world as artists moved away from the classical traditions of the **Renaissance** period. Early 20th-century sculptors gained the freedom to experiment with new ideas, materials, and artistic approaches, redefining what sculpture could be. Artists explored **modern materials**, abstraction, and innovative **design ideologies** instead of following traditional standards. Modern sculpture is often considered to have begun with Auguste Rodin, the French **sculptor** who introduced groundbreaking methods in sculpture. Rather than focusing on traditional themes from **allegory** or **mythology**, Rodin portrayed the **human body** with remarkable **realism**, emotional expression, **physicality**, and individuality.

Auguste Rodin

Born in Paris, Auguste Rodin (1840–1917) was largely **self-educated**, beginning to draw as a child. As a teenager, Rodin attended an art school where a teacher encouraged him to develop his own artistic **style**. Although he applied to the École des Beaux-Arts three times, he was repeatedly rejected and eventually established his own **studio**. The Thinker (13.3.1) is perhaps Rodin's most famous work and is recognized worldwide as a symbol of deep thought and reflection. The **bronze** sculpture portrays a nude male figure seated on a rock, approximately 186 centimeters high. The figure's muscular body and lowered head resting on his hand suggest intense contemplation about the **human condition**, reason, and the struggles of humanity. Today, twenty-eight full-size bronze castings are displayed in museums around the world.

The Burghers of Calais (13.3.2) was inspired by the long war between England and France and depicts the **burghers** surrendering while expecting execution. Rodin emphasized emotion and realism through details such as their oversized feet, symbolizing their attachment to life, along with the ropes around their necks and removed hats. Although the figures appear resigned to death, the lives of the men represented in the emotional **sculpture** were ultimately spared.

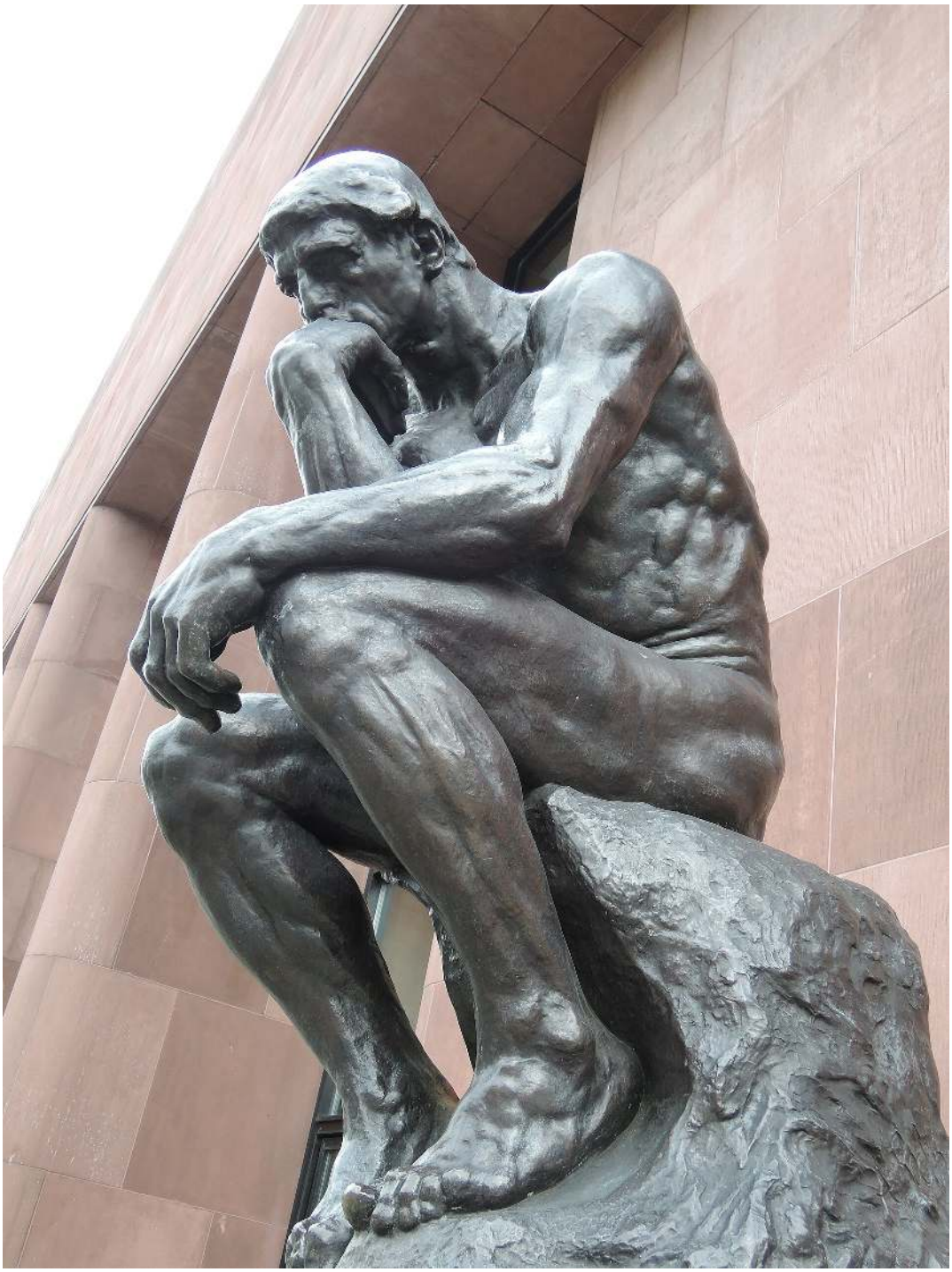


Figure \(\PageIndex{1}\): *The Thinker* (Public Domain)

Figure \(\PageIndex{2}\): *Burghers of Calais* (CC BY-SA 3.0)

The Thinker by Auguste Rodin - Museum Without Walls

Museum Without Walls: AUDIO is the Association for Public Art's award-winning audio program for Philadelphia's outdoor sculptures. The program is presented in partnership with Philadelphia Parks & Recreation, and has been supported by The Pew Center for Arts & Heritage, the William Penn Foundation, and the National Endowment for the Humanities.

One Minute with Rodin

Auguste Rodin was one of the most famous and influential sculptors of the modern era, but he was captivated by the art of the past. Discover how ancient Greek art inspired Rodin, and how he set a radical new direction for sculpture, in our major exhibition.

Henry Spencer Moore

A semi-abstract English Henry Moore (1898–1986) was known for creating monumental **bronze sculptures** displayed as public art around the world. His works often featured abstracted **human figures**, especially themes of **mother-and-child** relationships and **reclining figures**. Moore was strongly influenced by the Chac Mool (13.3.3), a stone sculpture found at Chichen Itza on the Yucatán Peninsula. The reclining figure became one of Moore's most important artistic **motifs**. Draped Seated Figure (13.3.4) is a whimsical **bronze** sculpture portraying an abstracted reclining woman. The folds of her gown resemble the drapery seen in classical Greek art. Some historians believe Moore created the work as a tribute to the social reforms benefiting women after World War II. The figure is larger than life, with exaggerated long legs, most of her weight supported on one arm, and a disproportionately small head.

The reclining figure became a recurring theme throughout Moore's career and evolved into increasingly stylized forms, as seen in Reclining Figure (13.3.5). This fiberglass sculpture is composed of thin and bulbous **tubular forms** that create the body. The head rises vertically with eyes positioned on each side. Although individual body parts are recognizable, the complete figure creates an abstract illusion rather than a realistic human form.

Figure \(\PageIndex{3}\): *Chac Mool* (CC BY-SA 3.0)

Figure \(\PageIndex{4}\): *Draped Seated Figure* (CC BY-SA 2.0)

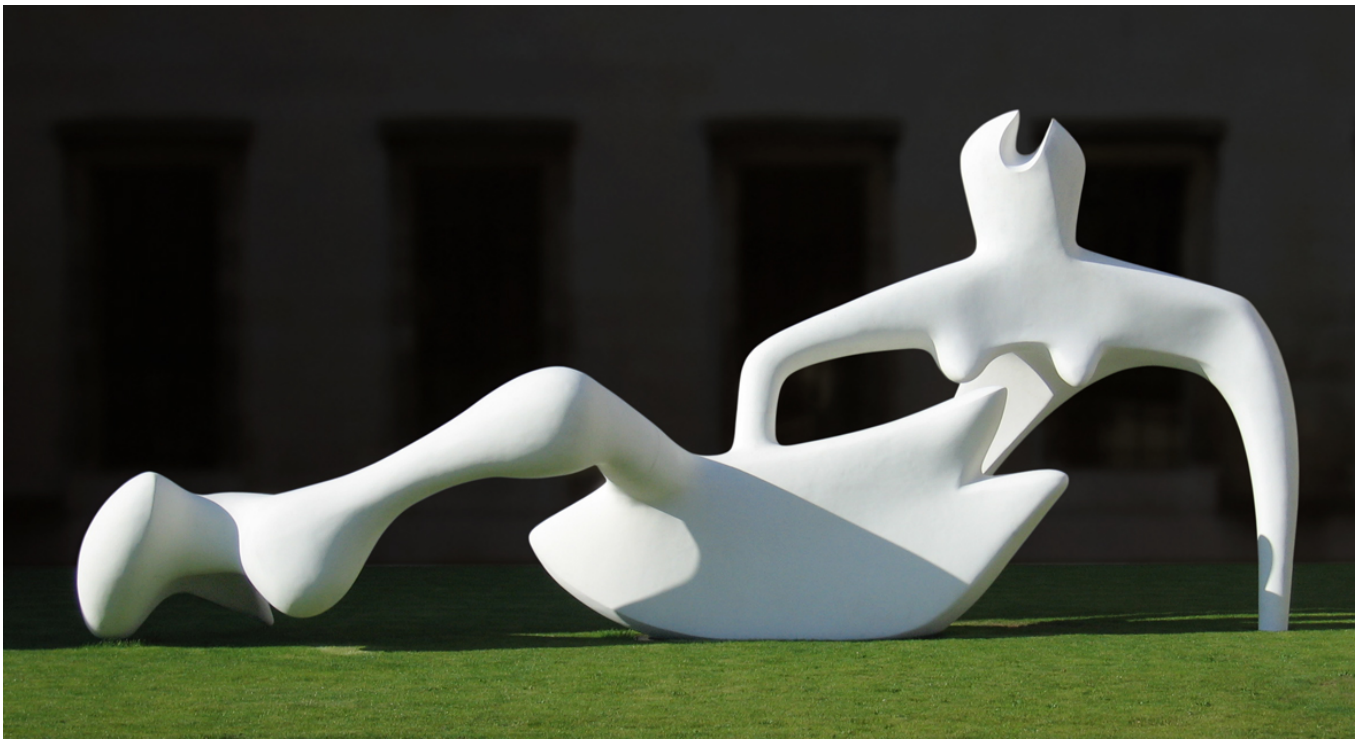
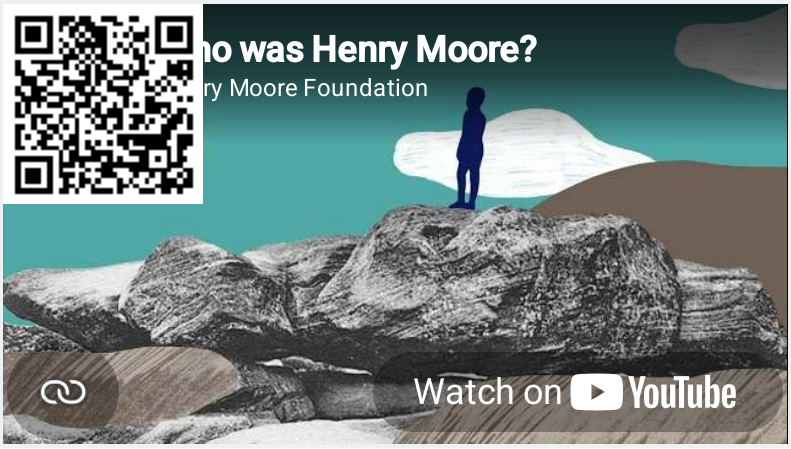


Figure \(\PageIndex{5}\): *Reclining Figure* (CC BY-SA 2.0)

Who was Henry Moore?

Discover Henry Moore, who is best known for his huge bronze sculptures. Learn all about his life from a humble beginning in Yorkshire to becoming a world famous artist.



Using modern materials such as painted **sheet metal** and **metal rods**, the American artist Alexander Calder (1898–1976), originally trained as an **engineer**, became the creator of the **kinetic mobile**. Calder came from a family of successful **sculptors**, as both his father and grandfather were accomplished artists. Although he began making small sculptures as a child, Calder initially studied **mechanical engineering** in college. After working several unfulfilling jobs, he chose to pursue a career in art. Calder did not want to create traditional static sculptures that remained motionless. Using his knowledge of engineering and movement, he designed hanging forms connected by wires and pivoting rods that responded to touch and **air currents**. These suspended works, known as **mobiles**, moved gracefully through space while exploring balance, motion, and spatial relationships.

Calder's mobiles were delicately balanced and often suspended from ceilings, creating sculptures that moved naturally with the surrounding air. His bold use of **color**, combined with the engineering principles required for balance, gave his artwork a distinctive appearance. Some mobiles produced sound, others moved in the wind, and several evolved into large static sculptures. The Four Elements (13.3.6) appears to maintain a fragile balance among its moving parts. Calder used color so each shape remained visually

distinct, while viewers are left wondering how the uneven forms remain balanced. Big Crinkly (13.3.7) features large abstract forms bolted together to support the upper section as it moves in the wind. Calder used red, blue, black, and white sections to distinguish and balance each component, creating a sense of motion and curiosity about how the sculpture remains stable.

Figure \(\PageIndex{6}\): *The Four Elements* at Moderna Museet in Stockholm (CC BY-SA 4.0)

Figure \(\PageIndex{7}\): *Big Crinkly* (CC BY-SA 3.0)

How Alexander Calder's "Mobile" injects motion into sculpture

Curator Marla Prather on Alexander Calder's "Mobile."

Ellen Neel

Ellen Neel (1916–1966) was the first known woman to professionally carve **totem poles**. A member of the **Kwakwaka'wakw** people from British Columbia, she learned traditional Northwest Coast carving techniques from her maternal grandfather. Neel began by carving small **totems** to sell and eventually became successful enough to create large-scale poles. The art of the Kwakwaka'wakw shares similarities with other **Northwest Coast art** traditions; however, the carvings often feature deeper cuts in

the wood. **Paint** is used to highlight important **figures** and symbolic **motifs**. Carved elements such as **beaks** and **wings** project outward from the surface of the pole, creating the illusion of birds in flight and adding dramatic movement to the sculpture.

Figure \(\PageIndex{8}\): Top of the totem pole (CC BY-SA 3.0)

Figure \(\PageIndex{9}\): Totem pole (CC BY-SA 3.0)

Ellen Neel likely used **western red cedar** for her taller **totem poles** because of the tree's abundance and large size in the Pacific Northwest. **Yellow cedar** was generally reserved for smaller carving projects. Totem poles were often placed outside homes to communicate information about a family, while other poles served as **welcome poles**, **memorial poles**, or **shaming poles**. Each **symbol**, **carving**, and painted image carried a specific meaning. At the top of a pole, the broadly curved **eagle's beak** (13.3.8) can

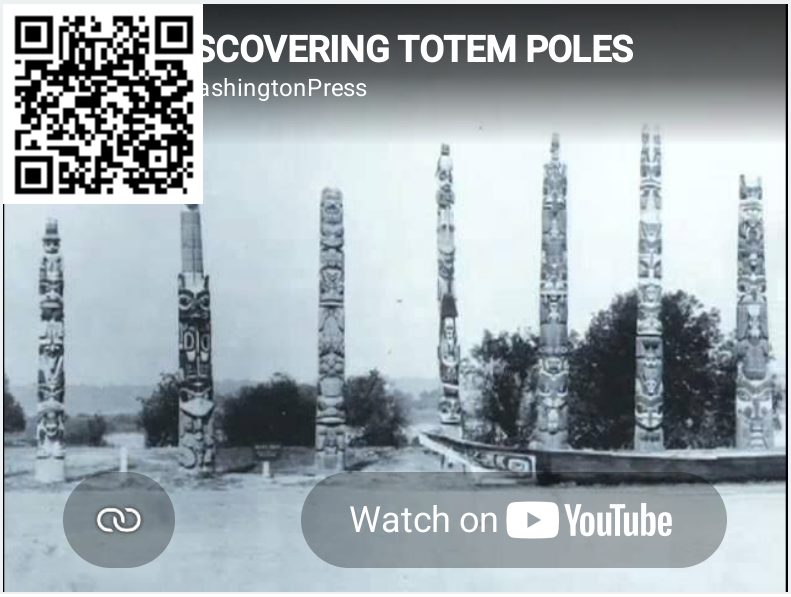
be identified by its shape, while a **raven** would have a straight beak and a **beaver** would feature large incised front teeth. The carved **figures** on the pole (13.3.9) are intertwined and connected through symbolic relationships and storytelling traditions. Some of Neel's totem poles are displayed in Stanley Park as well as in museums.

Totem Poles / Native America

Native America explores the world created by America's First Peoples. The four-part series reaches back 15,000 years to reveal massive cities aligned to the stars, unique systems of science and spirituality, and 100 million people connected by social networks spanning two continents.

Discovering Totem Poles

Rising from a forest mist or soaring overhead in parks and museums, magnificent cedar totem poles have captured the attention and imagination of visitors to Washington State, British Columbia, and Alaska. Discovering Totem Poles is the first guidebook to focus on the complex and fascinating histories of the specific poles visitors encounter in Seattle, Victoria, Vancouver, Alert Bay, Prince Rupert, Haida Gwaii (Queen Charlotte Islands), Ketchikan, Sitka, and Juneau. It debunks common misconceptions about totem poles and explores the stories behind the making and displaying of 90 different poles.



Gaston Lachaise (1882–1935) was an American **sculptor** associated with the early **Modernist** period of the 20th century. Educated in his native France, Lachaise fell in love with a woman, followed her to the United States, and used his admiration for her as inspiration for his artistic vision of the female figure. Created in 1932 from **bronze**, Standing Woman (13.3.10) became his signature work. The sculpture portrays a voluptuous **nude** woman whose confident posture redefined the traditional female figure.

Influenced by American ideals and his wife's strong personality, Lachaise transformed the female nude into a powerful and commanding presence.

The figure's right foot steps forward while her hips shift into a traditional **contrapposto** stance, and her hands rest firmly on her hips as she dominates the surrounding space. Floating Figure (13.3.11) also emphasizes feminine strength and confidence. The figure sits comfortably with crossed legs while gesturing expressively with one hand, appearing almost suspended in space. When first exhibited, critics described the work as "a seated woman who by the power of her gestures seems suspended in space." Both sculptures were first modeled in **plaster** before being cast in bronze.

Figure \(\PageIndex{10}\): *Standing Woman* (CC BY 2.5)

Figure \(\PageIndex{11}\): *Floating Woman* (CC BY-SA 3.0)

Isamu Noguchi (1904–1988) was a prominent Japanese American **artist** and **sculptor** who began his career creating sculpted **busts** before moving toward **abstract art** during the 1930s. In 1942, during World War II, Noguchi voluntarily entered the Poston War Relocation Center internment camp, where he continued to create designs and drawings. After the war, he returned to New York City and continued developing his artistic career. Noguchi was an **internationalist** who traveled extensively throughout his life, drawing inspiration from many cultures and artistic traditions. In Mexico, he was influenced by large-scale **public works**; in Japan, he studied earthy **ceramics** and tranquil **gardens**; in China, he admired delicate **ink-brush techniques**; and in Italy, he appreciated the purity and beauty of **marble sculpture**. He incorporated all of these impressions into his work, which utilized a wide range of materials, including stainless steel, marble, cast iron, balsa wood, bronze, sheet aluminum, basalt, granite, and water."[3]

Red Cube (13.3.12) is called a cube by name; however, the sculpture is actually a distorted three-dimensional **parallelogram** standing approximately 7.3 meters high. Created from **steel**, the sculpture was designed to complement the strong **horizontal** and **vertical lines** of the surrounding buildings. Noguchi painted the sculpture bright **red** to contrast with the dark glass architecture nearby, while the circular opening in the center remains a neutral gray. Positioned diagonally, the sculpture appears as though it is rolling or shifting in space. Zwillingsplastik (13.3.13) consists of two interconnected sections. The smaller portion appears to support the much larger upper section, while the missing space mirrors the shape of the smaller form, creating the illusion that the sculpture is floating. The separated **cuboid** structure seems almost balanced on tiny points, giving the artwork a delicate and unstable appearance despite its solid construction.

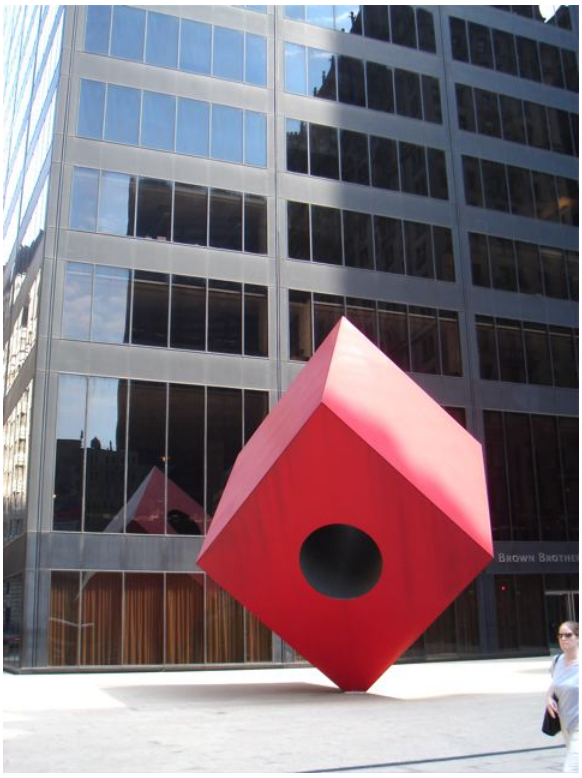


Figure \(\PageIndex{12}\): *The Red Cube* (CC BY-SA 3.0)

Figure \(\PageIndex{13}\): *Zwillingsplastik* (Public Domain)

George Segal (1924–2000) was an American **painter** and **sculptor** associated with the **Pop Art movement**. Born in the Bronx, New York, Segal originally studied science before purchasing a chicken farm. Materials found on the farm inspired him to create his first major **sculptures** using wood, chicken wire, burlap, and plaster. **Plaster** eventually became the material most closely associated with his artistic style. Segal became best known for his life-size figures created from **plaster bandages**. He wrapped live

models in plaster strips, removed the hardened sections, and reassembled them to create hollow impressions of the body. The rough texture of the plaster added realism and emotional depth to the finished works, which were often later cast in **bronze**. Segal pioneered the artistic use of plaster bandages similar to medical casts used for broken bones.

Unlike many traditional sculptors, Segal did not place his figures on **pedestals** or isolate them in formal settings. Instead, he positioned them in realistic everyday environments, as seen in Depression Bread Line (13.3.14). The men's clothing and posture communicate the hardship and desperation of people waiting for food during the **Great Depression**. Segal used the rough bronze surfaces to emphasize the worn appearance of the figures and their sense of poverty. In Holocaust Memorial (13.3.15) in San Francisco, Segal portrayed bodies scattered on the ground with a single emaciated survivor standing near a fence. The **bronze sculpture**, painted white, intensifies the emotional impact of the memorial. Its placement overlooking the Golden Gate Bridge and San Francisco Bay was controversial because of the painful subject matter contrasted against the beauty of the surrounding landscape.

Figure \(\PageIndex{14}\): *Depression Bread Line* (Public Domain)

Figure \(\PageIndex{15}\): *Holocaust Memorial* (Copyright; author via source)

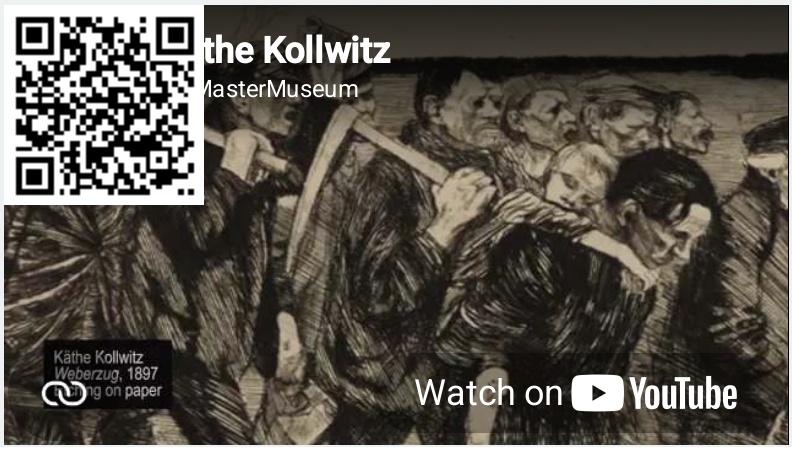
Modern sculptures often reflect humanity's need to understand an increasingly complex and changing world. Käthe Kollwitz (1867–1945), a German **artist**, created powerful works portraying the hardships and tragedies of human life, especially the suffering caused by **war**. Working in multiple forms of media, including **etching, woodcut, drawing**, **painting**, and **sculpture**, Kollwitz expressed deep emotional experiences connected to grief, poverty, and loss. The death of Kollwitz's son inspired her to create the memorial Mother with Her Dead Son (13.3.16). Similar to the traditional **Pietà**, Kollwitz portrayed her son lying across her knees as she cradles his body. Her expression reflects overwhelming grief and sorrow over the loss of her child during the war. The statue is placed in the center of a large room (13.3.17), creating a sense of **isolation** that intensifies the emotions of suffering and sadness. The **bronze memorial** serves as a tribute to all victims of war and tyranny.

Figure \(\PageIndex{16}\): *Mother with Her Dead Son* (CC BY-SA 4.0)

Figure \(\PageIndex{17}\): Installation of sculpture (CC BY-SA 3.0)

Kathe Kolwitz

Käthe Kollwitz (German, 1867-1945) A brief artist's bio illustrated by selected works from the collection of McMaster Museum of Art, McMaster University



Elizabeth Catlett

Elizabeth Catlett (1915–2012) was an American **artist** who knew from an early age that she wanted to pursue art. She attended Howard University and later earned a **Master of Fine Arts** degree from the University of Iowa. Before completing her graduate studies, Catlett worked as an **art teacher**. Catlett later moved to Mexico, where she was influenced by the artwork of Diego Rivera and Frida Kahlo. She created **abstract prints** and **sculptures** that focused on the lives and struggles of minority women working in difficult, low-paying jobs. As an African American artist living in Mexico, Catlett blended inspiration from both cultures into her work.

Her sculptures included expressive **busts** and standing figures, including Mahalia Jackson (13.3.18), a tribute to the famous gospel singer and civil rights activist Mahalia Jackson. The large **bronze** sculpture is located in Louis Armstrong Park. Stepping Out

(13.3.19) portrays a modern woman embodying **feminist ideals**, confidently stepping forward to face the challenges of the modern world. Her hand is on her hip, her face looking forward with confidence. Catlett wrote of her art: "It must answer a question, or wake somebody up, or give a shove in the right direction—our liberation." [4]

Figure \(\PageIndex{18}\): *Mahalia Jackson* (CC BY-NC-ND 2.0)

Figure \(\PageIndex{19}\): *Stepping Out* (CC BY-NC 2.0)

Maya Lin (born 1959) was born in the United States to parents who fled China. Both of her parents were professors at Ohio University. At the age of twenty-one, while studying **architecture** at Yale University, Lin entered a nationwide competition to design a memorial honoring veterans of the Vietnam War. Her proposal was highly unconventional and differed greatly from traditional **memorials**. More than one thousand people submitted designs, and although Lin's design was selected, it initially received intense criticism. She proposed a V-shaped **granite wall** engraved with the names of every soldier who had died or remained missing during the war. The wall slopes below ground level (13.3.20), creating a quiet and reflective space. Visitors walk beside the highly polished black wall (13.3.21), where the reflective surface allows viewers to see themselves alongside the engraved names. Today, the Vietnam Veterans Memorial is considered one of the most important and emotional memorials in the United States. Many visitors come to honor fallen soldiers (13.3.22), leave flowers, or place flags at the site. Lin's innovative design became a model for future **memorial sculptures** and modern public art.

Figure \(\PageIndex{20}\): *Vietnam Memorial* (Public Domain)

Figure \(\PageIndex{21}\): Wall at memorial (CC BY 2.0)

Figure \(\PageIndex{22}\): Soldier reads names (CC BY 2.5)

Maya Lin, Vietnam Veterans Memorial

Maya Lin, Vietnam Veterans Memorial, 1982, granite, 2 acres within Constitution Gardens, (National Mall, Washington, D.C.)

Folding the Chesapeake (13.3.23) was inspired by the complex formation of **river systems**, beginning with small streams that eventually flow into major rivers and finally into the sea. Maya Lin carefully studied the entire Chesapeake Bay watershed system while developing the installation. Thousands of small **glass marbles** were attached to the walls and floor to represent the branching waterways and the natural flow of water across the landscape. Lin spent decades studying **natural elements** and the ways they shape the Earth, and this installation reflects the complexity, scale, and environmental importance of interconnected water systems.

Figure \(\PageIndex{23}\): *Folding the Chesapeake* (2015, glass marbles, adhesive) (CC BY-NC-SA 2.0)

Maya Lin Interview for WONDER at the Renwick Gallery

Growing up in an artistic environment, Maya Lin sees the materials used in Folding the Chesapeake installed at the Renwick Gallery as a reflection of her childhood.

Installation of "Folding the Chesapeake" by Maya Lin

Time-lapse recording of the installation of "Folding The Chesapeake" part of the WONDER exhibition at the Renwick Gallery, Smithsonian American Art Museum.

Louise Bourgeois

Louise Bourgeois (1911–2010) was born in Paris and learned to draw while helping her parents restore **tapestries** in the family business. After marrying and moving to New York, she first focused on **painting** and **printmaking** before turning to **sculpture**. One of the central themes in her sculptural work was the **spider**. Spider (13.3.24) represents a series of spider sculptures created in many different sizes and materials, ranging from monumental outdoor works to smaller, intimate pieces. Bourgeois viewed spiders as both fierce and fragile creatures. This sense of fragility is reflected in the sculptures' thin, irregular legs, which appear delicate and awkward while still supporting the massive body above.

Figure \(\PageIndex{24}\): *Spider* (CC BY 2.0)

[2] "Exhibitions in New York: Gaston Lachaise, Brummer Galleries." *Art News*, vol. 26, no. 22, March 3, 1928, p. 11. Retrieved from https://en.wikipedia.org/wiki/Floating_Figure

[3] Retrieved from https://www.noguchi.org/isamu-noguch...phy/biography/

[4] Retrieved from https://www.famsf.org/artworks/stepping-out

13.4: Photography

Definition: Term

- **Photography** — The art and process of creating images using a camera and light.
- **Social landscape** — The social conditions, people, and environments that reflect a society or culture.
- **Artistic vision** — A creative way of seeing and expressing ideas through art.
- **Technical skill** — The practical ability and knowledge needed to use tools and techniques effectively.
- **Visual communication** — The use of images to share information, ideas, or emotions.
- **Historical documentation** — The recording of events, people, or places to preserve history.
- **Local events** — Events occurring within a community or nearby region.
- **International events** — Important events occurring across different countries or worldwide.
- **Human experiences** — The emotions, activities, and realities people encounter in life.

"New opportunities for photographers during the era are also addressed, such as the rise of photographically illustrated magazines and book publications, exhibitions, and advances of colour photography, offering insight into the ways a working photographer could prosper artistically and professionally during this exciting time."[1] **Photography** became a new way to document and record life, and the photographers of this period elevated the medium beyond ordinary images by capturing the **social landscape** with both artistic vision and technical skill. Through photographs, viewers gained a deeper understanding of local and international events, cultures, and human experiences. Photography emerged as an important form of visual communication, combining **artistic quality** with historical documentation.

Ansel Adams

When viewing The Tetons and the Snake River (13.4.1) at the visitor center in Grand Teton National Park, viewers often imagine hiking through the dramatic peaks of the **Tetons** and following the path once traveled by Ansel Adams (1902–1984). Adams was one of America's most celebrated **photographers** and a passionate **environmentalist**. Using **black-and-white film**, he captured powerful images of America's national parks and wilderness landscapes, helping inspire the preservation of thousands of acres of natural land. Born in San Francisco, California, Adams was influenced by his father's admiration for Ralph Waldo Emerson and the ideas of **Transcendentalism**, which emphasized the spiritual connection between humanity and **nature**. Growing up surrounded by the beauty of the California landscape, Adams developed a lifelong appreciation for the environment that became central to his photography and conservation efforts.

"To live a modest, moral life guided by a social responsibility to man and to nature" — Ralph Waldo Emerson

Figure \(\PageIndex{1}\): Tetons and the Snake River (Public Domain)

During the 1920s, Ansel Adams began his career in **photography**, influenced by the **Photo-Secession movement** led by Alfred Stieglitz. Before the era of digital editing and Photoshop, photographers relied entirely on what could be captured directly on **film**. Success depended on the photographer's patience, technical skill, and artistic eye, qualities Adams mastered throughout his career. Adams understood that creating a remarkable photograph required careful planning and timing. A photographer could not simply arrive at Half Dome and take a perfect image instantly. Instead, Adams often waited hours or even days for the ideal **light**, weather, and seasonal conditions to capture the scene exactly as he envisioned it. During the 1930s, Adams traveled extensively across the American West, producing photographs that demonstrated the expertise of a master artist. He also published books featuring his work, including Taos Pueblo (13.4.2), a photographic study of the western United States. The special paper used in the book allowed Adams to print directly onto the surface, creating an extraordinary **tonal range** with a soft matte finish.

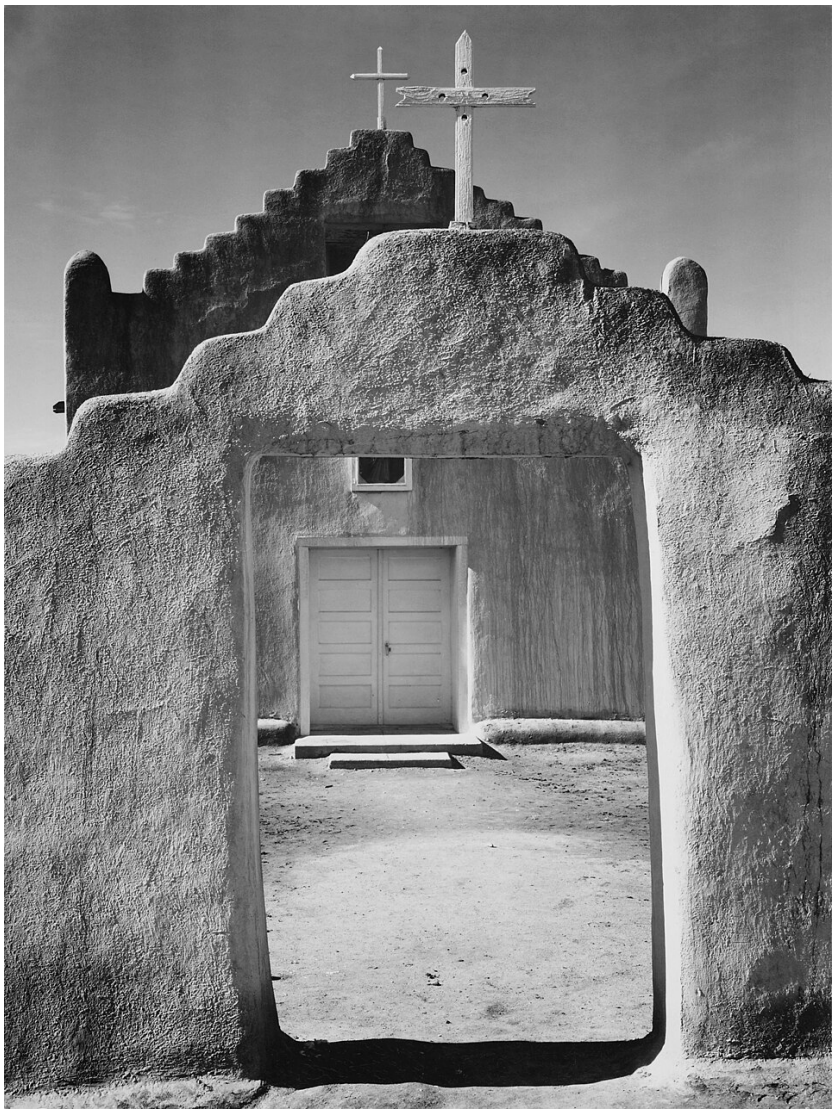


Figure \(\PageIndex{2}\): *Taos Pueblo* (Public Domain)

Figure \(\PageIndex{3}\): *Evening on McDonald Lake* (Public Domain)

https://human.libretexts.org/@go/page/308367

Figure \(\PageIndex{4}\): *Leaves at Glacier National Park* (Public Domain)

In the early 1940s, Ansel Adams worked under contract with the United States **Department of the Interior** to photograph America's **national parks**. Evening on McDonald (13.4.3) captures a peaceful moment at a lake in Glacier National Park during a brief opening in the clouds. Leaves at Glacier National Park (13.4.4) presents a highly detailed close-up study of the structure and texture of leaves found within the park. For nearly sixty years, Adams documented the beauty of **nature** through photography. His dramatic black-and-white images earned him numerous awards and recognition for both his artistic achievements and his dedication to **conservation** and environmental protection.

Gordon Parks

Gordon Parks (1912–2006) was an American **photographer** and **film director** best known for his powerful photographic essays published in Life magazine. Parks grew up on a farm in Kansas and attended a **segregated school** during a period of racial discrimination in the United States. After the deaths of his parents during his teenage years, Parks struggled to survive on his own. At the age of twenty-five, he purchased his first **camera** from a pawn shop and began photographing everyday life in Chicago. American Gothic (13.4.5) is one of Parks' most famous photographs. The image portrays Ella Watson, a janitor working in the Farm Security Administration building, standing with a mop and broom in front of an American flag. Parks intentionally referenced American Gothic (13.4.6) by Grant Wood to create a visual parody exposing racial and economic inequality in America. Instead of the traditional rural couple shown in Wood's painting, Parks presented a single Black working mother burdened by exhausting labor. The photograph became an important statement connected to the emerging **Civil Rights Movement** in the United States. Parks later photographed Ella Watson and her family (13.4.7) inside their small home after she had worked all night cleaning offices, further documenting the realities of poverty, inequality, and everyday life for African Americans during the period.

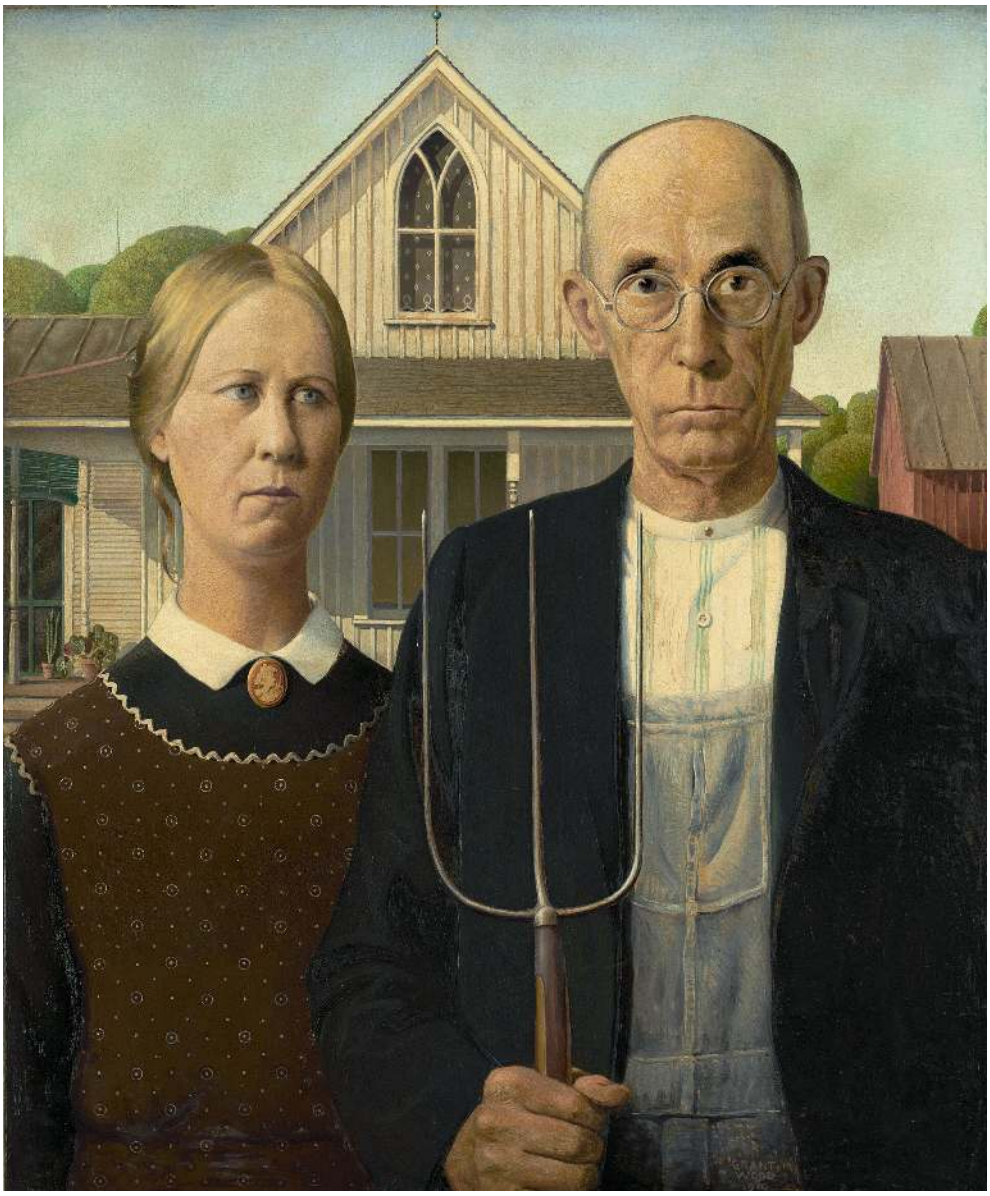


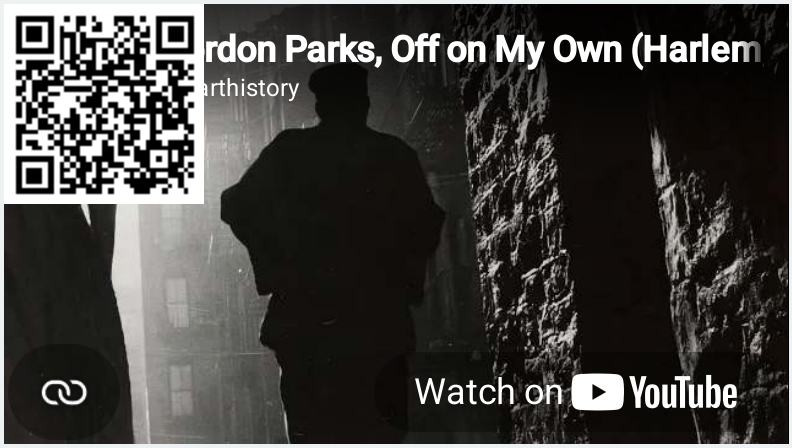
Figure \(\PageIndex{5}\): *American Gothic* (Public Domain)

Figure \(\PageIndex{6}\): *American Gothic* (Public Domain)

Figure \(\PageIndex{7}\): *Ella Watson and her Family* (Public Domain)

Gordon Parks, Off on My Own

Gordon Parks (American, 1912-2006), Off on My Own (Harlem, New York), 1948. Gelatin silver print. The Art Institute of Chicago, Amanda Taub Veazie Acquisition Fund



Migrant Mother, an iconic image of the American **Great Depression**, is one of the most recognized photographs created by Dorothea Lange (1895–1965). Born in New Jersey, Lange contracted **polio** as a child, leaving her with permanent damage to her right leg and causing her to walk with a limp for the rest of her life. Her physical challenges contributed to her unique approach to **photography**, as she developed patience and the ability to remain still for long periods while observing her subjects. Lange never rushed while taking photographs, and her patience, compassion, and courage allowed her to capture some of the most powerful images of American life. Her work documented the struggles of ordinary people during times of poverty, migration, and economic hardship, helping viewers understand the human impact of the Great Depression.

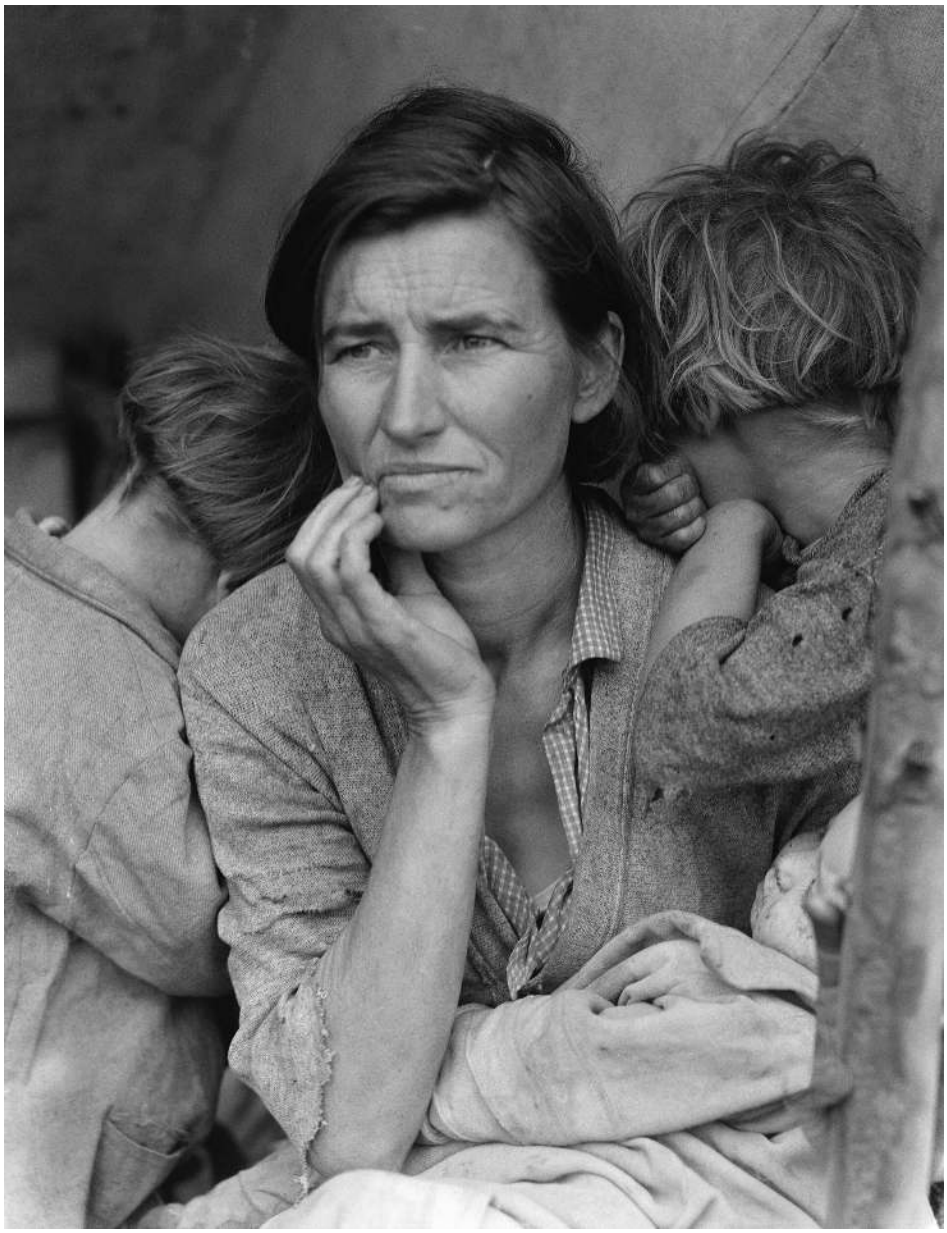


Figure \(\PageIndex{8}\): *Migrant Mother* (Public Domain)

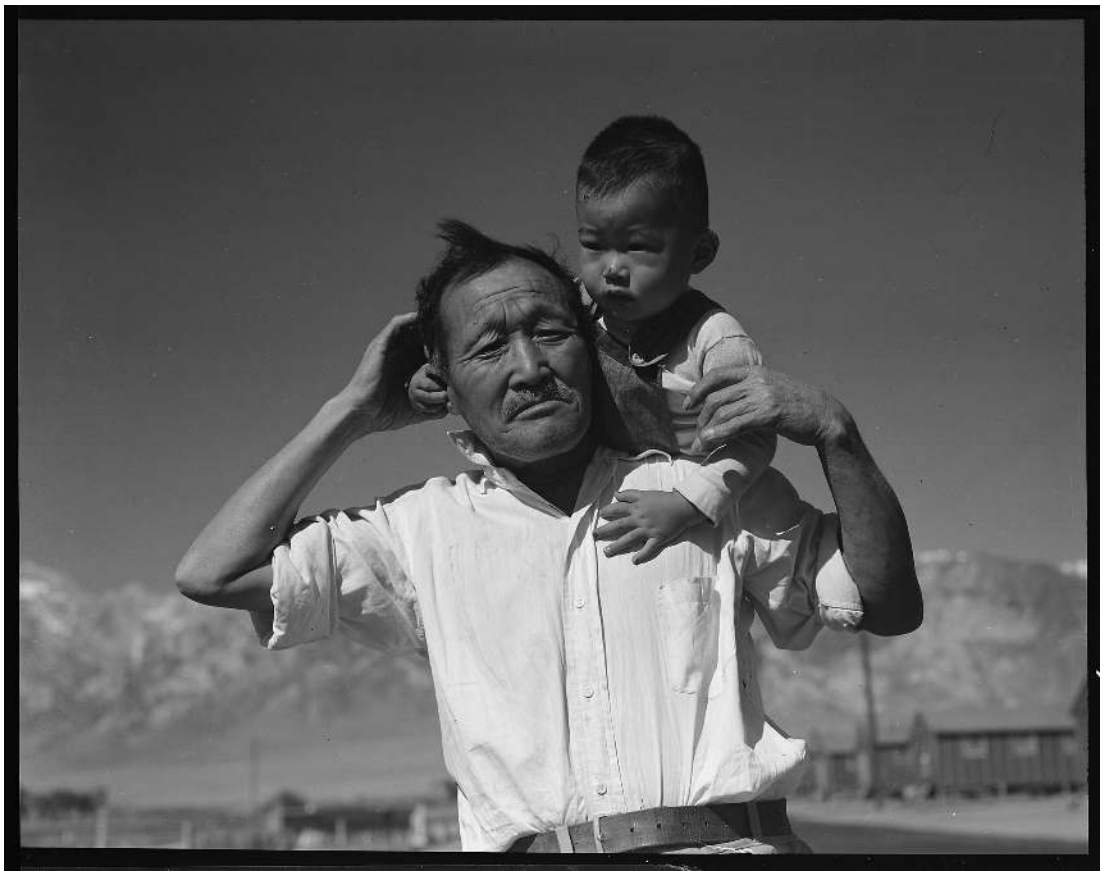
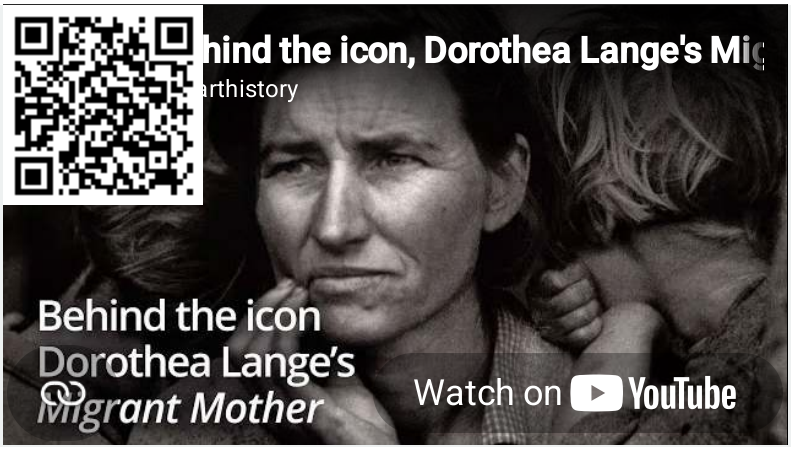


Figure \(\PageIndex{9}\): *Manzanar* (Public Domain)

Migrant Mother (13.4.8) was part of a series of photographs taken by Dorothea Lange while working for the **Resettlement Administration** of the **Farm Security Administration**. While traveling through Nipomo, Lange noticed a mother sitting in a tent with several children. She took five photographs, moving closer with each image until she captured the final composition that became one of the most famous photographs in American history. The image became a powerful symbol of the suffering and hardship experienced during the **Great Depression**. Manzanar (13.4.9) documented one of the Japanese American **internment camps** established under **Executive Order 9066**, authorized by Franklin D. Roosevelt during World War II. Lange was hired to photograph the relocation process and present it as a necessary wartime action. However, she disagreed with the government's position and instead focused on documenting the suffering, loss, and injustice experienced by Japanese American citizens imprisoned in the camps. Because Lange's photographs revealed the emotional hardship and harsh conditions of the camps, many of the images were suppressed and remained unpublished for decades. Her work was finally released nearly forty years later in a book published after her death. Rather than ignoring injustice, Lange used **photography** to tell honest human stories and document difficult moments in American history.

Behind the icon, Dorothea Lange's Migrant Mother

Dorothea Lange, Migrant Mother, Nipomo California, 1936, printed later, gelatin silver print, 35.24 x 27.78 cm (Los Angeles County Museum of Art, PG.1997.2)



Dorothea Lange Tribute

Dorothea Lange changed the world because of how she saw it and photographed it. She had polio as a child and had a heel that never touched the ground. Her father abandoned the family when she was young. Her marriage failed and her kids blamed her for never being home. Nothing stopped her from telling the stories that needed telling.

Alfred Stieglitz (1864–1946) was one of the most important influences on **modern photography**. An American **photographer** and owner of the famous Stieglitz Gallery in New York City, he was also married to Georgia O'Keeffe. By the beginning of the 20th century, Stieglitz had become an accomplished artist known for photographing everyday scenes of urban life in New York City. Terminal (13.4.10) portrays a city street scene with a horse-drawn trolley moving through deep snow while steam rises from the horses and the cold streets. The image demonstrates Stieglitz's ability to capture atmosphere, movement, and ordinary moments with artistic sensitivity.

Venetian Canal (13.4.11) and the portrait of Katherine Stieglitz (13.4.12) further demonstrate his technical and artistic skill with the camera. Although the portrait is black and white, many photographers during the period experimented with hand-coloring photographs to imitate color images. The Venice photographs were taken during Stieglitz's extended travels in Europe and were widely published in magazines. Using simple printing methods without retouching, Stieglitz relied on natural **light**, soft focus, and the narrow Venetian canals to create intimate and atmospheric compositions.

Figure \(\PageIndex{10}\): *Terminal* (Public Domain)

https://human.libretexts.org/@go/page/308367

Figure \(\PageIndex{11}\): *Katherine Stieglitz* (Public Domain)

Figure \(\PageIndex{12}\): *Venetian Canal* (Public Domain)

[1] Retrieved from https://thephotographersgallery.org....hy-1930s-1960s

13.5: Mexican Murals and Social Art

Definition: Term

- **Mural painting** – Large-scale paintings created directly on walls or ceilings.
- **Political** – Related to government, power, leadership, or public policy.
- **Social messages** – Ideas or statements about society, culture, equality, or human relationships.
- **Christian doctrine** – The beliefs and teachings of Christianity.
- **Style** – The distinctive artistic methods or visual characteristics used by an artist.
- **Scientific concepts** – Ideas or principles based on science and experimentation.
- **Utopian** – Describing an ideal or perfect society.

Mural painting in Mexico began expanding during the 1920s as a way to communicate **political** and **social messages** to the public. Diego Rivera, José Clemente Orozco, and David Alfaro Siqueiros became the leading artists of the Mexican mural movement. From the 1920s through the 1970s, murals spread throughout Mexico and influenced public art across the Americas. Mexico's tradition of mural painting dates back to the ancient Olmec civilization. After the Spanish conquest destroyed Tenochtitlan and much of its art, Spanish authorities introduced **Christian doctrine** and built churches decorated with religious murals, similar to the mural traditions of the **Renaissance** in Italy. By the 20th century, murals became powerful tools for education, political expression, government propaganda, and public protest. Rivera, Orozco, and Siqueiros were known collectively as "los tres grandes" ("the three great ones"). Although they often explored similar revolutionary and social themes, each artist developed a distinctive artistic **style**. Siqueiros incorporated **scientific concepts** and experimental techniques into his murals, Orozco approached political themes with a more pessimistic perspective, and Rivera created idealistic and **utopian** images that were strongly supported by the Mexican government.

Mexican Muralists

Several Mexican Muralists depicting their art.

José Clemente Orozco

José Clemente Orozco (1883–1949) emerged from the turmoil of the **Mexican Revolution** and overcame severe poverty during his early life. He discovered **painting** at a young age and was strongly influenced by José Guadalupe Posada, a Mexican cartoonist who believed art could become a powerful tool during political revolution. Posada encouraged artists to reject European artistic traditions and instead promote Mexican culture and identity. Orozco developed a dramatic artistic **style** using somber colors, distorted **human figures**, and sharp, slashing lines to express suffering and emotional intensity. Rather than glorifying war, Orozco focused on its brutality, fear, and human tragedy.

The Trinity (13.5.1) portrays a kneeling peasant in a white shirt begging for mercy while another peasant, already wounded and missing a hand, watches helplessly. The mural reflects how many working-class people were forced into battle without understanding the reasons behind the conflict. Orozco used intense **red tones** across the upper half of the mural while contrasting them with grays and whites below, creating emotional tension and symbolic conflict. The Trench (13.5.2) depicts fallen revolutionary soldiers whose bodies form the shape of a **cross**. The hidden faces of the figures emphasize universal suffering and loss rather than individual identity. One figure kneels while the others appear dead, suggesting despair and uncertainty about the future. Orozco used a dark **palette**, sharp diagonal lines, and strong red accents to communicate the violence and sorrow of war.

Figure \(\PageIndex{1}\): *The Trinity* (CC BY-SA 3.0)

Figure \(\PageIndex{2}\): *The Trench* (CC BY-SA 3.0)

David Alfaro Siqueiros (1886–1974) was a Mexican **social realist painter** best known for his monumental **murals**. He believed that mural art could educate the public about important **social issues** and political ideas. As a student, Siqueiros joined both the **Mexican Revolutionary Army** and the **Communist Party**. Although he was imprisoned several times because of his political activities, the Mexican government continued to commission him to create large public murals. Siqueiros rejected traditional **fresco painting** methods and instead developed innovative techniques of direct painting. He used specially created **plastic paint** applied with **spray guns** directly onto cement surfaces. Because the paint dried quickly, he could easily layer colors and forms, allowing for dramatic movement and bold visual effects.

The Polyforum Cultural Siqueiros (13.5.3), part of the trade center in Mexico City, contains his largest mural project, La Marcha de la Humanidad (March of Humanity) (13.5.4), covering more than 8,700 square meters. The mural explores humanity's continuous struggle to create a better society. Siqueiros was considered the most radical of the major Mexican muralists. He used bold, sweeping lines, dramatic perspectives, and blurred forms throughout the Polyforum mural, which is considered one of his masterpieces. The mural is divided into three major sections: **March of Humanity Towards Bourgeois Democratic Revolution**, **The March of Humanity to the Revolution of the Future**, and **Peace, Culture, and Harmony**. Each section portrays scenes of suffering, conflict, and oppression while still expressing hope and optimism for the future.

As a committed **socialist**, Siqueiros incorporated his political beliefs and revolutionary ideals directly into his artwork. He stated, "The artist... must make up his mind to serve either the bourgeoisie or the proletariat. I believe that painting and sculpture should serve the proletariat in their revolutionary class struggle."[1] The bourgeoisie he referred to were the people of the middle class who liked their comfortable lifestyle, and the proletariat were the working or lower class.

Figure \(\PageIndex{3}\): *Polyforum* (CC BY-SA 3.0)

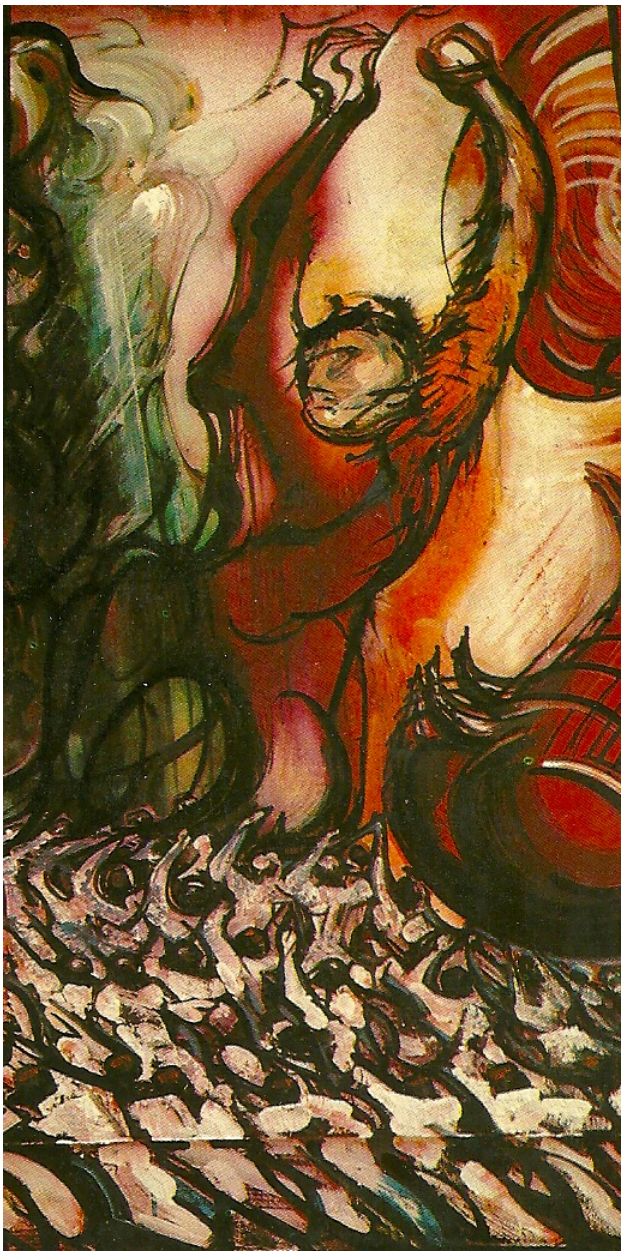


Figure \(\PageIndex{4}\): *March of Humanity* (Public Domain)

Diego Rivera (1886–1957) was one of the most famous Mexican **painters** and a leading force behind the Mexican **mural movement** in Mexico City. Rivera created murals intended to provide a visual and historical record of Mexico's people, culture, and political struggles. As a supporter of **collective justice**, he painted large public works throughout Mexico that celebrated cultural achievements, workers, and indigenous traditions. Rivera studied at the San Carlos Academy of Fine Arts in Mexico City and later traveled throughout Europe, where he studied the techniques and styles of major European artists. Influenced by **Cubism**, Rivera combined bold **color**, monumental figures, and large-scale mural compositions with themes connected to **Marxism** and radical politics. His murals blended artistic innovation with strong social and political messages.

Figure \(\PageIndex{5}\): *Tenochtitlan* (Public Domain)

Figure \(\PageIndex{6}\): Mural in Mexico City (CC BY-SA 3.0)

Diego Rivera drew inspiration from traditional **painting styles** while incorporating elements of **Modernism** and **Cubism** into his murals. Using bright colors combined with earthy tones, Rivera portrayed scenes of everyday life in ancient Mexico and emphasized the importance of Mexico's **indigenous people** and cultural heritage. Rivera's murals in the Palacio Nacional depict life during the height of the Aztec Empire in the city of Tenochtitlan. In Tenochtitlan (13.5.5), snowcapped mountains in the background demonstrate the use of **atmospheric perspective**. The mural's center reveals the vast scale of the ancient city, including pyramids, stone bridges, water canals, marketplaces, and flower-lined streets. Rivera portrayed the period when Moctezuma II ruled Tenochtitlan at the height of its power. Rivera was influenced by **Aztec art**, especially its flat perspective, bright colors, and simplified human figures. Another mural by Rivera (13.5.6) in the Palacio Nacional portrays the brutality and exploitation of the Spanish conquest, including scenes of execution, forced slavery, and forced religious conversion imposed upon the indigenous population.

Unearthing the Aztec past, the destruction of the Templo Mayor

Unearthing the Aztec past, the destruction of the Templo Mayor (Mexico City)

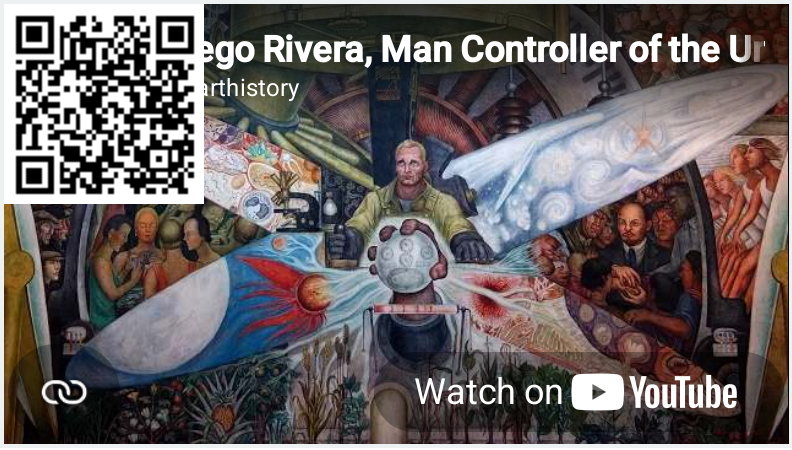
Man, Controller of the Universe (13.5.7) was originally created as a **fresco** for Rockefeller Center in New York City. Painted by Diego Rivera, the mural explored modern **social**, **scientific**, and industrial changes shaping contemporary life. Rivera included images of workers, scientific discoveries, and political figures, including Russian soldiers and Vladimir Lenin (13.5.8). The mural quickly became controversial because of its political imagery and association with **Communism**. Before the project could be completed, the mural was destroyed by Rockefeller Center officials. Anticipating possible conflict, Rivera had photographs taken of the unfinished work and later recreated the mural at the Palacio de Bellas Artes in Mexico City.

Figure \(\PageIndex{7}\): *Man, Controller of the Universe* (CC BY-SA 3.0)

Figure \(\PageIndex{8}\): Detail of *Man, Controller of the Universe* (CC BY-SA 3.0)

Diego Rivera, Man Controller of the Universe

Diego Rivera, Man Controller of the Universe (or Man in the Time Machine), 1934, fresco, 4.85 x 11.45 m in the Palacio de Bellas Artes, Mexico City



Jorge González Camarena (1908–1980) was a prominent Mexican **painter** and **muralist** best known for his large public murals in Mexico City. He was often called the “builder of mass, shape, and plane” because of his emphasis on strong forms and geometric structure. Born in Guadalajara into an artistic family, Camarena was encouraged by his father to develop his creativity. As a teenager, he attended the Academy of San Carlos, where he studied the technique of **Quadratism**, also known as **harmonic geometry**. Throughout his career, he incorporated geometric organization into his artwork. Camarena preferred using **natural**

pigments and emphasized visible lines, textures, and carefully arranged forms. His work combined elements of **Surrealism** and **Cubism**, often using harmonic geometric shapes to structure his compositions.

Liberación, also known as *La Humanidad se Libera de la Miseria* (“Man is Released from Misery”) (13.5.9), is a mural located in the Palacio de Bellas Artes in Mexico City. The mural portrays figures struggling against oppression and suffering. On one side, a figure stands with bound hands while another larger figure is tied to a coffin, symbolizing hardship and control. On the opposite side stands a radiant **mestizo** woman, representing people of indigenous and European ancestry. She appears spiritually liberated, symbolizing freedom from misery and colonial oppression through the power of knowledge and enlightenment.

Figure \(\PageIndex{9}\): *Liberacion* (CC BY-SA 4.0)

Alfredo Zalce (1908–2003) was a Mexican **artist** best known for his **murals**. His artistic career began at a very young age when he started drawing scenes on classroom chalkboards while teachers lectured. After the death of his father, Zalce helped support his family by working while continuing his education. He later spent many years teaching while also developing his artistic career. Although Zalce worked in several artistic disciplines, he specialized in mural painting and often used **colored cement** directly on walls as part of his technique. His murals usually focused on scenes from everyday life, emphasizing ordinary people and community experiences.

One of Zalce’s murals (13.5.10), located in the government palace in Morelia where he lived with his wife, portrays people enjoying music and daily life. Young girls in the foreground appear to be singing while men in the background accompany them with music. Through these scenes, Zalce celebrated culture, community, and the experiences of working people. As one of the important post-revolutionary Mexican muralists, Zalce helped shape **modern art** in Mexico by documenting the historical period of social reform and cultural identity.

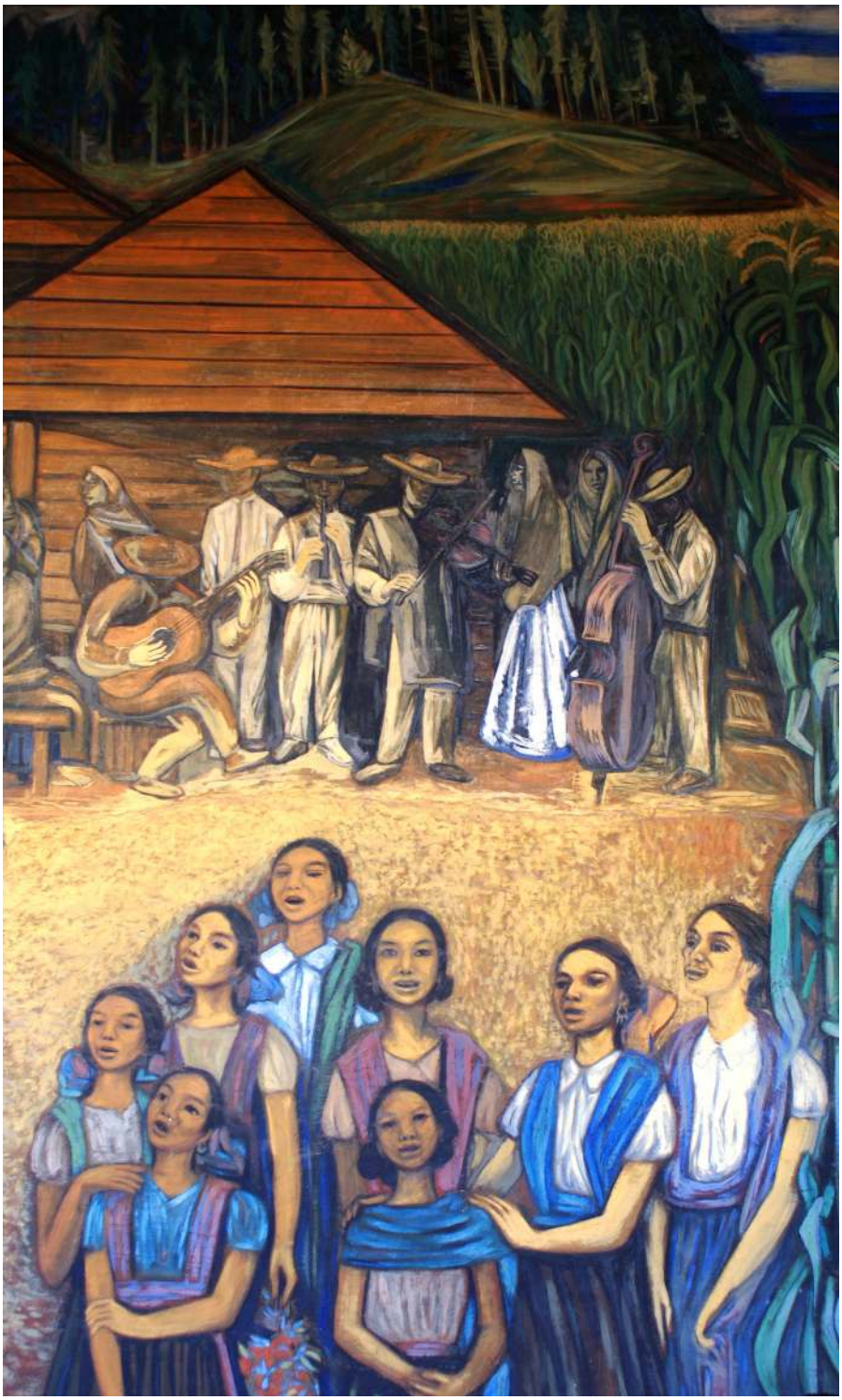


Figure \(\PageIndex{10}\): *Mural in Morelia* (CC BY-SA 3.0)

[1] Retrieved from https://www.nga.gov/educational-reso...queiros-speaks

13.6: Works Progress Administration Murals

Definition: Term

- **Great Depression** — A severe worldwide economic crisis during the 1930s marked by unemployment and poverty.
- **WPA (Works Progress Administration)** — A New Deal government program that provided jobs during the Great Depression, including employment for artists, writers, and builders.
- **Sculptures** — Three-dimensional works of art created by carving, modeling, or casting materials.
- **Artists** — People who create visual, musical, literary, or performance art.
- **Public art** — Artwork created for public spaces such as parks, schools, or government buildings.
- **Coit Tower** — A landmark tower in San Francisco known for its WPA murals.
- **Reinforced concrete** — Concrete strengthened with steel bars or mesh to increase durability and support.
- **Muralists** — Artists who create large paintings directly on walls or ceilings.
- **Frescoes** — Murals painted onto freshly applied wet plaster so the paint becomes part of the wall surface.
- **Patriotic values** — Ideas and beliefs expressing pride, loyalty, and support for one's country.
- **Economic relief** — Government assistance provided to help people during financial hardship.
- **Artistic style** — The distinctive techniques, appearance, and methods used by an artist.

The 1930s in American history are closely associated with the **Great Depression** and the federal government's **WPA (Works Progress Administration) Art Projects**. The WPA produced more than 100,000 works of art and over 18,000 **sculptures** throughout the United States. Franklin D. Roosevelt developed the program to combine art with patriotic American values while also providing economic relief during the Great Depression. Established in 1935, the WPA operated for eight years and employed more than 10,000 **artists**. Artists participating in the WPA murals program were required to create scenes representing American life and values; however, they were free to interpret those themes in their own artistic styles. The murals became important examples of **public art**, bringing art into government buildings, schools, and public spaces across the country.

Coit Tower (13.6.1) in San Francisco is one of the city's most recognizable landmarks. The tower was funded by philanthropist Lillie Hitchcock Coit as a memorial honoring the firefighters who responded to the 1906 earthquake and fire. Rising 210 feet tall, the tower is constructed from **reinforced concrete** and designed in the shape of an abstracted fire hose nozzle. The famous **Coit Tower murals** were completed in 1934 as part of the WPA program. Twenty-five muralists were selected to paint the tower's **frescoes**. Artists associated with the project included Diego Rivera, Bernard Zakheim, Victor Arnautoff, John Langley Howard, and Maxine Albro.

Figure \(\PageIndex{1}\): Coit Tower (CC BY-SA 3.0)

The murals in the tower represented agriculture, industry, immigration, politics, capitalism, social class, and urbanism.[1] A traditional **fresco** methodology was used to paint the murals. A thin layer of **plaster** was applied to the wall where the artist was working. The artist used dry color **pigments** and a wet brush to apply paint directly onto the plaster. As the plaster dried, a chemical bond formed, making the paint permanent. The murals inside Coit Tower became controversial because some viewers believed there were too many **Communist symbols** included in the artwork, leading to protests and public debate. The San Francisco Chronicle reported the Parks and Arts Commissions need to "decide whether the daubings on the interior of the Coit Tower Memorial Tower are art or whether they are merely a grotesque rebellion of starved souls against the existing order."[2] The hammer and sickle in one mural was removed while the rest stayed and remained controversial for years. Today, the murals are over ninety years old and celebrated as representative of the Great Depression in California during the period.

Victor Arnautoff (1896–1979) was born in Russia and originally planned to become an **artist** there. After the **Bolshevik Revolution**, he fled to China, where he married before eventually immigrating to the United States. Arnautoff studied at the California School of Fine Arts and later traveled to Mexico, where he worked as an assistant to Diego Rivera and learned the techniques of **mural painting**. After returning to San Francisco, Arnautoff received several important commissions, including work for the murals inside Coit Tower. He also taught at Stanford University for twenty-four years.

As part of the Coit Tower project, Arnautoff painted City Life (13.6.2), a busy urban street scene filled with examples of everyday city activity. The mural includes a traffic accident, leftist newspapers, a fire engine, an armed robbery in progress, and the San Francisco Stock Exchange. Arnautoff even included himself in the mural standing at a newsstand reading left-wing newspapers while intentionally excluding the *San Francisco Chronicle*. The mural's central theme explores the indifference and lack of concern that can develop in large cities, where people often ignore the suffering and struggles occurring around them.

Figure \(\PageIndex{2}\): *City Life* (Public Domain)

Bernard Zakheim

Bernard Zakheim (1898–1985) was born in Warsaw, which at the time was part of the Russian Empire. Although his family expected him to become a **rabbi**, Zakheim chose to pursue a career as an **artist** instead. He studied art independently before earning a scholarship to the Academy of Fine Arts in Warsaw. After World War I, Zakheim moved to San Francisco to continue his artistic career. Like several other muralists of the period, Zakheim traveled to Mexico and studied with Diego Rivera, where he refined his skills in **mural painting**. He later became an important contributor to the mural project at Coit Tower. Library (13.6.3) portrays people inside a library reading a variety of books considered "questionable" or politically controversial during the 1930s. Soon after the mural was opened to the public, debates and criticism erupted over its political content and themes. The controversy surrounding the mural continued for many years, reflecting the tensions and ideological conflicts of the Great Depression era.

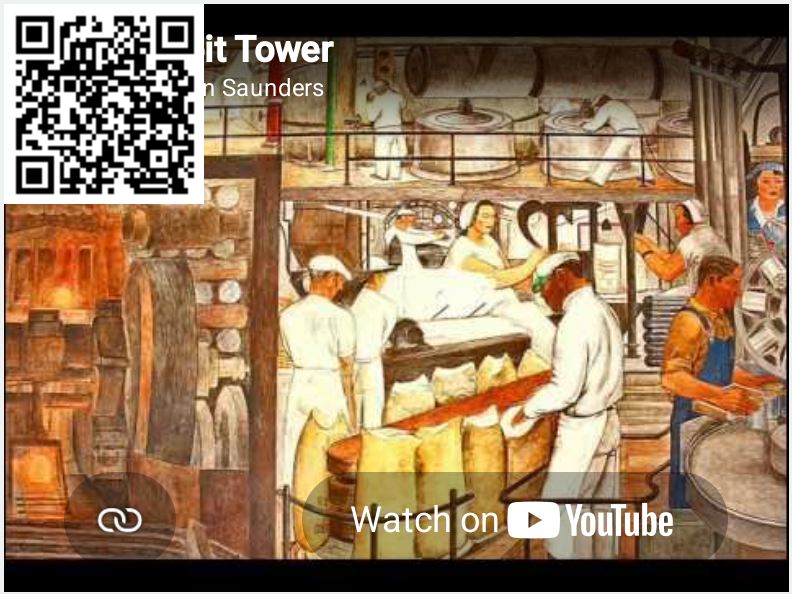
Figure \(\PageIndex{3}\): *The Library* (Public Domain)

Maxine Albro (1893–1966) was one of the leading female **artists** in America, working as a **painter**, **muralist**, and **sculptor**. During the government's **New Deal** art programs, very few women received major mural commissions, and Albro was among the select group chosen for these important projects. She studied at the California School of Fine Artsand traveled to Mexico several times to study with Diego Rivera. Albro painted California (13.6.4, 13.6.5) for the Coit Tower mural project. Although she was born in Iowa and spent part of her childhood in Los Angeles, Albro studied art at several schools around the world, gaining a broad artistic education. Some of her murals became controversial during the period and were eventually destroyed, a fate shared by several artists whose work contained political or social themes. Her mural at Coit Tower celebrated California's agricultural abundance, portraying the rich harvest of crops, fruit, and grain grown throughout the state.

Figure \(\PageIndex{4}\): *California* (Public Domain)

Coit Tower

The Coit Tower Murals were carried out under the auspices of the Public Works of Art Project, the first of the New Deal federal employment programs for artists in 1932.



San Francisco's Famed Coit Tower Murals in Peril Due to Fog and Neglect

In San Francisco's Coit Tower, historic murals by 25 significant artists depicting life in California in the early 1930s have fallen into disrepair for a variety of reasons, including a lack of security, funding problems and the city's famous fog. Correspondent Spencer Michels reports on efforts to preserve the famed frescoes.

Doris Lee

Doris Lee (1905–1983) was an American **painter** and **printmaker** who became one of the most successful artists during the **Great Depression**. Her artwork often focused on scenes of everyday American life, especially rural communities and small-town traditions. Lee's paintings are known for their warm colors, simplified figures, and sense of optimism during difficult economic times. In General Store and Post Office (13.6.5), Lee presents an idealized image of farm life in America. The painting portrays people gathering happily at a combined general store and post office as they receive mail and socialize with neighbors. Rather than emphasizing hardship, Lee focused on the strong sense of community and connection that existed in small rural towns.

Outside the building, the visible **gasoline pump** suggests growing access to automobiles and hints that the economy may soon improve as people gain the ability to afford modern transportation. Lee filled the scene with details of daily life, including ordinary clothing, packages, conversations, and casual interactions, creating a welcoming atmosphere. Her use of soft colors and relaxed composition helps communicate comfort, stability, and hope during a period marked by economic uncertainty.

Figure \(\PageIndex{5}\): *General Store and Post Office* (Public Domain)

Julius Woeltz (1911–1956) was an American **landscape painter** and **art teacher** who studied at the School of the Art Institute of Chicago. He created Bauxite Mines (13.6.6), a mural inspired by the **bauxite mining** industry that helped drive the economy of Benton, Arkansas. After touring the mining sites, Woeltz designed the mural to portray the scale and industrial power of the strip-mining process. Using a combination of **Cubism**, **Constructivism**, and **American Scene Painting**, Woeltz created a dynamic composition filled with geometric shapes, strong lines, and industrial imagery. The mural presents the machinery, landscape, and labor involved in mining while also reflecting the influence of modern art movements on American regional subjects.

Figure \(\PageIndex{6}\): *The Bauxite Mines* (Public Domain)

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[1] Retrieved from https://www.argcs.com/portfolio-item...-tower-murals/

[2] Retrieved from https://www.foundsf.org/Revolutionar...t_Tower_Murals

13.7: Nihonga and Yoga Style

Definition: Term

- **Nihonga** — A modern Japanese painting style that uses traditional Japanese techniques and materials.
- **Modern paintings** — Artwork created using newer artistic ideas and styles of the modern era.
- **Art history** — The study of art, artists, and artistic movements throughout time.
- **Paper** — A thin material used as a surface for drawing and painting.
- **Silk** — A smooth fabric traditionally used in Asian painting and calligraphy.
- **Monochrome** — Artwork created using one color or shades of one color.
- **Ink** — A liquid or paste used for drawing, writing, or painting.
- **Polychrome** — Artwork using multiple colors.
- **Minerals** — Naturally occurring substances used to create pigments for paint.
- **Shells** — Natural materials sometimes ground into pigments for artistic use.
- **Binders** — Substances mixed with pigments to help paint adhere to a surface.
- **Screens** — Folding panels often decorated with paintings or designs.
- **Panels** — Flat surfaces used for painting or decorative artwork.
- **Yoga painting** — Western-style Japanese painting using European artistic methods and materials.
- **Western-style painting** — Art influenced by European techniques, materials, and realism.
- **Oil paints** — Paint made by mixing pigments with oil, known for rich color and slow drying time.
- **Pastels** — Sticks of powdered pigment used for drawing and coloring.
- **Watercolors** — Paints mixed with water to create transparent color effects.
- **Color spectrum** — The full range of visible colors.
- **Artistic realism** — An artistic approach focused on accurate and lifelike representation.

Nihonga paintings are traditional Japanese artistic techniques and materials applied to **modern paintings**. The methods are based on more than a thousand years of Japanese **art history** and are typically created on **paper** or **silk** using either one color or multiple colors. **Monochrome** works are produced with **ink** made from ashes mixed with glue, while **polychrome** works use pigments created from ground **minerals**, **shells**, and other natural materials combined with **binders**. Many of the works are in the form of screens or panels and are not put under glass as in traditional paintings. Nihonga is a term literally translating to “pictures of Japan.”[1] However, Nihonga style is a relatively new type of Japanese painting based on traditions of the past.

Yoga painting refers to **Western-style paintings** created by Japanese artists using techniques and materials associated with European art. The term **Yoga** was developed to distinguish this style from traditional Japanese painting methods such as **Nihonga**. Yoga artists used materials including **oil paints**, **ink**, **pastels**, and **watercolors**, all introduced to Japan through contact with European culture and Christian missionaries. Unlike traditional Japanese art, which followed established symbolic color traditions, Yoga painting used colors based on the **color spectrum** and principles of Western artistic realism.

Nihonga Style Painters

Tomioka Tessai (1837–1924) was a Japanese **painter** and **calligrapher** considered one of the first major artists of the **Nihonga** style. Born with the name Yusuke, he later adopted Tessai as his artistic pseudonym. Because he experienced hearing difficulties as a child, his family decided he should pursue the education of a scholar rather than become a merchant. Tessai studied classical **literature**, **philosophy**, and later learned scholarly painting while living with a respected Buddhist poet. Throughout his life, Tessai served as a **Shinto priest**, scholar, and highly productive artist. *Two Divinities Dancing* (13.7.1) was painted in 1924 on **eginu** (silk) using brushes and **ink**. Tessai carefully controlled the gradations of black ink by adjusting the amount of water and pressure applied to the brush. He also used a small touch of orange in the center of the composition, drawing the viewer’s attention directly to the figure.

Figure \(\PageIndex{1}\): *Two Divinities Dancing* (Public Domain)

Takeuchi Seihō (1864–1942), a Japanese **painter** of the **Nihonga** genre, was one of the founders of the movement. He worked for more than half a century and was regarded as a master among prewar Japanese painters. Seihō introduced European artistic ideas into traditional Japanese painting standards while still using traditional Nihonga materials and techniques. His work was influenced by European **realism**, especially in his depictions of playful animals and landscapes, which often appear more spontaneous and natural. Despite these influences, his paintings remained grounded in traditional Japanese artistic practices.

Tabby Cat (13.6.2) demonstrates the careful precision of **Nihonga-style painting**. The spotted tabby cat has a short tail, a common feature among cats in Japan. As the cat grooms itself and glances backward, its body forms an elegant “S” shape. Mount Fuji from Miho to Matsubara (13.6.3) uses subtle **shading** characteristic of the Nihonga style. Green tones represent the water, enhanced with lighter waves and delicate gradations of color. White, gray, and black tones create the mountains and trees, while Mount Fuji rises majestically in the background, viewed from a distant perspective.

Figure \(\PageIndex{2}\): *Tabby Cat* (1924, color on silk, 81.9 x 101.6 cm) (Public Domain)

Figure \(\PageIndex{3}\): *Mount Fuji from Miho to Matsubara* (1891, ink and color on silk) (Public Domain)

Uemura Shōen (1875–1949), whose birth name was Uemura Tsune, was an important female Japanese **artist** best known for her **bijinga** paintings of beautiful women in the **Nihonga** style. Although she also created works based on historical and traditional subjects, she became especially recognized for her elegant portrayals of women. Jo-no-Mai (13.6.4) was inspired by a dance performed in the play *Soshi-arai Komachi*. The beautifully painted **Geisha** figure appears to float gracefully across the composition. Earlier Japanese painting traditions often outlined figures and clothing in black; however, Nihonga painters such as Shōen avoided strong outlines, creating softer and more natural transitions of color and form.

Honoo (13.6.5) portrays a woman wearing a patterned robe while her long hair swirls in the same direction as her body, creating a sense of movement and elegance. Some critics described Shōen's paintings as resembling "faceless dolls" because of the calm, idealized, and restrained expressions of the figures. Uemura continued to paint women throughout her life and stated, "Never once did I paint a work with the expectation that it would be a fine work as long as the woman depicted was beautiful. My earnest hope is that all my works are like fragrant jewels, always with a sense of fresh purity, never with even an iota of the vulgar."[2]

Figure \(\PageIndex{4}\): *Jo-no-Mai* (Public Domain)

Figure \(\PageIndex{5}\): *Honoo (Flame)* (1918, ink and color on silk, 191 x 92 cm) (Public Domain)

Yoga-style painters

Kuroda Seiki (1866–1924) was one of the leaders of the **Yoga movement**, introducing Western artistic ideas and techniques into Japanese art. While studying in Paris, Seiki became influenced by **Impressionism** and **Post-Impressionism**, especially the use of light, color, and outdoor painting techniques. Lakeside (13.6.6) is an example of **plein-air painting**, a method popular among French artists who painted directly outdoors. The painting depicts a young woman in traditional Japanese clothing sitting beside a lake. Although the subject wears a traditional dress, the background mountains resemble the softer landscapes commonly found in European paintings rather than the rugged forms typical of Japanese art. The colors used throughout the painting also reflect modern Western influences.

Maiko (13.6.7) portrays two women near the water wearing colorful **kimonos**. While their clothing is traditionally Japanese, the painting style itself is distinctly European. The figures are painted realistically rather than stylized, and the women are shown in ordinary, natural poses instead of formal traditional activities. Seiki's use of bright colors, changing light, and **oil paint** was considered radical in Japan at the time. After returning from France, Kuroda founded an art school in Japan based on Western artistic concepts, especially **plein-air painting** and European approaches to realism and color.

Figure \(\PageIndex{6}\): *Lakeside* (Public Domain)

Figure \(\PageIndex{7}\): *Maiko* (1893, oil on canvas, 80.4 x 65.3 cm) (Public Domain)

Tokyo National Museum - Kuroda Memorial Hall

Built in 1928 with a bequest left by Western-style painter, Kuroda Seiki(1866-1924), for the use of projects to promote art. In 1930 the Institute of Art Research for the Imperial Academy of Fine Arts was also established here. Artworks from the Hall's collection, including oil paintings and drawings, are exhibited on the 2nd floor. Refurbished on January 2, 2015.

Asai Chū

Asai Chū (1856–1907) was known for his pioneering efforts in developing the **Yoga style** in Japan. While attending school, his father served as the principal. Later, Asai moved to Tokyo to study English, where he became interested in **art**and eventually emerged as one of Japan's earliest Western-style painters. His artwork clearly demonstrates the influence of **Impressionism** and **Realism**. Village of Kotaba (13.6.8) features colors that were unusual in traditional Japanese painting. The rounded mountains blend softly into the lighter sky, while the houses are painted with accurate proportion and **depth**, creating a more realistic spatial effect.

Spring Ridge (13.6.9) resembles many landscapes seen in European painting traditions, although the houses in the distance identify the setting as Japan. The sky contains natural-looking clouds instead of the oversized decorative clouds often seen in traditional Japanese art. The people are realistically scaled within the landscape, reinforcing Asai's interest in proportion, perspective, and Western artistic realism.

Figure \(\PageIndex{8}\): *The Village of Kotaba (1893, oil on canvas)* (Public Domain)

Figure \(\PageIndex{9}\): *Spring Ridge* (1888, oil on canvas, 84 x 102.5 cm) (Public Domain)

Fujishima Takeji (1867–1943) developed a distinctive artistic style that combined **Romanticism** and **Impressionism** within the Japanese **Yoga style**. Born in southern Japan, Fujishima came from a family connected to the powerful **Shimazu clan daimyō**. He studied **art** during middle school and later traveled to Tokyo to apprentice with a **Nihonga** artist. Despite this traditional training, Fujishima became increasingly interested in Western-style Yoga painting.

Fujishima later traveled to France to continue his artistic education before returning to Japan, where he became an influential art teacher. Butterflies (13.6.10) demonstrates his use of **oil paint**, natural composition, and carefully placed **shadows** to create depth. The painting portrays a woman surrounded by butterflies, rendered in close-up detail. Fujishima contrasted deep dark colors with bright yellows, carefully repeating these colors throughout the butterflies to unify the composition. Sunrise Over the Eastern Sea (13.6.11) further illustrates his use of **Impressionist** techniques. Large visible **brushstrokes** capture the changing light across the sky and water. Fujishima used strong contrasting colors, especially oranges and greens, to define forms and create vibrant atmospheric effects.

Figure \(\PageIndex{10}\): *Butterflies* (Public Domain)

Figure \(\PageIndex{11}\): *Sunrise Over the Eastern Sea* (1932, oil, 65.2 x 90.0 cm) (Public Domain)

Wada Eisaku

Wada Eisaku (1874–1959) was one of the leading artists of **Yōga painting** in Japan. Raised in Tokyo, he grew up in an intellectual environment where his father worked as an English instructor. Wada studied under Kuroda Seiki and helped organize exhibitions dedicated to **Western-style painting** in Japan. Like many Yoga artists, he traveled to Europe, spending time in Paris and Italy before returning to Japan to teach as a professor at his former school. Old Woman (13.6.12) portrays an elderly Japanese woman dressed in traditional clothing as she walks beside the sea using an umbrella for support. The soft background of the ocean and setting sun creates the atmosphere of dusk, symbolically reflecting the later stage of the woman's life. Wada used subtle light and realistic shading to create emotional depth and atmosphere.

The Girl Reading a Newspaper (13.6.13) also contains many elements of traditional Japanese life, although they are painted using Western artistic realism. The girl rests her head on a **hakomakura** while lying on a **tatami mat** and wears traditional Japanese clothing. While the subject matter is distinctly Japanese, Wada rendered the scene with Western techniques of perspective, shading, and naturalistic detail characteristic of the **Yōga style**.

Figure \(\PageIndex{12}\): *Old Woman* (1908, 94 x 136.5 cm) (Public Domain)

Figure \(\PageIndex{13}\): *Girl Reading a Newspaper* (1897) (Public Domain)

[1] Retrieved from https://www.rem.routledge.com/articles/nihonga

[2] Retrieved from https://www.yamatane-museum.jp/exh/e...murashoen.html

13.8: Surrealism

Definition: Term

- **Surrealism** – An art and cultural movement of the 1920s focused on dreams, fantasy, and the subconscious mind.
- **Subconscious** – The part of the mind containing thoughts, feelings, and memories outside conscious awareness.
- **Free Association** – A Freudian technique where ideas flow freely without logical control to reveal subconscious thoughts.
- **Dream Imagery** – Visual scenes inspired by dreams and imagination rather than reality.
- **Photographic Precision** – Painting with highly realistic detail that resembles a photograph.
- **Sigmund Freud** – Austrian neurologist whose theories about dreams and the subconscious influenced Surrealism. Sigmund Freud
- **Karl Marx** – German philosopher whose ideas about social change influenced Surrealist thinkers. Karl Marx
- **The Communist Manifesto** – Political text written by Marx and Engels advocating social and economic change. The Communist Manifesto
- **Das Kapital** – Major work by Karl Marx analyzing capitalism and economics. Das Kapital
- **Whimsical Imagery** – Playful, strange, or fantastical visual elements.
- **Freudian Theory** – Psychological ideas developed by Freud emphasizing dreams, desires, and the unconscious mind.

Surrealism emerged as a cultural movement in the early 1920s, exploring the distinction between dreams and reality. The art is highly visual and often painted with photographic precision while placing objects and figures in unexpected or irrational situations. The movement sought to liberate the artist's imagination through access to the subconscious mind. Influenced by the dream studies of Sigmund Freud, Surrealist artists used Freudian ideas such as free association to create surprising, whimsical, and dreamlike imagery.

Surrealism was also influenced by Karl Marx, whose writings, including *The Communist Manifesto* and *Das Kapital*, encouraged artists and writers to challenge traditional social and political structures. Many Surrealists believed art could free both the mind and society from restrictive conventions. Surrealism has often been described as a "sandbox for the subconscious mind," where imagination, dreams, fantasy, and hidden desires could be visually explored without the limits of logic or reality.

A German painter, Max Ernst (1891–1976), was one of the primary pioneers of the **Surrealism** movement. When Ernst was young, he studied philosophy, although his true passion was painting. After being forced to join the German Army during World War I, he became highly critical of modern civilization and warfare. Ernst developed artistic concepts based on fantasy, dreams, and the subconscious mind, becoming one of the earliest supporters of **Surrealism**.

L'Ange du Foyer (*The Fireside Angel*) (13.8.1) was painted in response to the outbreak of World War II and was inspired by political conflict in Spain. The painting portrays a destructive creature violently moving across the canvas, symbolizing chaos, fear, and the destruction of humanity. The overly abstracted figure dominates the composition against a dark and gloomy sky and landscape. Ernst's bold use of reds and blues intensifies the dramatic action while leaving much of the meaning open to the viewer's imagination. In *Ubu Imperator* (13.8.2), Ernst created a strange spinning figure resembling a red mechanical top moving through an empty desert landscape. The figure's raised hands suggest emotional tension or confusion, contributing to the dreamlike and irrational qualities characteristic of **Surrealism**.

Figure \(\PageIndex{1}\): *L'Ange du Foyer* (Public Domain)

Figure \(\PageIndex{2}\): *Ubu Imperator* (Public Domain)

Nightingales and nightmares

Max Ernst, Two Children Are Threatened by a Nightingale, 1924, oil with painted wood elements and cut-and-pasted printed paper on wood with wood frame, 69.8 x 57.1 x 11.4 cm

Joan Miró

Joan Miró (1893–1983) was a Spanish painter and sculptor from Barcelona who believed his artwork was a recreation of the subconscious mind and rejected many traditional methods of painting. Miró began painting at age seven and later attended a fine arts academy. His early work was influenced by **Fauvism** and **Cubism**, but after joining the **Surrealist** group, his art developed the dreamlike qualities associated with the movement. Miró also developed the concept of **automatic drawing**, a process in which the artist moves the hand freely across the paper to create accidental marks believed to come from the subconscious mind. These spontaneous marks often evolved into imaginative and illusionistic forms. Throughout his career, Miró experimented with many forms of media, including painting, sculpture, printmaking, and ceramics, creating hundreds of ceramic works.

The Tilled Field (13.8.3) was one of Miró's first Surrealist paintings and introduced many of the symbolic forms and pictorial signs he would continue to use throughout his career. The painting resembles a strange garden filled with abstract shapes suggesting plants, animals, and imaginary creatures. Bold outlines and bright colors unify the composition, while scholars often interpret the symbols as clues to hidden meanings within the work. *Dona i Ocell* (*Woman and Bird*) (13.8.4) is a brightly colored concrete and tile sculpture standing twenty-two meters high near the sea in Barcelona. The sculpture reflects Miró's recurring themes of women

and birds and can be viewed from cars, airplanes, or boats approaching the city. The word *ocell* is the Catalan word for “bird,” although it is also used as slang for the male body, adding another layer of symbolic meaning to the sculpture.

Figure \(\PageIndex{3}\): *The Tilled Field* (1924, oil on canvas) (Public Domain)

Figure \(\PageIndex{4}\): *Dona I Ocell* (CC BY 3.0)

Leonora Carrington

Leonora Carrington (1917–2011) was born in England and later moved to Mexico City, where she became known as a painter, writer, and activist. Raised in a wealthy family, Carrington received a strong education and became interested in the emerging ideas of **Surrealism**, although her family did not support her desire to become an artist. She later met Max Ernst, who left his wife to join Carrington and encouraged her artistic career. After the Nazis arrested Ernst during World War II, Carrington fled France, suffered a mental breakdown, and spent several years hospitalized before eventually settling in Mexico.

Deeply interested in animals, mythology, and mysticism, Carrington later created *Crocodrilo* (13.8.5), a large bronze sculpture inspired by earlier paintings of surreal crocodiles. The sculpture portrays a crocodile transformed into a boat carrying five strange creatures while another crocodile propels them forward. The work was inspired by a poem by Lewis Carroll from Alice's Adventures in Wonderland. Weighing nearly five tons, the sculpture demonstrates Carrington's fascination with fantasy, transformation, and mythical storytelling. Isaac Masri, Carrington's agent, strongly supported her work in sculpture. Masri was surprised when Carrington invited him to view her next sculpture. She opened a door to a room in her house filled with an immense creature, and he stated, "I was facing the piece called *Crocodile*, done completely in paper wrapped in cloth. …Leonora said to take it to the foundry, and I did."[1]

Figure \(\PageIndex{5}\): *Crocodrilo* (CC BY-SA 4.0)

René Magritte (1898-1967) was a Belgian artist known for his unusual perceptions of reality. Magritte's process of painting depicted the use of objects in different contexts. Magritte started as a graphic artist and abstract painter before reinventing himself. He even moved to Paris to associate with the Surrealist artists. Magritte believed, “The painter’s art, as I see it, is about making poetic images visible.”[2] The idea led to making commonplace objects seem strange in an unfamiliar environment. René Magritte created *The Empire of Light* (13.8.6), a painting that presents a visual paradox between day and night. The upper half of the painting shows a bright blue daytime sky with soft clouds, while the lower portion depicts a dark nighttime street illuminated by a single streetlamp. Although several windows glow with light, the scene still feels mysterious and unsettling. By combining contradictory elements of day and night into one image, Magritte challenges the viewer’s sense of reality and encourages deeper interpretation.

Magritte’s paintings often leave viewers questioning the meaning of images and the relationship between objects and reality. His famous painting, *The Treachery of Images* (13.8.7), presents a carefully painted image of a pipe accompanied by the French phrase “This is not a pipe.” The statement creates confusion because the object clearly resembles a pipe. However, Magritte argued that the painting is only a representation of a pipe and not an actual physical object. Through this work, he explored the difference between reality, language, and visual representation, one of the central ideas of **Surrealism**.

Figure \(\PageIndex{6}\): *Empire of Light* (Public Domain)

Figure \(\PageIndex{7}\): *Courtesy of the artist* (Public Domain)

Magritte, The Treachery of Images

René Magritte, The Treachery of Images (Ceci n'est pas une pipe), 1929 (LACMA)

Salvador Dalí

Salvador Dalí (1904-1989) was the most prominent Spanish Surrealist artist, and his best-known work is The *Persistence of Memory* (13.8.8), painted in 1931. The use of everyday objects in uncommon circumstances is the dream state, and Dalí casts light on what is essential. Do the clocks represent time? The distortion in dreams becomes real when painted: ants are attracted to metal instead of flesh, hard objects bend oddly, and a weird creature lies in the center. How is this perceived when awake? In 1954, Dalí painted *The Disintegration of the Persistence Memory* (13.8.9) as a recreation of his original work; however, in this work, water floods the area, and the shapes and parts float, unattached to each other. Even on the dead tree, the watches begin to melt. Dalí was interested in the theories of atomic energy and the properties of the new nuclear energy and its potential destruction.

Figure \(\PageIndex{8}\): *Persistence of Memory* (Public Domain)

Figure \(\PageIndex{9}\): *The Disintegration of the Persistence of Memory* (Public Domain)

Salvador Dalí was deeply interested in mathematics and science while continuing to maintain strong religious beliefs, which he believed could exist in harmony. His artwork often combined scientific ideas, spirituality, and dreamlike imagery characteristic of **Surrealism**. *Corpus Hypercubus* (13.8.10) reinterprets the traditional Biblical scene of the crucifixion in an unusual and symbolic way. Instead of a standard wooden cross, Christ is suspended from a mathematical form known as a hypercube, or four-dimensional

cube. Christ's body appears idealized and unharmed, without visible wounds, while his face turns upward toward the heavens. A woman, believed to represent Dalí's wife Gala, gazes upward from below while standing on a checkerboard floor that echoes the geometric forms of the hypercube. Through this combination of religion, mathematics, and abstraction, Dalí transformed a familiar religious image into a surreal and intellectual composition.

In *Rinoceronte* (13.8.11), Dalí created a large sculpture of a rhinoceros decorated with lace and interacting with sea urchins. The strange and imaginative imagery reflects Dalí's fascination with unexpected combinations of objects. He was inspired by a painting by Johannes Vermeer depicting a woman sewing, which had hung in his father's home during his childhood. Dalí often drew inspiration from classical art and transformed it into bizarre and symbolic surrealist imagery.

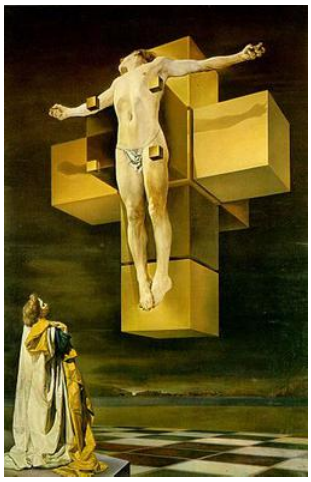
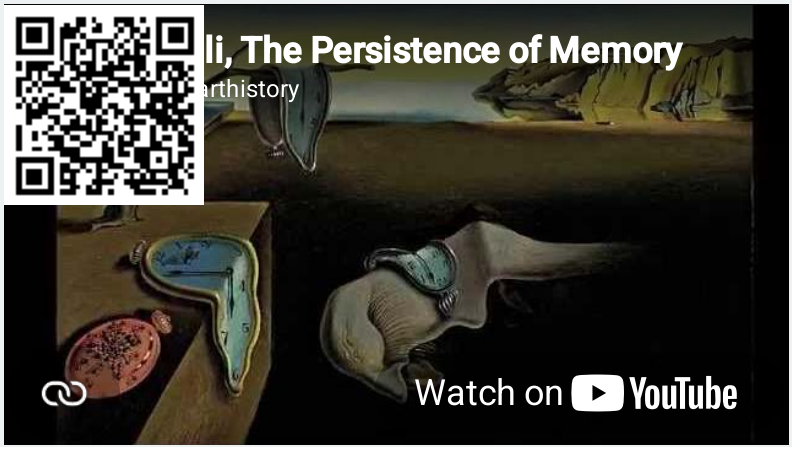


Figure \(\PageIndex{10}\): *Corpus Hypercubus* (Public Domain)

DalFigure \(\PageIndex{11}\): *Rinoceronte* (CC BY 3.0)

Dali, The Persistence of Memory

Salvador Dalí, The Persistence of Memory, 1931 (The Museum of Modern Art)



Marc Chagall (1887–1985) was a Russian artist who later traveled to Paris to study art. His work combined elements of **Cubism**, **Surrealism**, fantasy, memory, and personal symbolism. Chagall often painted scenes inspired by his childhood in Russia alongside the imaginative experiences he encountered in Paris. *Half-Past Three* (13.8.12) was painted shortly after Chagall arrived in Paris and reflects both Cubist and Surrealist influences. The fragmented figure of a poet dressed in blue sits at a bright red table surrounded by a sense of organized chaos. The poet rests his elbow on the table while holding a notebook and pen, suggesting a moment of quiet inspiration before creativity begins to flow. The painting was inspired by one of Chagall's Russian poet friends who regularly visited for coffee, symbolizing the search for artistic inspiration or the "muse."

While living in Paris, Chagall frequently included floating figures in his paintings, blending memory, dreams, and reality. In *Paris Through the Window* (13.8.13), a figure near the window appears to look both toward Paris and back toward Russia, symbolizing Chagall's connection to both places. Outside the window are dreamlike scenes representing his imaginative experiences in Paris. *The Fiddler* (13.8.14) reflects memories of Chagall's small Russian village. In the painting, a fiddler stands on top of a house overlooking the rural settlement below. The floating and oversized figure creates a magical and emotional atmosphere, expressing the importance of music, tradition, and cultural memory in Chagall's life and art.

Figure \(\PageIndex{12}\): *Half-Past Three* (Public Domain)

Figure \(\PageIndex{13}\): *Paris Through the Window* (Public Domain)

Figure \(\PageIndex{14}\): *Fiddler* (Public Domain)

"This painting is a representation of a fiddler in Chagall's village, Vitebsk. Chagall uses the fiddler to create an image of the internal battle of an average individual, which is accentuated through his choice of colors and other elements. Created at a time when nostalgia dominated his thoughts, the painting highlights his cultural and religious legacy through the image of a violinist dancing in a rustic village. Chagall's image of the fiddler served as an inspiration for the famous 1964 musical *Fiddler on the Roof*, which held the record for the longest-running Broadway musical for almost ten years."[3]

Frida Kahlo (1907–1954) was a famous Mexican painter recognized for her deeply personal self-portraits, her marriage to Diego Rivera, and her lifelong struggle with physical pain caused by severe injuries and medical complications. Although often associated with **Surrealism**, Kahlo stated that she painted her own reality rather than dreams or fantasies. Her artwork reflected her Mexican identity, emotional experiences, and physical suffering. After surviving a devastating traffic accident, Kahlo endured lifelong injuries and multiple surgeries to repair her spine and body. Because she was frequently confined to bed or a chair, she often painted using mirrors placed around her room. Isolation and suffering led her to create numerous self-portraits as a way to express both emotional and physical pain.

In *Self-Portrait with Thorn Necklace and Hummingbird* (13.8.15), Kahlo presents herself wearing a necklace made of thorns that pierce her neck and draw blood, symbolizing her constant physical suffering. Despite the pain, her expression remains calm and controlled, reflecting her endurance and resilience. The black hummingbird hanging from the necklace, traditionally a symbol of life and freedom, appears lifeless, suggesting loss or emotional despair. A monkey standing behind her may symbolize her troubled relationship and failed marriage with Rivera. The painting is one of approximately fifty-five self-portraits Kahlo created during her lifetime, each revealing aspects of her identity, pain, and inner strength.

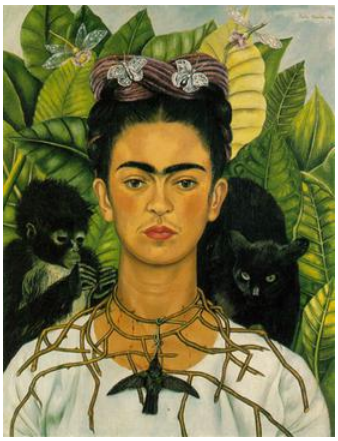


Figure \(\PageIndex{15}\): *Self-Portrait with Thorn Necklace and Hummingbird* (Public Domain)

The Two Fridas (13.8.16) was painted by Frida Kahlo after her divorce from Diego Rivera and is considered one of her most emotional self-portraits. The painting presents two versions of Kahlo seated side by side. One figure wears traditional Mexican clothing and displays an exposed, broken heart, while the other wears modern European-style clothing. The visible hearts of both figures are connected by veins, although one heart has been cut with scissors and bleeds onto the white dress. The dark and stormy sky in the background intensifies the mood of sadness, loneliness, and emotional suffering often associated with her divorce and personal struggles.

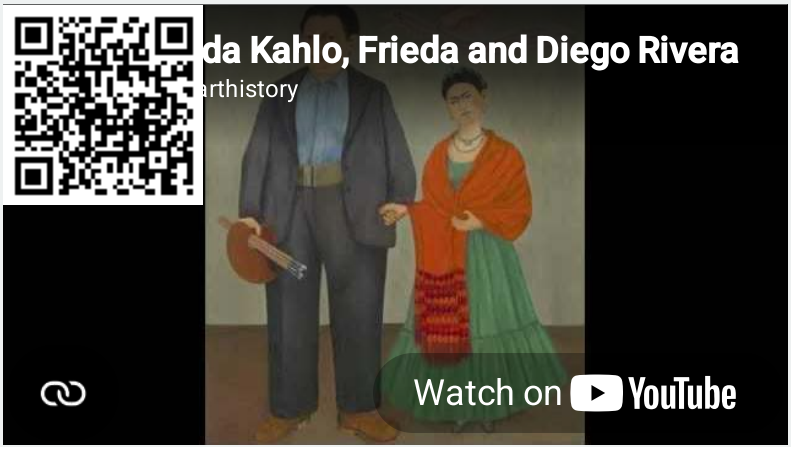
In *The Wounded Deer* (13.8.17), Kahlo symbolized the physical and emotional pain she endured throughout her life following her devastating accident and ongoing medical problems. Her face appears on the body of a wounded deer pierced by multiple arrows. Although the animal suffers severe injuries, Kahlo's expression remains calm and composed, reflecting her resilience and ability to endure pain. The barren landscape, broken tree branches, and absence of foliage emphasize isolation, despair, and emotional devastation.

Figure \(\PageIndex{16}\): *The Two Fridas* (Public Domain)

Figure \(\PageIndex{17}\): *The Wounded Deer* (Copyright; author via source)

Frida Kahlo, Fried and Diego Rivera

Frida Kahlo, Frieda and Diego Rivera, 1931, oil on canvas, 39-3/8 x 31 inches or 100.01 x 78.74 cm (San Francisco Museum of Modern Art)



Pablo Picasso

Pablo Picasso is best known as one of the leaders of **Cubism**; however, during his long artistic career he explored many different styles, including **Surrealism**. One of his most famous works, *Guernica* (13.8.18), reflects strong surrealist qualities through its distorted figures, emotional intensity, and symbolic imagery. Painted in response to the bombing of the town of Guernica during the Spanish Civil War, the massive black, white, and gray painting portrays the destruction and suffering caused by war. The chaotic composition includes wounded animals, screaming figures, flames, broken bodies, and expressions of fear and despair. The gored horse, grieving mother, and shattered forms symbolize the brutality and pain experienced by innocent civilians. Although Picasso based the painting on a specific historical event, *Guernica* does not identify an exact battlefield or location within the image. Instead, the painting became a universal and timeless symbol of the horrors, destruction, and emotional suffering caused by war throughout history.

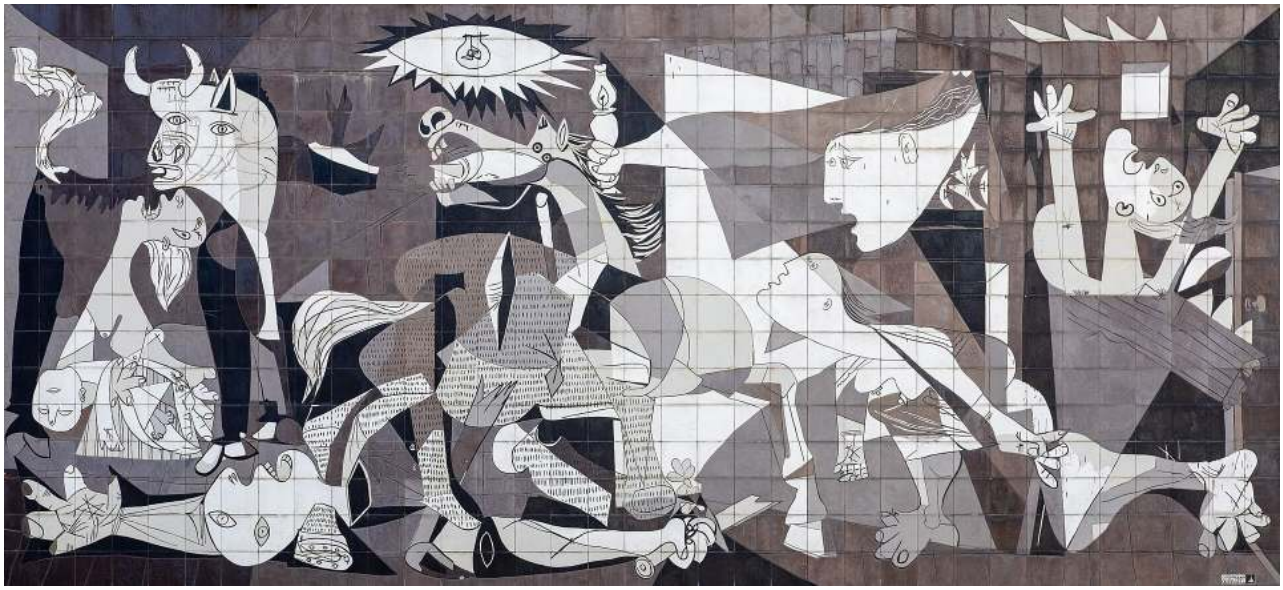


Figure \(\PageIndex{18}\): *Guernica* (CC BY-SA 4.0)

Pablo Picasso, Guernica

Pablo Picasso, Guernica, May 1–June 4, 1937 (Paris), oil on canvas, 349.3 x 776.6 cm (Museo Nacional Centro de Arte Reina Sofía, Madrid)

[1] Retrieved from http://www.revistascisan.unam.mx/Voices/pdfs/5307.pdf

[2] Retrieved from https://www.moma.org/artists/3692-rene-magritte

[3] Retrieved from https://learnodo-newtonic.com/marc-c...mous-paintings

13.9: Conclusion

The **Modern Art** movement marked one of the most revolutionary periods in the history of art. Artists throughout the **20th century** challenged traditional ideas about beauty, realism, and artistic technique, creating entirely new ways of seeing and understanding the world. Modern artists believed art did not need to imitate reality exactly; instead, art could express emotion, ideas, movement, spirituality, politics, and personal experiences. This freedom of expression led to the development of many influential movements, including **Fauvism**, **Expressionism**, **Cubism**, **Dadaism**, **Surrealism**, and **Abstract Expressionism**. Each movement introduced innovative techniques and styles that forever changed the direction of art history.

Modern architecture reflected the rapid technological growth and industrialization of the modern world. Expanding cities required new types of buildings, and architects embraced **steel**, **reinforced concrete**, **glass**, and modern welding technologies to create structures unlike anything seen before. Buildings became taller, lighter, and more functional while emphasizing clean horizontal and vertical lines. Architects such as Frank Lloyd Wright promoted the idea that **"form follows function,"** meaning buildings should be designed according to their purpose rather than excessive decoration. Modern architecture focused on simplicity, efficiency, and innovation, influencing urban design across the globe and laying the foundation for **contemporary architecture**.

Modern sculpture also evolved dramatically during this time. Sculptors rejected the highly polished realism of earlier centuries and instead experimented with **abstraction**, distortion, movement, and unconventional materials. Influenced by the same artistic movements affecting painters, sculptors explored emotional expression, fragmented forms, and symbolic meanings. Artists used **bronze**, **steel**, **wood**, **glass**, and industrial materials to create works that reflected the anxieties, hopes, and complexities of modern society. Sculpture became less about perfect representation and more about provoking thought and emotional response.

Photography emerged as one of the most important artistic mediums of the 20th century. Improvements in cameras and photographic technology allowed photographers to travel widely and document the rapidly changing modern world. Rather than creating carefully staged portraits, many photographers captured candid images of everyday life, political events, war, poverty, industrialization, and nature. Photography became both an artistic expression and a powerful form of historical documentation. Through photography, artists could communicate social realities and preserve important moments in history with unprecedented immediacy and realism.

New materials and technologies also transformed artistic methods. **Acrylic paint**, first developed in the 1930s and widely available by the 1950s, revolutionized painting because it dried quickly, could be mixed easily, and cleaned with water instead of harsh chemicals. Artists appreciated its flexibility and vibrant colors, and many began replacing traditional **oil paints** with acrylics. Advances in **printmaking**, **industrial design**, **film**, and **mixed media** further expanded artistic possibilities and encouraged experimentation across disciplines.

The political and social conflicts of the 20th century deeply influenced modern art as well. Artists increasingly used their work to comment on war, oppression, inequality, industrialization, and government power. **Political posters**, **public murals**, **caricatures**, **protest art**, and **installations** became important forms of expression. During **World War II**, the **Nazi regime** condemned many forms of modern art as **"degenerate art,"** confiscating, destroying, or hiding thousands of artworks because they did not fit Nazi ideals. Many artists fled Europe to escape persecution, spreading modern artistic ideas to other parts of the world. Although some stolen artworks have been recovered, many remain missing today, reminding us of the fragile relationship between art, politics, and cultural preservation.

Ultimately, the **Modern Art movement** transformed every aspect of artistic creation and permanently altered the history of art. Artists embraced experimentation, innovation, and individual expression, opening the door for **contemporary art**and **postmodern art** movements that continue today. Modern art challenged viewers to think differently about creativity, meaning, and the role of art in society. Its influence can still be seen in modern architecture, sculpture, photography, design, film, and contemporary visual culture around the world. The bold ideas and revolutionary spirit of Modern Art continue to inspire artists and audiences, proving that art is constantly evolving alongside human history and experience.

CHAPTER OVERVIEW

14: The World is One (1960 CE – 1990s CE)

Modern art began at the turn of the 20th century and ushered in a complete and profound change in art and the world culture. On the edge of the industrial revolution, the steam train and the electric train, along with winged flight, changed how people traveled around the world. The new form of travel opened up the opportunity for millions of people as they discovered new territories, cultures and ideas. Translating these ideas into art, the modern art movement spread quickly and changed rapidly.

14.1: Overview
14.2: Pop Art
14.3: Op Art
14.4: Abstract Expressionism
14.5: Minimalism
14.6: San Francisco Bay Area Figurative
14.7: First Nation Group of Seven
14.8: Quilting
14.9: Conclusion

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14.1: Overview

Modern art emerged at the turn of the **20th century**, bringing about a significant and profound change in art and global culture. On the brink of the **Industrial Revolution**, the **steam train**, **electric train**, and **winged flight** transformed how people traveled worldwide. This new mode of travel gave millions of people the chance to explore new territories, cultures, and ideas. The innovative spirit of the modern era created exciting opportunities for artistic experimentation, and new art movements spread rapidly across the globe. Artists no longer felt restricted by traditional rules and instead explored new approaches to color, form, perspective, and subject matter. Technological advances and dramatic societal changes influenced modern artistic themes, inspiring artists to experiment with new materials, techniques, and viewpoints that reflected the fast-changing modern world.

The early twentieth century was also marked by rapid industrialization, urban growth, scientific discoveries, and political unrest, all of which deeply influenced artistic expression. Artists responded to modern life by creating movements such as **Fauvism**, **Expressionism**, **Cubism**, **Dadaism**, and **Surrealism**, each offering a different interpretation of reality and human experience. Many artists abandoned realistic representation in favor of **abstraction**, emotional expression, and symbolic imagery. Art became a way to question tradition, challenge authority, and explore the psychological and social effects of modernization. Modern artists sought to capture not only what the world looked like, but also what it felt like to live during a period of rapid transformation.

After the devastation of **World War I** and **World War II**, the world entered a new era of globalization and international exchange. Countries rebuilt themselves politically, economically, and culturally, while artists increasingly interacted across national boundaries. The rise of mass communication, international exhibitions, museums, and global travel allowed artistic ideas to spread faster than ever before. Some art movements united artists from many countries, while regional artists continued to develop styles reflecting local traditions, histories, and identities. Artists used art to respond to war, social inequality, political conflict, civil rights movements, and changing cultural values.

The second half of the twentieth century introduced even greater experimentation in artistic media and techniques. Artists expanded beyond traditional painting and sculpture by incorporating **photography**, **film**, **installation art**, **performance art**, **mixed media**, and environmental works into their practice. New technologies and industrial materials gave artists endless creative possibilities. Instead of limiting art to galleries and museums, some artists used entire landscapes, city streets, buildings, and public spaces as artistic canvases. Art became increasingly interactive, conceptual, and socially engaged, encouraging viewers to think critically about the world around them.

Chapter 14, **“The World is One” (1960 CE – 1990s CE)**, explores the work of artists who challenged the status quo and expanded the definition of art itself. These artists embraced globalization, cultural exchange, political activism, and technological innovation while breaking traditional boundaries between cultures, artistic disciplines, and audiences. Their work reflects a world becoming more interconnected, demonstrating how art can communicate universal human experiences while celebrating diverse cultural perspectives.

Art	Location
Pop Art	Worldwide
Op Art	Worldwide
Abstract Expressionism	Worldwide
Minimalism	Worldwide
San Francisco Bay Area Figurative	United States
First Nation Group of Seven	Canada
Quilting	Worldwide

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14.2: Pop Art

Definition: Term

- **Pop Art** – An art movement that emerged in the 1950s and 1960s using images from popular culture, advertising, comic books, and consumer products as artistic subjects.
- **Fine Art** – Traditional forms of art, such as painting and sculpture, created primarily for beauty, intellectual meaning, or aesthetic appreciation.
- **Mass Culture** – Cultural products and activities shared by large groups of people through media, advertising, television, magazines, and popular entertainment.
- **Advertising** – Visual or written communication designed to promote products, services, or ideas to consumers.
- **Comic Books** – Illustrated stories combining images and text, often used as inspiration by Pop artists.
- **Consumerism** – A social and economic system that encourages the buying and consumption of goods and products.
- **Popular Culture** – Mainstream entertainment, fashion, music, media, and trends widely enjoyed by the public.
- **Perspective** – An artistic technique used to create the illusion of depth and space on a flat surface.
- **Repetition** – The repeated use of shapes, images, colors, or objects in a work of art.
- **Commercial Printing** – Industrial printing methods used for advertisements, magazines, newspapers, and packaging.
- **Ben-Day Dots** – Small colored dots used in commercial printing and comic books to create shading and color effects, often imitated in Pop Art.
- **Roy Lichtenstein** – A Pop artist known for creating large-scale paintings inspired by comic books and commercial printing styles.
- **Andy Warhol** – A leading Pop artist famous for repetitive images of celebrities and consumer products such as Campbell's soup cans.
- **Minimalism** – An art movement focused on simplicity, geometric forms, and limited colors or materials.
- **Postmodern Art** – An artistic period that rejects strict artistic rules and combines different styles, media, and cultural references.
- **Abstraction** – Art that does not attempt to represent reality exactly but instead uses shapes, colors, and forms to create meaning.
- **Contemporary Art** – Art created during the present or recent time period that reflects current ideas, issues, and technologies.
- **Geometric Shapes** – Shapes such as squares, circles, triangles, and rectangles often used in abstract and minimalist art.
- **Industrial Materials** – Manufactured materials such as steel, concrete, plastic, and glass used in modern and contemporary art.

Pop Art emerged from popular culture during the mid-1950s in England and the United States, presenting a direct challenge to the traditional **fine art** movements of the first half of the twentieth century. Unlike earlier modern movements that often focused on emotional expression or abstraction, Pop artists embraced imagery from everyday life and **mass culture**. Advertisements, comic books, celebrities, product packaging, newspapers, and ordinary consumer goods became the subjects of art. Pop Art was often flat, brightly colored, repetitive, and lacked traditional perspective, reflecting the visual style of commercial printing and media.

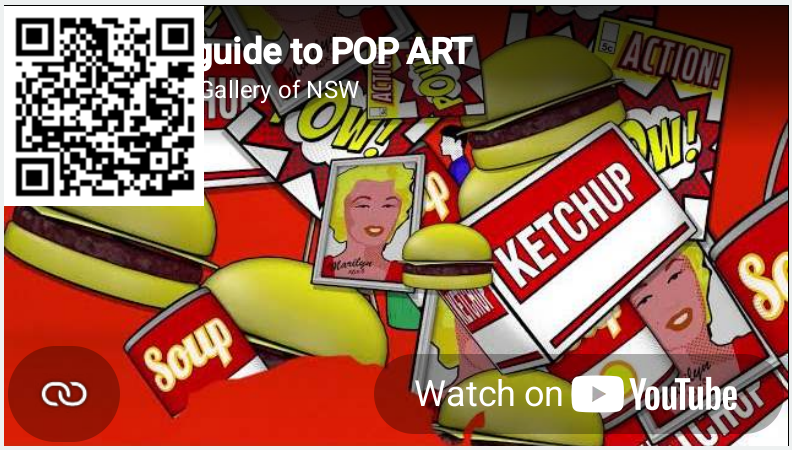
Pop artists transformed familiar objects and images by removing them from their original context and presenting them as works of art. This challenged traditional ideas about what qualified as "high art" and blurred the boundaries between fine art and popular culture. Artists used bold outlines, hard edges, and pure, vibrant colors to imitate the appearance of advertisements and comic strips. Roy Lichtenstein became famous for paintings inspired by comic books, using dramatic imagery, speech bubbles, and Ben-Day dots to imitate commercial printing techniques. Other artists, such as Andy Warhol, reproduced everyday consumer products and celebrity images repeatedly, emphasizing the growing influence of consumerism, media, and mass production in modern society.

Pop Art reflected both fascination with and criticism of consumer culture. By elevating ordinary objects such as soup cans, soda bottles, and comic strips into gallery artworks, artists questioned originality, artistic value, and the increasing commercialization of modern life. The movement also highlighted how advertising and media shaped public identity, taste, and culture during the postwar economic boom.

At the same time, **Minimalism** emerged as another important artistic movement that rejected emotional excess and focused on simplicity, order, and pure form. Minimalist artists reduced art to basic geometric shapes, clean lines, and industrial materials, removing personal expression and symbolism. Together, **Pop Art** and **Minimalism** helped pave the way for **Postmodern Art**, a period characterized by experimentation, appropriation, irony, and the breaking down of boundaries between artistic styles and cultural categories. These movements fundamentally changed the direction of contemporary art and continue to influence artists today.

A guide to Pop Art

Popular, witty, sexy, glamorous – pop art exploded onto the cultural scene in the early 1960s. A new generation of artists rebelled against 'high art' to embrace the world of advertising, television, film stars, pop music and consumerism. Pop art shocked many but inspired even more.



Andy Warhol

Andy Warhol was an American artist who became one of the leading figures of the **Pop Art** movement through his illustrations, paintings, and innovative **printmaking** techniques. A graduate of the **Carnegie Institute of Technology**, Warhol moved to **New York City**, where he first worked as an illustrator for magazines such as *Glamour*. His early success in commercial art helped shape his fascination with advertising, celebrity culture, and mass production. In 1964, Warhol opened his famous studio known as **The Factory**, which became a center for artists, musicians, actors, and celebrities.

Warhol's artwork focused on images from **popular culture**, including movie stars, consumer products, advertisements, and media imagery. Using repetitive techniques such as **silkscreen printing**, he transformed ordinary objects like Campbell's soup cans and Coca-Cola bottles into iconic works of art. His work often served as both a celebration and a critique of modern consumer culture, questioning ideas about fame, originality, and commercialism. Warhol's bold colors, repetition, and mechanical style reflected the growing influence of mass media in twentieth-century society. Warhol quickly became one of the most famous and influential artists of the twentieth century. His artworks gained widespread popularity and dramatically increased in value, making them some of the most highly collected and expensive works in the contemporary art market today.

Campbell's Soup Cans (14.2.1) by Andy Warhol (1928–1987) is one of the most famous examples of **Pop Art** and demonstrates Warhol's fascination with everyday consumer products. In the series, Warhol painted multiple soup cans enlarged to life-size, carefully reproducing the appearance of the actual Campbell's soup labels. By transforming an ordinary grocery store item into fine art, Warhol challenged traditional ideas about what art should represent and questioned the boundaries between **commercial culture** and **fine art**. The repetitive arrangement of the cans also reflected the growing influence of **mass production** and consumerism in modern society.

Warhol created additional Pop Art images using familiar objects such as **$100-dollar bills**, **Coca-Cola bottles**, and famous celebrities including Marilyn Monroe, Elizabeth Taylor, Marlon Brando, and Mao Zedong (14.2.2). Through bright colors and repetitive imagery, Warhol explored themes of fame, media influence, celebrity culture, and consumer society. His portraits of Mao Zedong were especially controversial because Mao was the leader of **Communist China**, and using his political image as a form of commercialized Pop Art challenged conservative political and cultural values. Warhol's work demonstrated how political leaders and celebrities alike could become mass-produced cultural icons within modern media culture.

Figure \(\PageIndex{1}\): *Campbell's Soup Cans* (Public Domain)

Figure \(\PageIndex{2}\): *Mao Zedong* (CC BY-NC-ND 2.0)

The Case for Andy Warhol

You've heard his name. You've seen the Campbell's Soup cans. You might know something about The Factory. But perhaps you've wondered why Andy Warhol gets so much attention or why his work even matters. What's the deal with Warhol, and is he worth your time and consideration?

Robert Rauschenberg

In America, Robert Rauschenberg (1925–2008) became one of the most influential artists of the twentieth century and helped create a transition between **Abstract Expressionism** and **Pop Art**. Rauschenberg rejected the idea that art had to remain separate from everyday life and instead combined ordinary objects with traditional artistic techniques. His innovative approach blurred the boundaries between painting, sculpture, and installation art, opening the door for new forms of contemporary artistic expression. Rauschenberg studied at **Black Mountain College**, an experimental art school where Josef Albers, one of the founders of the **Bauhaus**, served as an instructor. The Bauhaus emphasis on experimentation, design, and the integration of art with everyday materials strongly influenced Rauschenberg's creative philosophy. He believed artists should respond directly to the modern world around them, famously stating, **"The artist's job is to be a witness to his time in history."**

Throughout his career, Rauschenberg traveled extensively through **Europe** and **Northern Africa**, spreading his artistic ideas and drawing inspiration from different cultures and environments. His sculpture *Riding Bikes* (14.2.3), located in **Berlin, Germany**, demonstrates his fascination with movement, found objects, and industrial materials. The sculpture is constructed from used bicycle parts combined with **neon lighting**, creating glowing reflections in the surrounding pool of water. Although bicycles are objects associated with motion, Rauschenberg transformed them into a frozen sculptural composition, emphasizing themes of time, memory, and modern urban life.

One of Rauschenberg's earliest and most famous works, *Bed* (14.2.4), challenged traditional definitions of painting and sculpture. In this work, he attached a pillow, sheet, and quilt directly onto a vertical canvas support and then splashed paint across the surface in a style associated with **Abstract Expressionism**. He also added pencil marks and scribbles, creating what he called a "combine" — a mixture of painting and sculpture using found objects from everyday life. By transforming personal household items into art, Rauschenberg forced viewers to reconsider the relationship between art, ordinary experience, and modern culture. His experimental techniques greatly influenced the development of **Pop Art**, **Conceptual Art**, and later contemporary art movements. Rauschenberg said, "It was very simply put together, because I actually had nothing to paint on," he reflected years later, in 2006. "Except it was summertime, it was hot, so I didn't need the quilt. So the quilt was, I thought, abstracted. But it wasn't abstracted enough, so that no matter what I did to it, it kept saying, 'I'm a bed.' So, finally, I gave in and I gave it a pillow."[1]

A Gift for Apollo (14.2.5) by Robert Rauschenberg was constructed from a wide variety of materials, including both new and discarded objects. The artwork incorporates found items such as a pair of men's pants, an old metal bucket, rubber wheels with spokes, and other everyday materials assembled into a sculptural composition. Rauschenberg's use of **found objects** and recycled materials reflects his experimental artistic style and his belief that ordinary items from daily life could become important works of art.

The title references **Apollo**, the god from **Greek mythology** associated with the sun, music, poetry, and prophecy. According to mythology, Apollo traveled across the heavens in a golden chariot carrying the sun through the sky. Rauschenberg combined this ancient classical theme with modern artistic experimentation by suggesting the form of a two-wheeled chariot through the use of rubber wheels and the metal bucket as a symbolic seat. The mixture of discarded industrial objects with a mythological subject creates a contrast between the ancient world and modern consumer culture. Through works such as *A Gift for Apollo*, Rauschenberg challenged traditional artistic expectations by blending **sculpture**, **assemblage**, and **Pop Art** ideas into a single work. His innovative approach demonstrated how contemporary artists could reinterpret historical and mythological subjects using modern materials and unconventional techniques.

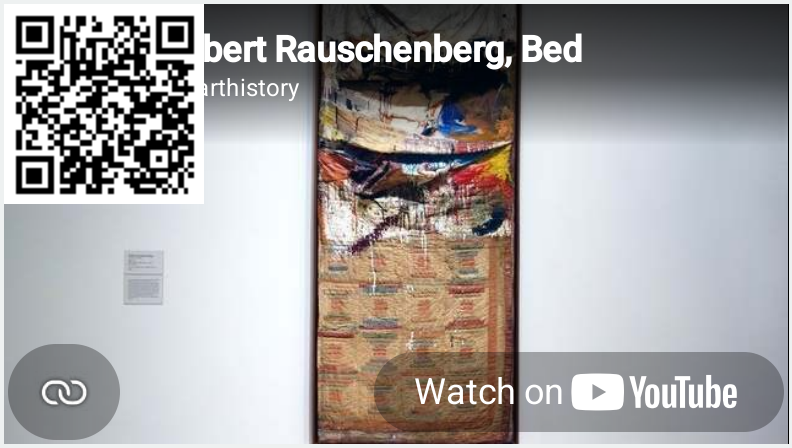
Figure \(\PageIndex{3}\): *Riding Bikes* (CC BY-SA 3.0)

Figure \(\PageIndex{4}\): *Bed* (1955, oil, pencil, toothpaste, fingernail polish, quilt, bedsheet, wood, 191.1 x 80 x 20.3 cm) (CC BY-NC 2.0)

Figure \(\PageIndex{5}\): *Gift for Apollo* (1959, oil, paint, necktie, mixed media) (CC BY-NC 2.0)

Robert Rauschenberg, Bed

Robert Rauschenberg, Bed, 1955, oil and pencil on pillow, quilt, and sheet on wood supports, 191.1 x 80 x 20.3 cm (The Museum of Modern Art)



Marisol Escobar

Marisol Escobar (1930–2016), known simply as **Marisol**, was an influential sculptor associated with the **Pop Art** movement. Born in **Paris** to wealthy Venezuelan parents, she spent her childhood traveling between **Venezuela**, **Europe**, and the **United States**. A tragic turning point in her life occurred when her mother committed suicide when Marisol was eleven years old, an event that deeply affected her emotionally and contributed to her long periods of silence that lasted into adulthood. Despite her personal

struggles, Marisol pursued artistic training in **Los Angeles**, **Paris**, and **New York**, eventually becoming part of the vibrant New York Pop Art scene during the 1960s. She became friends with Andy Warhol and appeared in several of his experimental films.

Unlike many Pop artists who focused on painting, Marisol concentrated on **sculpture**, creating highly original works that combined elements of painting, assemblage, and installation art. Early in her career, she sculpted small figures from clay and carved wood, eventually developing large-scale sculptural groupings using unconventional materials such as **wood**, **fabric**, **mirrors**, photographs, clothing, and found objects. Her works often explored themes connected to identity, femininity, wealth, celebrity culture, and social expectations placed on women. Because female artists faced difficulties gaining recognition in the male-dominated art world, Marisol frequently chose subjects that reflected women's experiences and societal roles.

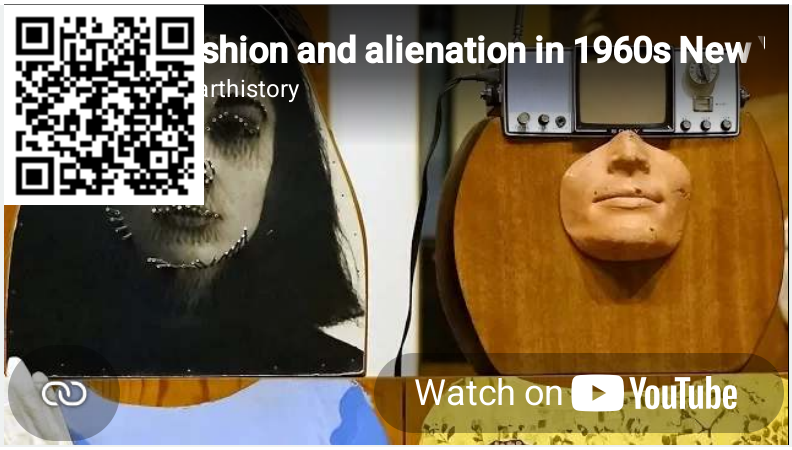
One of her most famous works, *The Party* (14.2.7), is a large sculptural installation containing fifteen life-sized figures and three wooden panels arranged as a satirical commentary on New York society's elite party culture. The figures stand independently with little interaction between one another, creating an atmosphere of emotional distance and discomfort. Many scholars interpret the stiff poses and lack of communication as a critique of superficial social behavior and conformity among wealthy social circles. The women appear elegant and fashionable, dressed in clothing and accessories symbolizing wealth and status, yet they also seem isolated and uneasy. Marisol used her own face repeatedly on the figures through photographs, casts, and painted features, inserting herself into the social critique rather than separating herself from it.

Marisol's sculptures combined humor, satire, and psychological insight while blending **Pop Art**, **assemblage**, and **social commentary**. Her innovative use of mixed media and sculptural storytelling challenged traditional ideas about sculpture and expanded the possibilities of contemporary art. Although her work was overlooked for many years, recent retrospectives and exhibitions have restored recognition of her importance as one of the leading sculptors of the twentieth century.

Figure \(\PageIndex{6}\): *The Party* (1965-66, wood, mirrors, plastic, television set, clothes, shoes, glasses, other accessories) (CC BY-NC-SA 2.0)

Fashion and Alienation in 1960s New York, Marisol's The Party

Marisol Escobar, The Party, 1965-66, fifteen freestanding, life-size figures and three wall panels, with painted and carved wood, mirrors, plastic, television set, clothes, shoes, glasses, and other accessories, variable dimensions.



Jasper Johns

Jasper Johns (born 1930) is an American painter and printmaker best known for his patriotic **Pop Art** imagery and his use of familiar everyday symbols. Johns studied art at the **University of South Carolina** and later attended the **Parsons School of Design** before being drafted into military service during the **Korean War**. After completing his military service, he moved to New York City and began developing the artistic style that would make him one of the most influential artists of the twentieth century. Johns became famous for creating paintings based on ordinary and recognizable images such as the **American flag**, maps, targets, numbers, and letters. Rather than inventing entirely new subjects, he focused on symbols already deeply connected to American culture and everyday life. By reproducing these common images in paintings and prints, Johns challenged traditional distinctions between **fine art** and **mass culture**. His work encouraged viewers to reconsider familiar objects and question how meaning is created through repetition, symbols, and cultural identity.

Using techniques such as **encaustic painting**, layering, and printmaking, Johns added texture and complexity to simple images. His works often blurred the line between representation and abstraction because viewers recognized the symbols immediately while also becoming aware of the paint surface, texture, and artistic process itself. Johns helped bridge the transition between **Abstract Expressionism**, which emphasized emotion and gesture, and **Pop Art**, which embraced popular culture and consumer imagery. Modern art during this period increasingly reflected themes of **consumerism**, advertising, and mass communication. Artists like Jasper Johns incorporated common objects and symbols into their work, demonstrating how modern society was shaped by media, nationalism, and consumer culture. His innovative approach greatly influenced later generations of contemporary artists and expanded the definition of what could be considered art.

Using single items like *Three Flags* (14.2.7) repetitively, Johns creates consistency in his art. Johns believed the flag was "seen and not looked at, not examined."[2] He used encaustic, a mix of color pigment and wax. The wax hardened on the surface, creating thick textures and visible marks that gave the painting a sculptural quality. In *Three Flags*, Johns layered three American flags on top of one another, with each flag reduced in size by approximately twenty-five percent. The overlapping arrangement creates a sense of depth while also emphasizing the flatness of the painted surface. By repeating the familiar image of the American flag, Johns encouraged viewers to think differently about a symbol they often recognized automatically without careful observation.

In *Map* (14.2.8), Johns used energetic brushstrokes, bold colors, and a geometric grid to create an abstract interpretation of the **United States map**. Rather than producing an accurate geographic representation, Johns intentionally distorted the placement and shapes of the states. The state names are applied using **stenciled lettering**, adding a mechanical and industrial appearance associated with commercial design and mass production. Johns described the map as something people “see but do not really look at,” meaning that familiar symbols are often accepted without careful examination.

The slight inaccuracies and chaotic paint application create visual tension and a subtle feeling of discomfort for the viewer because the map appears recognizable yet unrealistic. Johns blurred the line between **representation** and **abstraction**, forcing viewers to question how they interpret familiar national symbols. Through works like *Map*, Johns transformed ordinary imagery into thought-provoking art, challenging traditional ideas about perception, realism, and American identity.

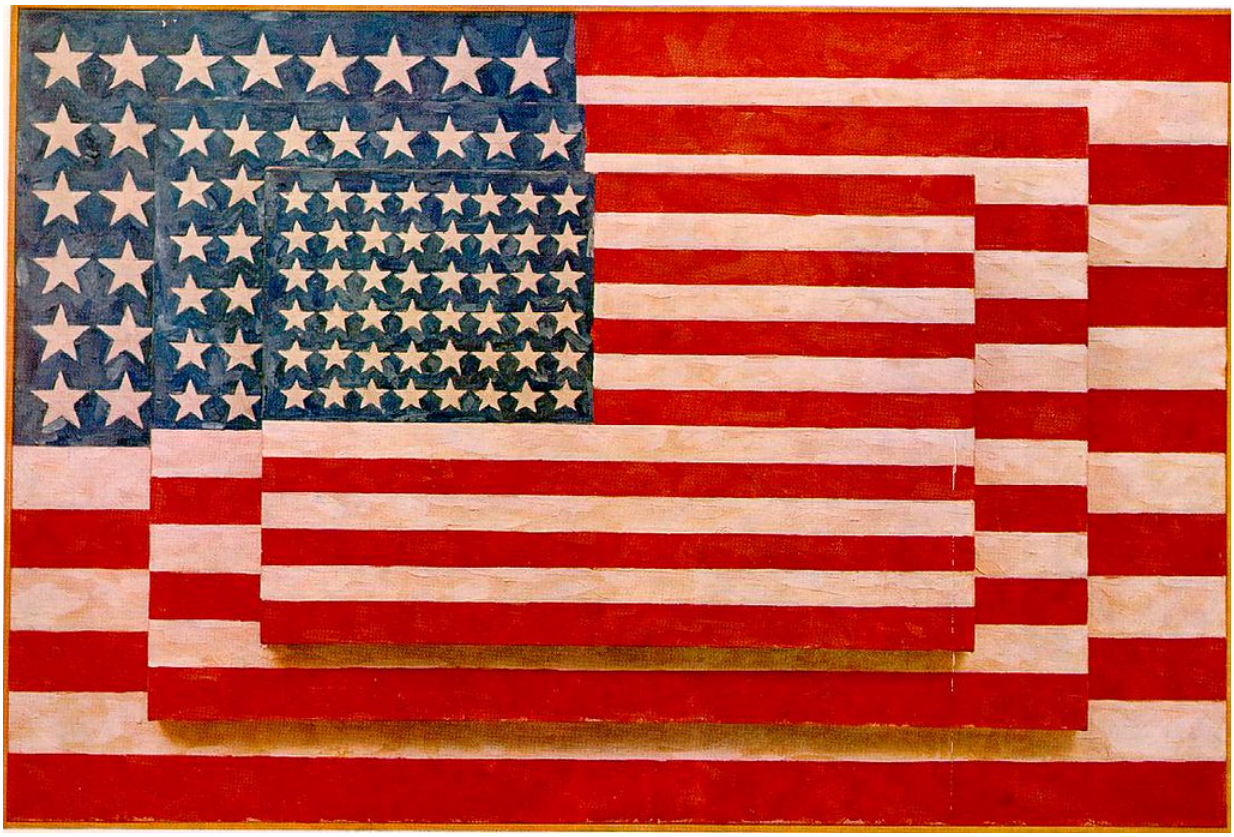


Figure \(\PageIndex{7}\): *Three Flags* (1958, encaustic on canvas, 76.5 x 116 cm) (CC BY-NC-SA 2.0)

Figure \(\PageIndex{8}\): *Map* (CC BY-NC-ND 2.0)

Jasper Johns, Flag

A conversation between Salman Khan and Steven Zucker about Jasper Johns, Flag, 1954-55 (dated on reverse 1954), encaustic, oil, and collage on fabric mounted on plywood, three panels, 42-1/4 x 60-5/8 inches /107.3 x 153.8 cm (The Museum of Modern Art).

Roy Lichtenstein

Roy Lichtenstein (1923–1997) was one of the leading figures of the **Pop Art** movement and became famous for transforming the visual style of **comic strips** into fine art. Lichtenstein was inspired by the commercial printing process used in newspapers and comic books, where colors were created through tiny printed dots called **Ben-Day dots**. Instead of blending paint smoothly, he carefully painted rows of colored dots against white backgrounds so the viewer's eye would visually combine them into solid colors. This distinctive technique gave his artwork a bold, mechanical appearance that became instantly recognizable and closely connected to Pop Art.

One of his best-known works, *I...I'M SORRY* (14.2.9), belongs to a series of paintings focusing on dramatic female characters inspired by romance comic books. The close-up image of the woman, combined with exaggerated facial expressions, bold outlines, and text captions, creates emotional tension while also appearing theatrical and ironic. As the woman gazes outward toward the viewer, her expression remains emotionally complex, leaving viewers to interpret whether she feels sadness, regret, confusion, or vulnerability. Lichtenstein's paintings often explored themes of emotion, media stereotypes, and popular culture while imitating the style of inexpensive printed comics.

Lichtenstein also expanded his artistic practice into **sculpture**. His work *Female Figure* (14.2.10), created for the **Olympics in Barcelona, Spain**, reflects the bright colors and mosaic traditions associated with the city's artistic heritage. The sculpture presents an abstract image of a woman's head covered in the signature dots seen in his paintings. Mosaic tiles cover the concrete structure in a style inspired by Antoni Gaudí, whose colorful architectural mosaics appear throughout Barcelona. By combining Pop Art imagery with local artistic traditions, Lichtenstein connected modern popular culture with historical artistic influences.

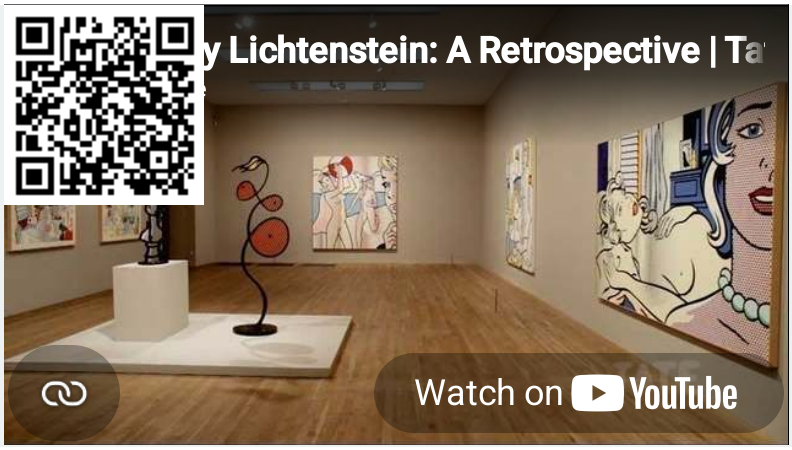
Although some critics initially rejected his work, even calling him the "worst artist in the U.S." in a 1964 *Life Magazine* article, Lichtenstein eventually became one of the most celebrated and financially successful artists of the twentieth century. His paintings later sold for tens of millions of dollars, demonstrating the growing acceptance of Pop Art within the art world. Lichtenstein's work often contained a humorous and playful quality, encouraging viewers to smile while also questioning the relationship between mass media, emotion, and artistic value.

Figure \(\PageIndex{9}\): *I...I'M SORRY* (Public Domain)

Figure \(\PageIndex{10}\): Female Figure (Public Domain)

Roy Lichtenstein: A Retrospective

Roy Lichtenstein is one of the foremost pop artists. In 2013, Tate Modern's blockbuster exhibition, 'Lichtenstein: A Retrospective', brought together 125 of his most definitive paintings and sculptures and reassessed his enduring legacy.



Kiki Kogelnik

Kiki Kogelnik (1935–1997) began her artistic career in **Vienna**, near her birthplace in Austria. Early in her career, she became connected with **Abstract Expressionism** through her engagement to an Abstract Expressionist artist. In 1962, Kogelnik moved to **New York City**, where she became involved with the growing **Pop Art** movement. Known for her extravagant clothing, elaborate hats, and colorful personal style, Kogelnik herself became a striking public figure whose appearance reflected the vibrant energy of her artwork.

Kogelnik embraced the bold colors and visual language of Pop Art while incorporating themes connected to technology, consumer culture, and women's roles in modern society. She often created life-sized cutouts based on the bodies of friends, using industrial materials, bright colors, and simplified forms inspired by modern advertising and media imagery. During the late 1960s, Kogelnik increasingly focused on **female identity**, women's representation in advertising, and the growing **Women's Liberation Movement**, even creating a series titled **"Women's Lib."** The **Space Race** and rapid technological developments of the twentieth century strongly influenced Kogelnik's artistic imagery. Many of her female figures appear as **techno-robotic** forms floating through undefined spaces, combining the appearance of fashion models, machines, and futuristic technology. Her works used vibrant colors, bold outlines, metallic elements, and simplified shapes similar to commercial advertisements while also critiquing the objectification of women in modern culture.

In *Female Robots* (14.2.11), Kogelnik explored the many social roles women were expected to perform. The artwork depicts fragmented female body parts floating independently across the composition, suggesting the pressures and divisions placed upon women in modern life. The faces appear mechanical and emotionless, emphasizing themes of dehumanization and societal expectations. Painted in contrasting bright colors, the silhouetted forms appear suspended in space, creating a futuristic yet unsettling atmosphere. Kogelnik also included her trademark **metallic circles** and geometric elements throughout the composition, reinforcing the connection between technology, identity, and consumer culture. Through her innovative combination of **Pop Art**, **feminism**, and futuristic imagery, Kogelnik challenged traditional portrayals of women and expanded the possibilities of contemporary art. Her work addressed issues of gender, technology, fashion, and media while maintaining the bold colors and visual excitement characteristic of Pop Art.

Kogelnik thought the job, based on her previous interest in robotics, was "beautiful, rich, worldly, superficial, bored, neither happy nor unhappy, no deep thoughts, no sentiment, no feelings."[3] *Superwoman* (14.2.12) reflected Kogelnik's portrayal of women in fashion magazines and advertising. The figure is larger-than-life scale. Oversized glasses cover her eyes and much of her face, hiding any emotion. Her body is stiffly posed in an unnatural stance, the oversized scissors mimicking the pose. The figure has a hard-edge outline, and the background is monochrome, unlike most of Kogelnik's work. The image is similar to a cartoon or comic book.

Figure \(\PageIndex{11}\): *Female Robot* (1964, oil and acrylic on canvas, 123 x 184 cm) (CC BY-SA 3.0)

Figure \(\PageIndex{12}\): *Superwoman* (1973, oil and acrylic on canvas, 251.4 x 152.4 cm) (CC BY-SA 2.0)

[1] Retrieved from https://www.moma.org/collection/works/78712

[2] Retrieved from https://whitney.org/collection/works/1060

[3] Retrieved from https://kikikogelnikfoundation.org/past/

14.3: Op Art

Definition: Term

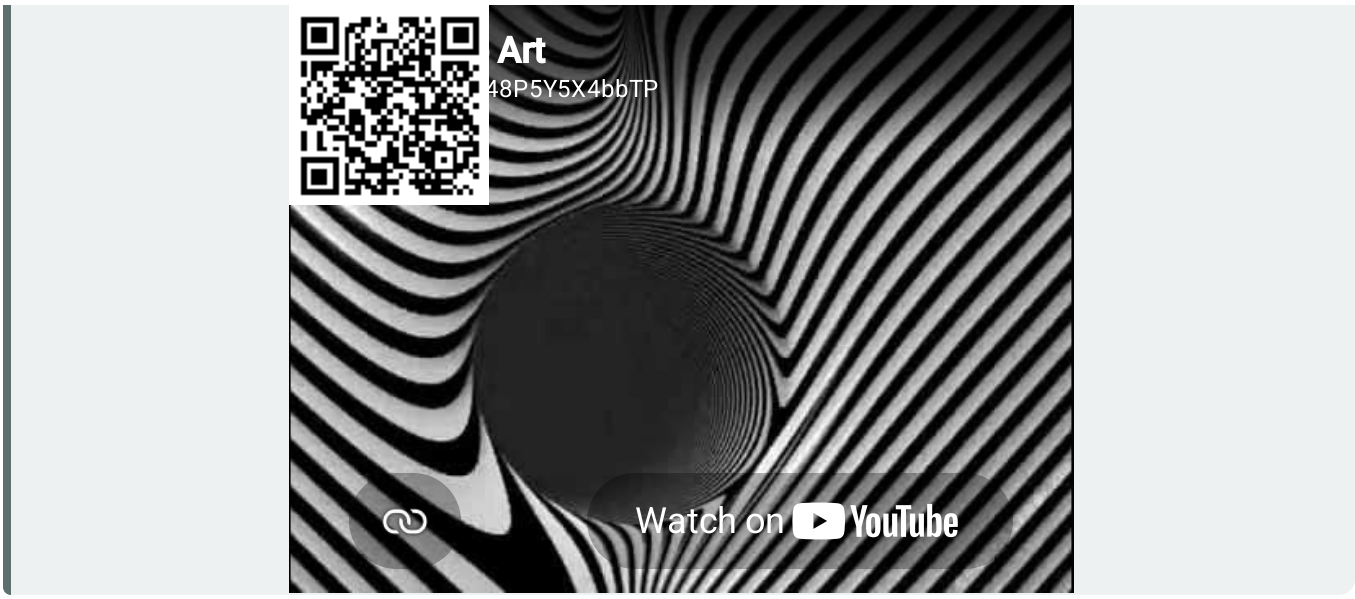
- **Op Art** – A style of abstract art that uses optical illusions to create the appearance of movement, vibration, or depth on a flat surface.
- **Optical Art** – Another name for Op Art, emphasizing the visual effects created through patterns, lines, and contrast.
- **Abstract Art** – Art that does not realistically represent objects or people but instead uses shapes, colors, and forms to create meaning or emotion.
- **Two-Dimensional Space** – A flat surface with height and width but no actual depth, such as a painting or drawing.
- **Optical Illusion** – A visual effect that tricks the eye into seeing movement, depth, or distortion that does not actually exist.
- **Geometric Forms** – Shapes such as circles, squares, triangles, and rectangles commonly used in abstract and Op Art compositions.
- **Patterns** – Repeated decorative or organized designs used to create rhythm and visual effects.
- **Contrast** – The strong difference between colors, shapes, or tones used to create emphasis and visual intensity.
- **Black and White** – Opposite colors frequently used in Op Art to heighten visual contrast and optical effects.
- **Figure-Ground Relationship** – The interaction between the main image (figure) and the background, often creating visual tension or ambiguity.
- **Foreground** – The part of an image that appears closest to the viewer.
- **Background** – The area behind the main subject in an artwork.
- **Visual Perception** – The process by which the eyes and brain interpret visual information.
- **Spatial Distortion** – The manipulation of shapes or space to create unusual visual effects or illusions.
- **Visual Vibration** – A shimmering or pulsating optical effect created by contrasting lines, colors, or patterns.
- **Rhythm** – A repeated visual movement created through recurring lines, shapes, or colors in an artwork.
- **Line** – A mark connecting two points, often used to define shapes, movement, or patterns.
- **Repetition** – The repeated use of shapes, lines, colors, or patterns within a composition.
- **Illusion of Movement** – The appearance that an artwork is moving even though it remains physically still.
- **Modern Design** – A style emphasizing simplicity, geometry, clean lines, and innovation in art, architecture, and visual culture.

Op Art, short for **Optical Art**, is a style of abstract visual art that creates the illusion of movement, vibration, flashing, or depth on a flat two-dimensional surface. Emerging during the 1960s, Op Art relied on precise arrangements of **lines**, **patterns**, and strongly contrasting colors to trick the viewer's eye into perceiving motion or spatial distortion. Most Op Art compositions used **black and white** combinations because the extreme contrast heightened the optical illusion and intensified the visual effect. Unlike traditional art that focused on realistic representation, Op Art depended on the viewer's visual perception and psychological response. The artwork appears to shift, pulse, bend, or move even though the surface remains completely flat and motionless. Artists achieved these effects through carefully organized geometric forms, repeated patterns, and rhythmic lines that confuse the eye and create visual tension.

A key feature of Op Art is the use of a **figure-ground relationship**, where the viewer struggles to distinguish foreground from background. This creates the illusion of multiple spatial planes competing for attention. The interaction between shapes, lines, and contrasting colors generates a dissonant and sometimes unsettling visual experience. Repeated patterns and sharp contrasts create edgy, vibrating effects that make the artwork appear dynamic and alive. Op Art became closely connected with modern design, fashion, advertising, and architecture because of its bold geometric appearance and striking visual impact. The movement reflected modern interests in science, psychology, perception, and technology while expanding the possibilities of abstract art.

Op Art

Video about Op Art



Victor Vasarely

Victor Vasarely (1906–1997) was a Hungarian-French artist widely considered the leader and "grandfather" of the **Op Art** movement. Born in **Budapest**, Vasarely moved to **Paris** in 1930, where he began experimenting with **geometric abstraction**, contrasting colors, and simplified visual forms. Before becoming a fine artist, he worked in **graphic design** and advertising agencies, experiences that strongly influenced his interest in visual perception, patterns, and optical effects. After **World War II**, Vasarely focused increasingly on abstract compositions designed to create the illusion of movement, depth, and spatial distortion.

Vasarely developed a highly systematic artistic process based on **algorithmic logic**, **binary relationships**, and carefully organized geometric structures. His works often consisted of repeated squares, circles, grids, and other geometric forms filled with contrasting colors. By manipulating color gradients, scale, and arrangement, he created powerful **optical illusions** that appeared to pulse, expand, curve, or protrude from the flat canvas surface. His innovative techniques made him internationally famous and helped establish Op Art as one of the major art movements of the 1960s.

In *vega-gyongly-2* (14.3.1), Vasarely created the illusion that the surface of the canvas bulges outward or sinks inward through the careful arrangement of geometric patterns and color transitions. The image appears to stretch and warp, creating a sensation of tension as if an invisible object were pushing against the surface from behind. This illusion of movement and dimensionality became one of Vasarely's signature artistic effects. In *Zett Kek* (14.3.2), Vasarely demonstrated how repeating small square units with limited color combinations could generate dramatically different visual experiences. By simply rotating or rearranging the colored squares, he transformed the overall composition and altered the viewer's perception of movement and pattern. His work revealed how small changes in color placement and geometric order could create complex and dynamic optical effects. Through his exploration of **geometry**, **color theory**, and **visual perception**, Vasarely transformed abstract art into an interactive visual experience. His innovative ideas influenced not only fine art, but also graphic design, architecture, fashion, and digital art, making him one of the most important figures in twentieth-century modern art.

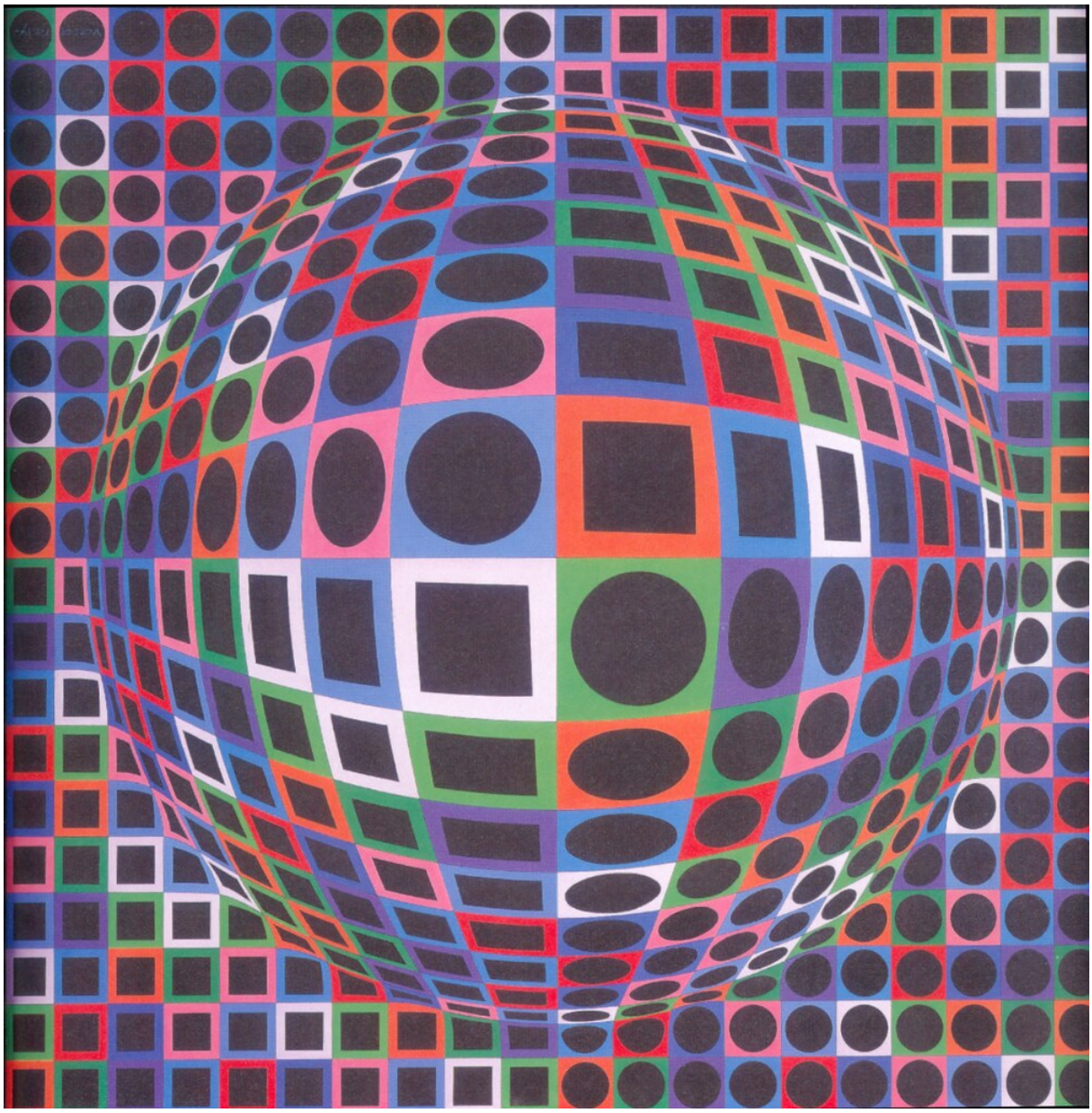


Figure \(\PageIndex{1}\): *vega-gyongly-2* (1971, acrylic on board, 80 x 80 cm) (CC BY 2.0)

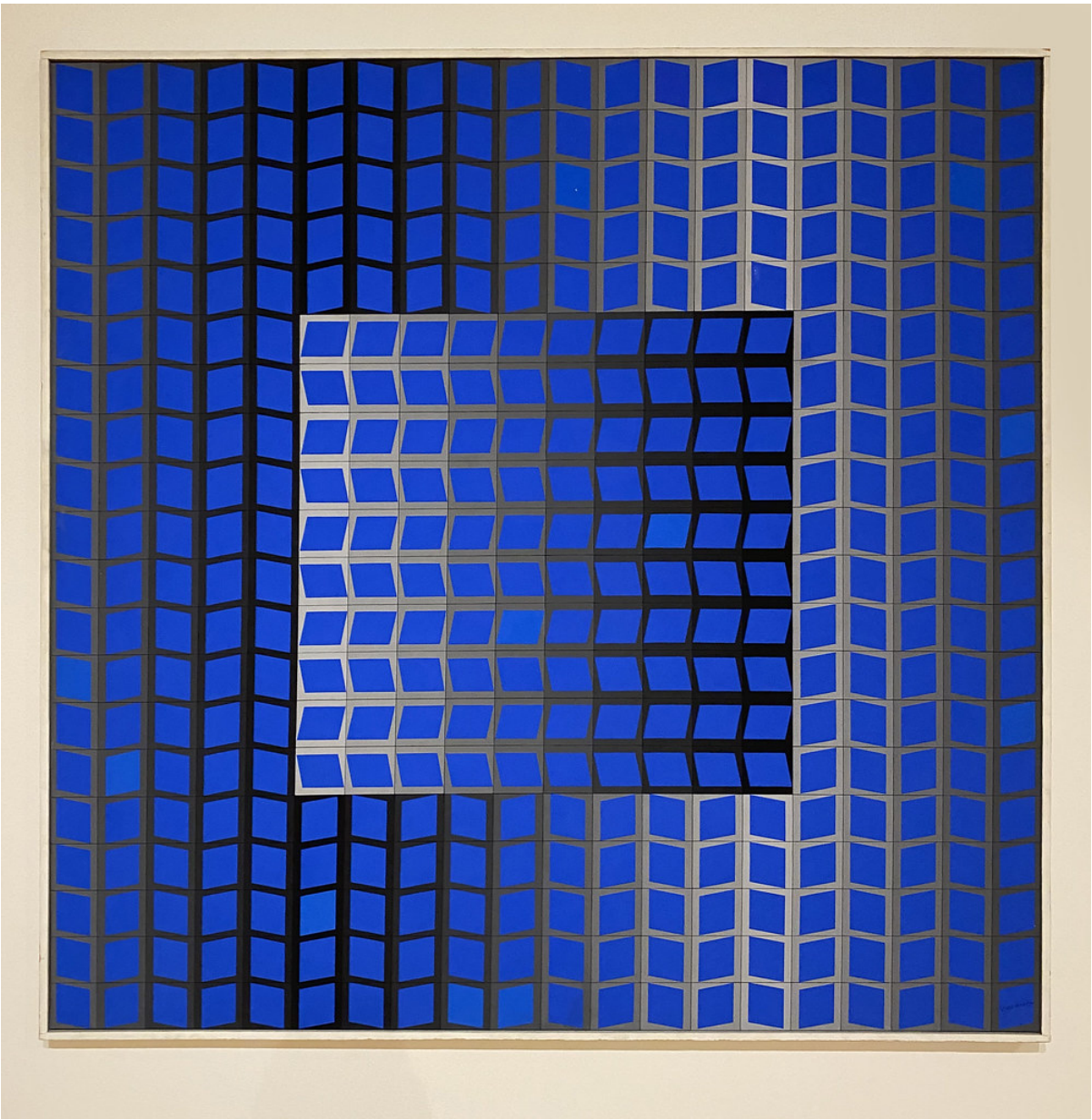
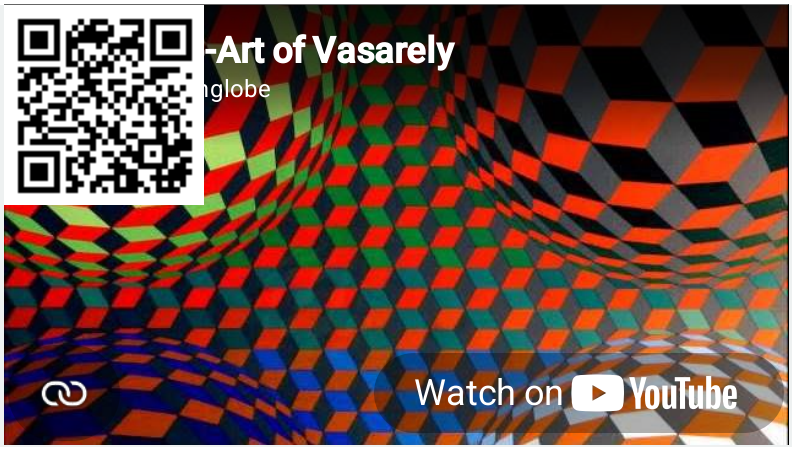


Figure \(\PageIndex{2}\): *Zett Kek* (1966, tempera on linen) (CC BY-NC 2.0)

Op Art of Vasarely

After "Black & White Vasarely" visible here on this chain, this is the expression of the Optical Art Victor Vasarely, with the addition of some visual animation style of Yvaral (his son), images taken at the museum in Budapest, and the Fondation Vasarely in Aix en Provence.



Bridget Riley

Bridget Riley (1931–) was born in **London, England**, and became one of the leading artists of the **Op Art** movement. Before **World War II**, her father owned a printing business, an experience that may have influenced Riley's later interest in patterns, precision, and visual design. After the war, she studied art at **Cheltenham Ladies' College**, **Goldsmiths College**, and the **Royal College of Art**, where she developed the artistic ideas that would shape her signature style during the 1960s. Riley became internationally known for her carefully organized **black-and-white geometric patterns** that create powerful optical illusions. Using repeated lines, curves, circles, and shapes, she designed compositions that appear to shimmer, pulse, vibrate, or move across the surface of the painting. Her works intentionally disorient the viewer's eye, creating sensations of motion and instability even though the image itself remains completely flat and still. Riley also incorporated various shades of gray and curved arrangements of geometric forms to intensify the sense of movement and optical variation.

By the late 1960s, Riley expanded her work to include bold colors arranged in stripes and repeating patterns. The contrasting colors produced shimmering visual effects and increased the sensation of movement. Although her paintings appear abstract and mathematical, Riley explained that her inspiration came from **nature**. Rather than painting realistic landscapes, she sought to capture what she described as the "dynamism of visual forces," focusing on energy, rhythm, and movement instead of physical appearances. In *Metamorphosis* (14.3.3), Riley used repeated circles in varying gray tones against a white background to create an ambiguous sense of progressive movement. As the circles move across the composition, their shapes and spacing subtly change, causing the viewer's perception to shift continuously. The careful placement and proportion of each circle demonstrate Riley's precise planning and technical control. She meticulously designed and measured her patterns to ensure the optical effects worked accurately and consistently.

Through her innovative exploration of **visual perception**, **pattern**, and **optical illusion**, Bridget Riley became one of the most influential artists of the twentieth century. Her work expanded the possibilities of abstract art and influenced fields such as graphic design, fashion, architecture, and contemporary visual culture. She was not inspired by realism and stated, "I started studying squares, rectangles, triangles, and the sensations they give rise to…The marks on the canvas are sole and essential agents in a series of relationships which form the structure of the painting"[1]

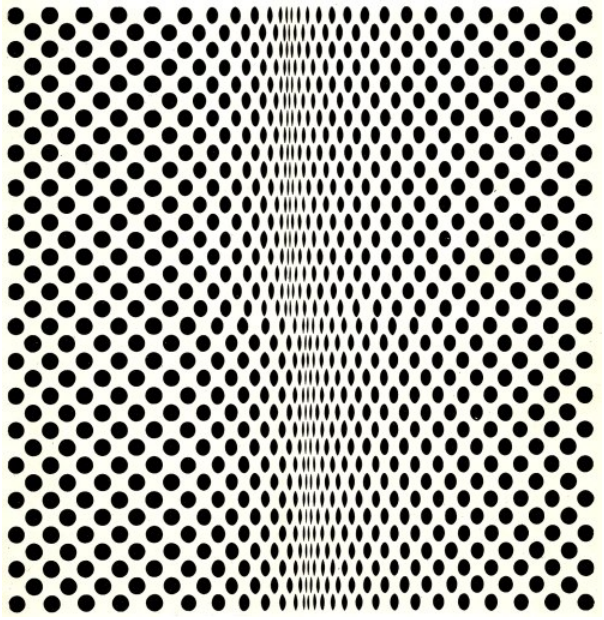


Figure \(\PageIndex{3}\): *Metamorphosis* (1964, wood and liquid suspension, 108 x 112.2 cm) (CC BY 2.0)

In 1967, Bridget Riley began introducing **color** into her **Op Art** compositions, expanding beyond the black-and-white patterns that had first made her internationally famous. Riley became increasingly interested in how colors interact with one another and how subtle color relationships could alter visual perception. Instead of using color simply for decoration, she treated it as an active visual force capable of creating movement, rhythm, vibration, and optical tension across the surface of the painting. In *Cataract 3* (14.3.4), Riley used repeated **lines**, one of the most stable geometric elements, to organize color and generate the illusion of movement. The alternating broad and narrow lines curve across the canvas like flowing ribbons or waves, creating a sense of motion and energy. Riley carefully positioned intense contrasting colors such as **turquoise** and **vermilion** to create a shimmering luminosity that appears to ripple through the center of the composition. The addition of softer gray tones near the top and bottom of the painting helps direct the viewer's eye toward the vibrant movement in the middle of the work.

Although Riley's earlier black-and-white paintings had already earned international recognition, she continued experimenting with color because she believed it offered new possibilities for exploring **visual perception** and **optical illusion**. Her later works demonstrated how color relationships alone could create sensations of movement, depth, and rhythm without the need for realistic imagery. Through these innovations, Riley expanded the boundaries of Op Art and deepened the connection between abstract art and human visual experience.

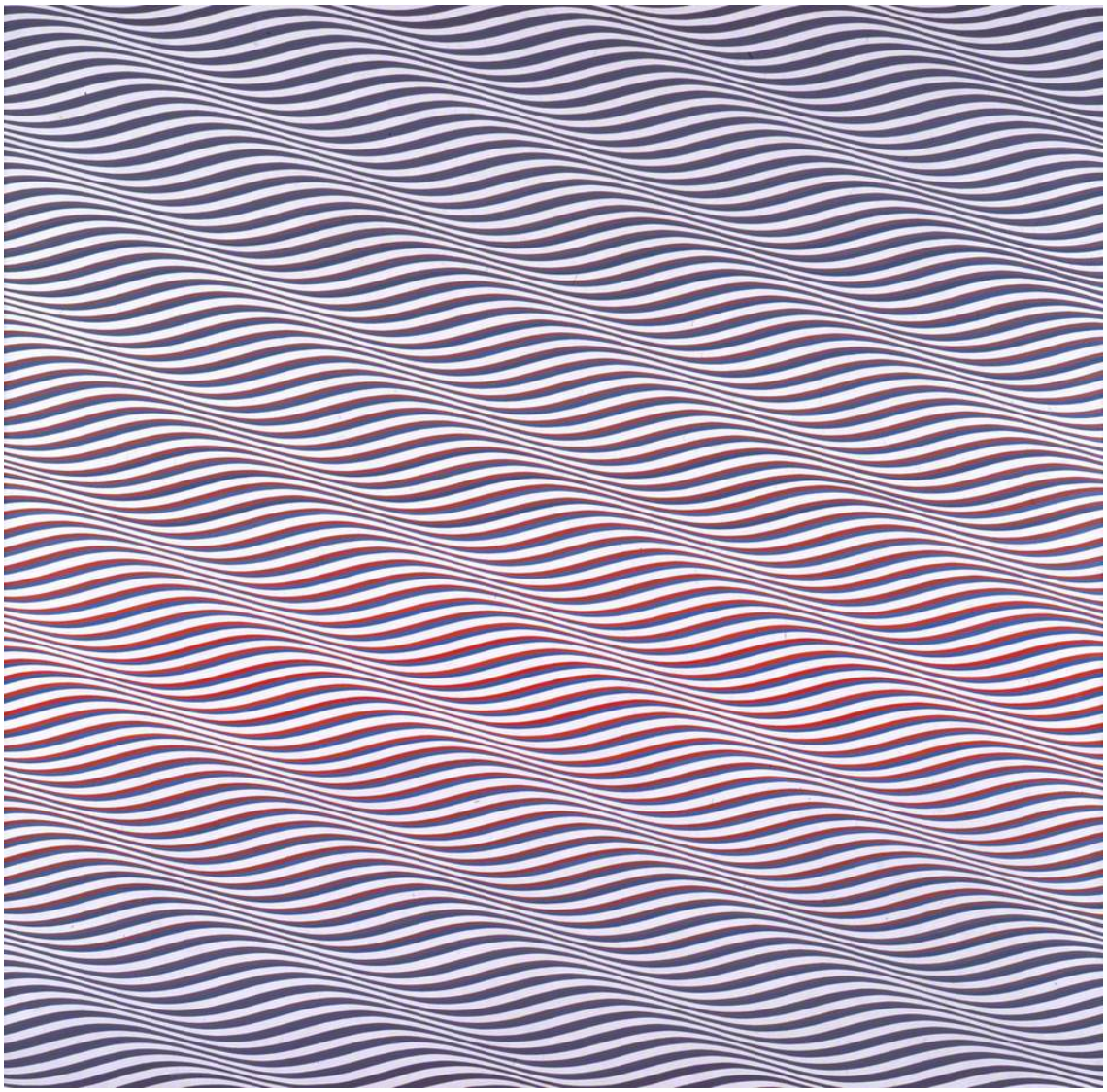
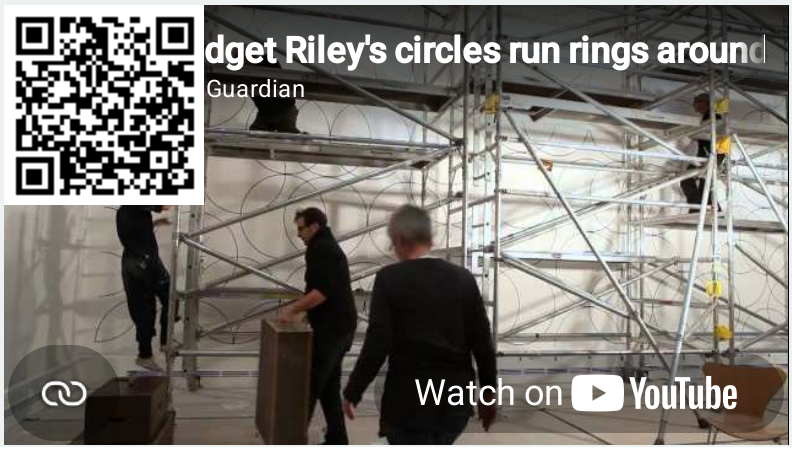


Figure \(\PageIndex{4}\): *Cataract 3* (1967, emulsion PVA on linen, 221.9 x 222.9 cm) (CC BY 2.0)

Bridget Riley's circles run rings around us at the National Gallery

Bridget Riley's circles run rings around us at the National Gallery



Edna Andrade

Edna Andrade (1917–2008) was an American artist associated with the **Op Art** movement and known for her mesmerizing geometric paintings and optical illusions. Born in **Virginia**, Andrade showed artistic talent from an early age and later earned a degree in **Fine Arts** from the **University of Pennsylvania**. Early in her career, she painted abstract landscapes and worked during **World War II** creating propaganda materials for the government agency that eventually became the **CIA**. Andrade later described this work as routine and reflective of the limited expectations often placed on women during that era. She referred to herself as an "unliberated housewife" before fully pursuing her own artistic vision.

After divorcing her husband in 1960, Andrade devoted herself completely to the exploration of **Op Art**, creating highly structured paintings based on **geometric shapes**, repeated patterns, and carefully organized color relationships. Many of her compositions use squares, lines, grids, and rhythmic arrangements that create the illusion of movement and vibration across the canvas. Some of her paintings produce almost **psychedelic** visual effects, causing the viewer's eye to constantly move around the surface without finding a resting point. Andrade believed that the interaction between simple forms and contrasting colors could create powerful sensations of symmetry, rhythm, and energy.

In *Blue Cross with Red* (14.3.5), Andrade used a deep blue background filled with fragmented red lines that appear to shift and bend across the painting. The eye is continually drawn around the composition before returning to the strong red square positioned in the center. The contrasting colors and repeated directional lines create visual tension and movement, demonstrating Andrade's belief that a few basic shapes combined with color could generate complex rhythmic effects. In *Untitled (Metallic Square 3)* (14.3.6), Andrade further explored the symbolic and visual power of fundamental geometric forms. Bent and repeated lines arranged at gradual intervals create the illusion of organized movement within what initially appears chaotic. The opposing colors and maze-like structure produce a sense of controlled energy and shifting perspective. While *Blue Cross with Red* appears to radiate outward from a central square, *Untitled* creates a more enclosed and labyrinth-like visual experience. Through her exploration of **optical illusion**, **geometry**, **color contrast**, and **visual rhythm**, Edna Andrade became an important figure in American Op Art. Her paintings transformed simple lines and shapes into dynamic visual experiences that challenged perception and engaged viewers in constant visual motion.

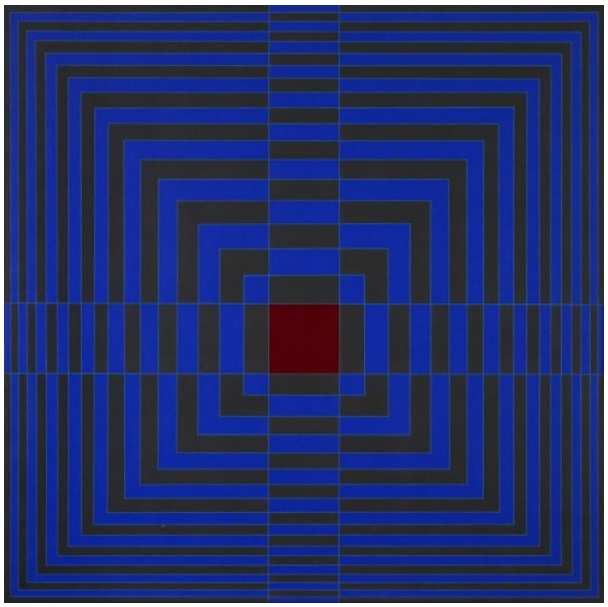


Figure \(\PageIndex{5}\): *Blue Cross with Red* (1968, acrylic on canvas, 93.2 x 93.2) (CC BY 2.0)

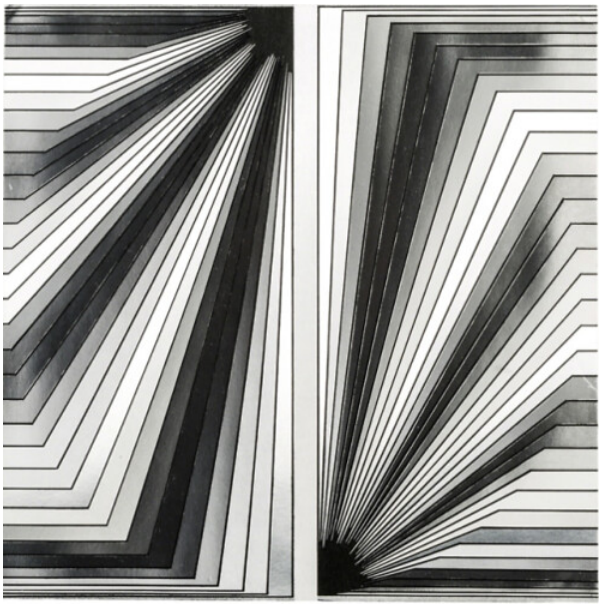


Figure \(\PageIndex{6}\): *Untitled* (Metallic Square 3) (1972, screenprint on aluminum foil paper) (CC BY 2.0)

Wen-Ying Tsai

Wen-Ying Tsai (1928–2013) was a Chinese-American **cybernetic sculptor** and **kinetic artist** best known for creating innovative sculptures that combined art, science, engineering, light, sound, and motion. Tsai believed that art should actively engage viewers through movement and sensory experience rather than remain static and motionless. His sculptures incorporated modern technologies such as **motors**, **strobe lights**, **metal rods**, **electronics**, and **audio components** to create dynamic works that constantly changed before the viewer's eyes. Tsai's work reflected growing twentieth-century interests in **technology**, **cybernetics**, and interactive environments. Rather than creating traditional sculpture from stone or bronze, he designed mechanical systems that moved, vibrated, flashed, and produced sound. The movement of the sculptures created constantly shifting optical effects, encouraging viewers to experience art as an active and changing event instead of a fixed object.

In *Multi Kinetic Wall* (14.3.7), Tsai created a large-scale interactive wall composed of numerous moving units coordinated through carefully timed motorized systems. The work uses **gyroscopes**, lights, and movement to create rhythmic visual patterns that continuously shift and transform. Each individual component functions as a separate artwork while simultaneously contributing to the larger kinetic environment. The synchronized movement and changing light effects create a visually immersive experience for the audience. Tsai's sculptures *Double Diffraction* (14.3.8) and *Harmonic Sculpture* (14.3.9) further demonstrate his exploration of motion, sound, and light. These works use flexible **stainless-steel rods** illuminated by **strobe lighting**. As the rods vibrate, they create shimmering optical effects and produce subtle sounds, giving the sculptures both visual and auditory qualities. The vibrating rods appear almost weightless and fluid, transforming rigid industrial materials into graceful, moving forms. Through his fusion of **kinetic art**, **technology**, and **scientific principles**, Wen-Ying Tsai expanded the possibilities of modern sculpture and interactive art. His work blurred the boundaries between engineering and artistic expression while emphasizing movement, perception, and viewer participation as essential elements of contemporary art.

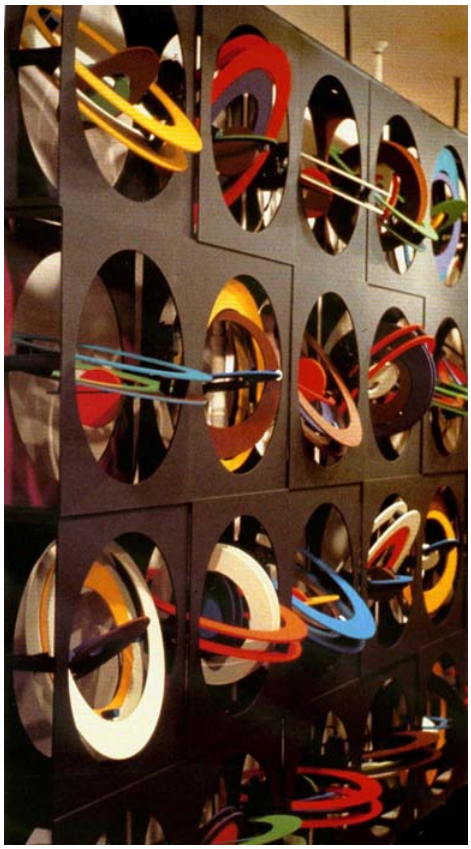


Figure \(\PageIndex{7}\): *Multi Kinetic Wall* (CC BY-SA 3.0)

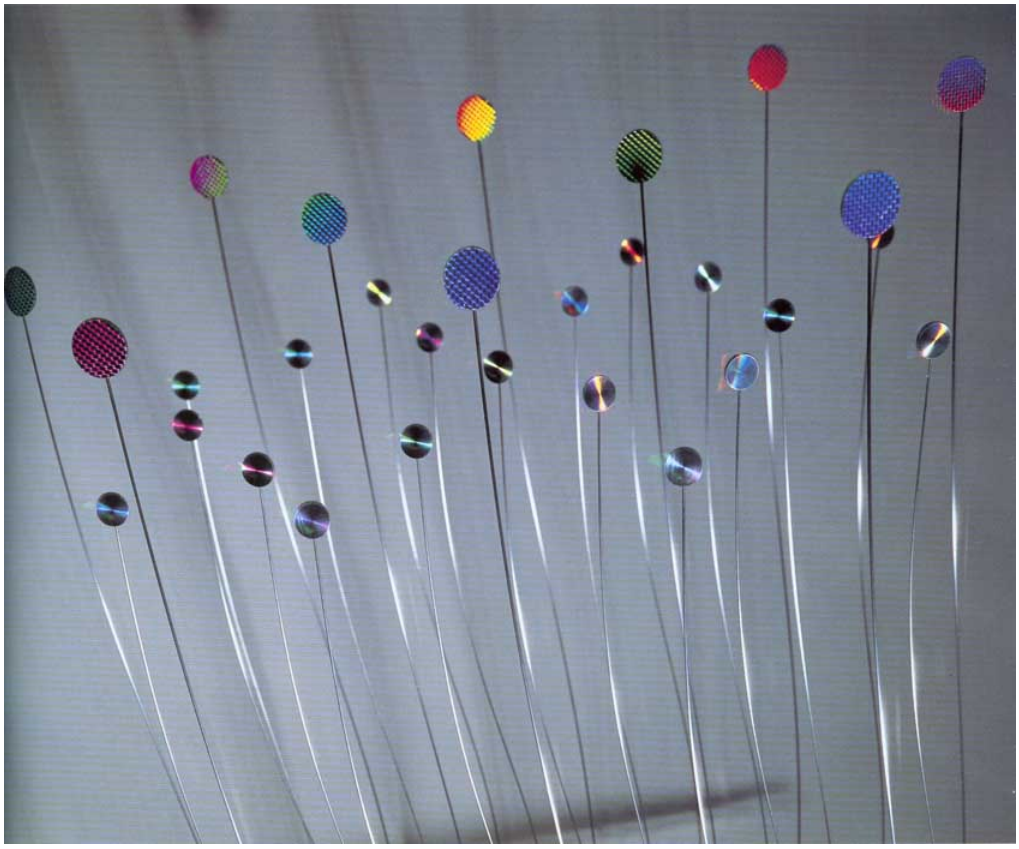


Figure \(\PageIndex{8}\): *Double Diffraction* (CC BY-SA 3.0)

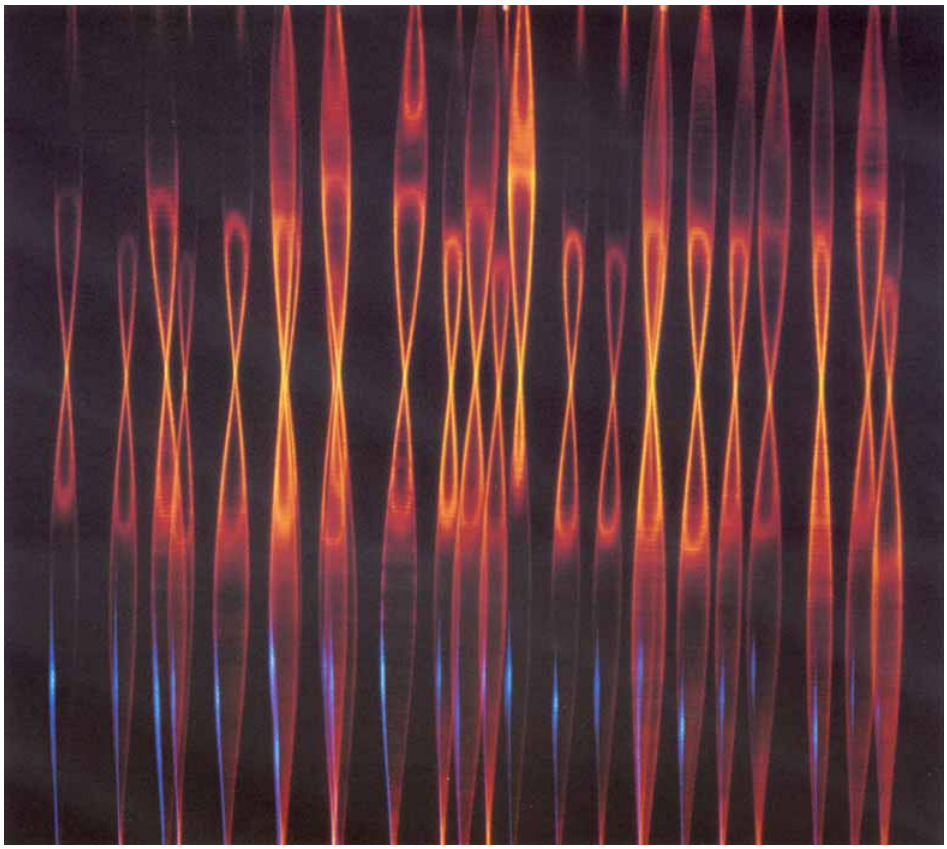


Figure \(\PageIndex{9}\): *Harmonic Sculpture* (CC BY-SA 3.0))

14.4: Abstract Expressionism

Definition: Term

- **Abstract Expressionism** – A post–World War II art movement centered in New York that emphasized emotional expression, abstraction, spontaneity, and individual creativity.
- **New York School** – A group of artists, poets, and musicians in New York associated with Abstract Expressionism during the 1940s and 1950s.
- **Action Painting** – A style of painting in which artists physically apply paint through dripping, splashing, pouring, or energetic brushwork, making the act of painting part of the artwork itself.
- **Post-War Art** – Art created after World War II that often reflects social, political, and emotional responses to modern life and global conflict.
- **Abstraction** – Art that moves away from realistic representation and instead uses shapes, colors, forms, and gestures to create meaning.
- **Subconscious** – The part of the mind containing thoughts, emotions, and memories outside conscious awareness, often explored through art.
- **Impulsive Creation** – A spontaneous and instinctive approach to making art without strict planning or control.
- **Gesture** – Expressive movement of the artist's hand, brush, or body visible in the artwork.
- **Emotion** – Feelings or emotional states expressed through artistic color, form, movement, or composition.
- **Spontaneity** – The act of creating freely and naturally without careful preplanning.
- **Large Canvases** – Oversized painting surfaces often used by Abstract Expressionists to create immersive and physical works of art.
- **Physical Experience** – The idea that both creating and viewing art can involve bodily movement, sensation, and emotional engagement.
- **Contemporary Art** – Art created during the present or recent time period that reflects modern ideas, issues, and experimentation.
- **Jackson Pollock** – An Abstract Expressionist artist famous for drip painting and energetic Action Painting techniques.
- **Mark Rothko** – An Abstract Expressionist painter known for large fields of glowing color designed to evoke emotional responses.
- **Willem de Kooning** – An Abstract Expressionist artist recognized for expressive brushwork and energetic abstract figures.
- **Robert Motherwell** – An Abstract Expressionist painter known for bold abstract forms and intellectual approaches to art.
- **Surrealism** – An art movement exploring dreams, fantasy, and the subconscious mind through unexpected imagery.
- **Psychoanalysis** – A psychological theory developed by Sigmund Freud that studies the subconscious mind and human behavior.
- **Modern American Art** – Artistic movements and styles developed in the United States during the modern era, especially during the twentieth century.

Abstract Expressionism emerged in **New York City** after **World War II** as a major American art movement that shifted the center of the art world from Europe to the United States for the first time. Artists such as Jackson Pollock, Mark Rothko, Willem de Kooning, and Robert Motherwell became associated with the **New York School**, where they developed highly experimental abstract styles emphasizing emotion, spontaneity, and personal expression. Rather than depicting realistic subjects, these artists focused on gesture, color, movement, and subconscious thought.

Abstract Expressionism was not a single uniform style but a broad artistic movement that varied greatly from artist to artist. The movement emphasized **impulsive**, **subconscious**, and emotionally driven methods of creation. Many artists believed painting itself should become an experience or event rather than simply the production of an image. This idea led to the development of **Action Painting**, a style in which artists physically engaged with the canvas through dripping, splashing, pouring, or aggressively applying paint. The act of painting became just as important as the finished artwork.

For artists like Jackson Pollock, painting was an intensely physical process involving large canvases spread across the floor where paint could be thrown, dripped, or flung onto the surface. Other artists, such as Mark Rothko, used large fields of color to create emotional and spiritual experiences for viewers. Some Abstract Expressionists explored the subconscious mind and psychological symbolism, influenced by ideas connected to **Surrealism** and psychoanalysis.

The movement also reflected broader social and political changes occurring in postwar America. During the 1950s and 1960s, artists responded to rapid modernization, political tensions, and cultural transformation. Abstract Expressionism revitalized the art world by rejecting traditional artistic rules and encouraging freedom, experimentation, and individuality. The movement helped establish modern American art on an international stage and greatly influenced later developments in **contemporary art**.

What is Abstract Expressionism?

In this video from the Clyfford Still Museum (CSM) ground-floor storyviewers, CSM Director Dean Sobel, Senior Consulting Curator David Anfam, art historian Robert Storr, and author Robert Genter discuss the development of this iconic American artistic movement following World War II. While Storr and Genter provide historical context for the movement, Sobel identifies “all over” composition and monumental scale as two of its defining characteristics.

William De Kooning

Willem de Kooning (1904–1997) was born in the **Netherlands** and studied at the **Rotterdam Academy** before immigrating to the **United States**. After moving to **New York City**, he became one of the leading members of the **Abstract Expressionist** movement and joined the influential **New York School**, a group that included artists such as Philip Guston, Robert Motherwell, Jackson Pollock, and Mark Rothko. De Kooning became known for his energetic brushwork, experimental techniques, and ability to shift freely between abstraction and representation. Early in his career, de Kooning primarily worked in **black and white**, often combining paint with other materials in mixed-media compositions. Unlike some artists who remained committed to a single style, de Kooning constantly experimented and evolved his artistic approach. He became especially famous for his controversial series of **women paintings**, which blended aggressive brushstrokes, distorted figures, and fragmented forms inspired partly by **Cubism**. These paintings challenged traditional portrayals of women and became some of the most discussed works in modern art.

One of de Kooning’s most important paintings, *Excavation* (14.4.1), demonstrates his dynamic and layered painting process. The large composition is believed to have been inspired by women laboring in rice fields, although the imagery remains highly abstracted. Strong black lines carve through the surface, defining fragmented anatomical forms that resemble humans, birds, fish, and other organic shapes. The painting originally contained a white background interrupted by vivid slashes of color, creating visual tension and movement across the canvas. De Kooning built his paintings through multiple layers of paint, continually adding, scraping away, and repainting areas of the composition. This process gave the surface a sense of depth, energy, and constant transformation. His vigorous brushwork and expressive handling of paint reflected the central ideas of **Action Painting** and **Abstract Expressionism**, where the physical act of painting became an important part of the artistic experience itself. Through his experimentation and emotional intensity, de Kooning became one of the most influential artists of twentieth-century modern art.

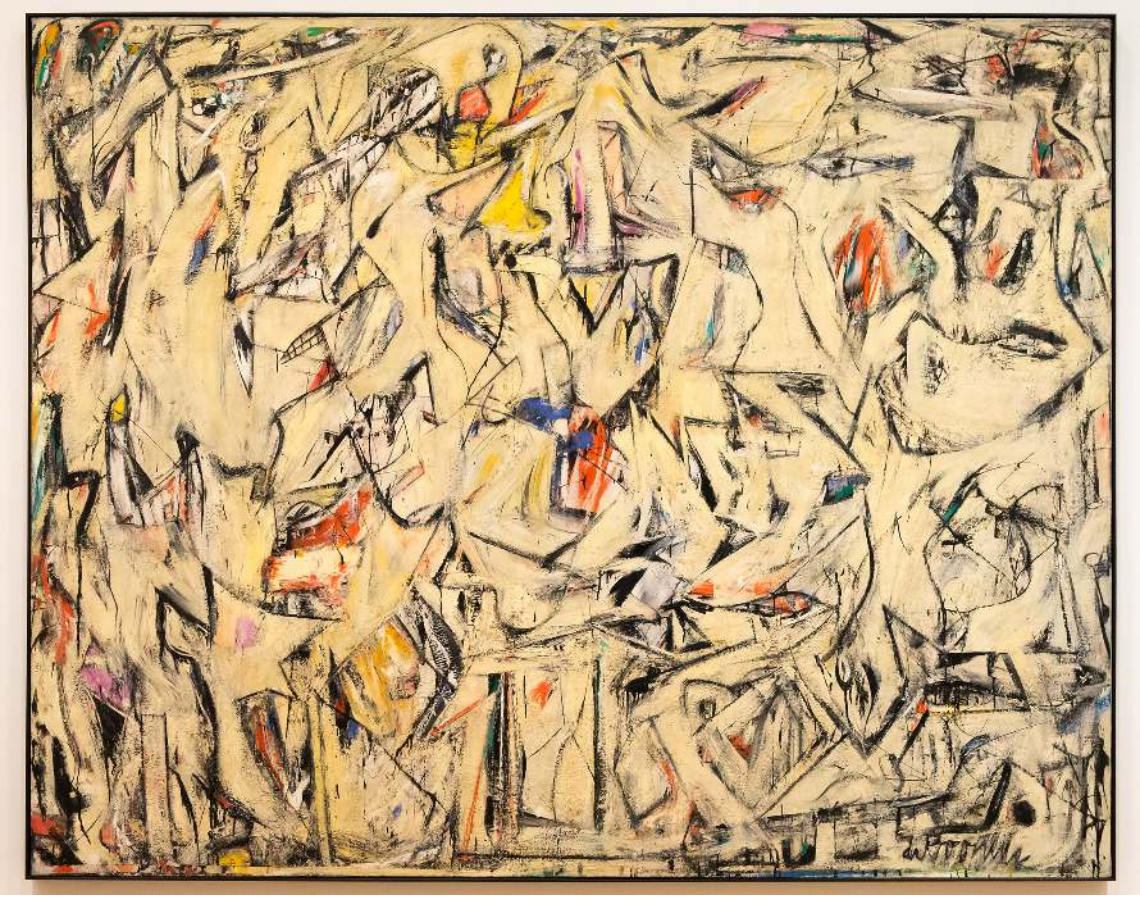


Figure \(\PageIndex{1}\): *Excavation* (*CC BY-NC 2.0*)

Willem De Kooning, Woman 1

Willem de Kooning, Woman I, oil on canvas, 1950-52 (MoMA)

Robert Motherwell

Robert Motherwell (1915–1991) was the youngest of the original artists associated with the **New York School** of **Abstract Expressionism**. Unlike many artists who entered the movement through practical studio training alone, Motherwell received an

extensive academic education, studying at **Stanford University**, **Harvard University**, and **Columbia University**. He was also influenced by **Surrealism** and worked closely with several Surrealist artists, whose ideas about the **subconscious mind**, automatic creation, and symbolic imagery shaped his artistic philosophy. Motherwell was both a painter and a printmaker whose work often reflected political and emotional themes. One of his most important sources of inspiration was the defeat of the **Spanish Republic** during the **Spanish Civil War** in 1939 by fascist military forces led by Francisco Franco. Deeply affected by the tragedy and violence of the conflict, Motherwell created a long-running series of artworks responding to the war and its emotional impact. Over the course of his career, he produced more than 140 paintings connected to this subject, making it one of the most significant political series in modern American art.

Motherwell frequently used recurring **black abstract shapes** combined with white backgrounds to symbolize oppression, death, mourning, resistance, and human struggle. His compositions often included large ovals, rectangles, and bold gestural forms arranged in rhythmic patterns across the canvas. The stark contrast between **black and white** created dramatic visual tension and emotional intensity, characteristics strongly associated with Abstract Expressionism. In *Wall Painting III* (14.4.2), Motherwell repeated many of his familiar visual elements while creating a composition that appears more energetic and optimistic than some of his darker works. The large black forms are balanced by an ochre-colored star-like shape that seems to push outward against the surrounding boundaries. Another figure appears almost dance-like, introducing a sense of movement and vitality. Although Motherwell continued using his characteristic bold black lines and simplified abstract forms, the addition of **ochre** and touches of brown introduced warmth and variation into the composition. Through his combination of abstraction, symbolism, and political awareness, Motherwell helped expand the emotional and intellectual depth of **Abstract Expressionism**. His work demonstrated how abstract art could communicate universal themes of conflict, suffering, resistance, and human resilience without relying on realistic imagery.

Figure \(\PageIndex{2}\): *Wall Painting III* (1952, oil on fiberboard, 121.9 x 189.9 cm) (CC BY-NC-ND 2.0)

Robert Motherwell, Elegy to the Spanish Republic

Robert Motherwell, Elegy to the Spanish Republic No. 57, 1957-60, oil on canvas, 84 x 109-1/8 inches (San Francisco Museum of Modern Art)

Joan Mitchell

Joan Mitchell (1925–1992) was an American painter associated with the **Abstract Expressionist** movement and one of the most important female artists of the twentieth century. Born in **Chicago, Illinois**, Mitchell showed artistic talent from an early age and studied at the **School of the Art Institute of Chicago** as both a child and teenager. She later earned both a **Bachelor of Fine Arts (BFA)** and a **Master of Fine Arts (MFA)** before briefly moving to **New York City**, where she became involved with the growing Abstract Expressionist community. After **World War II**, Mitchell traveled to **Paris** through a travel fellowship, where she met an American publisher whom she later married. Although she eventually returned to New York, Paris remained an important influence throughout her life and career. During the 1950s, Mitchell became part of the vibrant social and intellectual circle of Abstract Expressionist artists who gathered in bars, cafés, and clubs to debate artistic ideas and discuss the future of modern art. These informal meetings played a major role in shaping the identity of the **New York School**.

Mitchell held her first solo exhibition in 1952 shortly after divorcing her husband. At a time when the art world remained heavily dominated by men, female artists often faced marginalization and limited recognition. Despite these barriers, Mitchell became one of the few women regularly included in the influential weekly discussions held on **East Eighth Street**, where artists exchanged ideas about abstraction, gesture, emotion, and the direction of contemporary painting. Mitchell's paintings became known for their energetic brushwork, layered color, and emotional intensity. Inspired by memories, landscapes, poetry, and personal experience, she created large abstract compositions filled with dynamic movement and expressive marks. Her work combined the physical energy associated with **Action Painting** with lyrical color relationships and emotional depth, helping establish her as one of the leading painters of Abstract Expressionism.

Mitchell's work always remained abstract, usually on large, expansive panels. Landscapes were her primary source of inspiration. Throughout the 1950s, she established her style using counterweighted lines and layers of color, forming emotions in her work. She used white backgrounds on her canvas and applied bright chunky colors. Art historian Linda Nochlin stated the "meaning and emotional intensity [of Mitchell's pictures] are produced structurally, as it were, by a whole series of oppositions; dense versus transparent strokes; gridded structure versus more chaotic, ad hoc construction; weight on the bottom of the canvas weight at the top; light versus dark; choppy versus continuous strokes; harmonious and clashing juxtapositions of hue—all are potent signs of meaning and feeling." [2]

During the 1960s, Joan Mitchell experienced significant personal loss when her father died and her mother was diagnosed with cancer. These emotional events deeply influenced her artwork, including *Lady Bug* (14.4.3), which reflects a more somber and emotional color palette. Rather than using bright and energetic colors, Mitchell selected subdued tones such as **mauve**, **brown**, **berry**, and **marigold**, creating a mood of reflection, grief, and emotional complexity. In *Lady Bug*, Mitchell applied layered brushstrokes, lines, and dashes of paint across the canvas in an energetic yet emotional manner. The paint often drips and trickles downward, emphasizing the physical process of painting and connecting her work to the ideas of **Action Painting** within **Abstract Expressionism**. The overlapping colors blend together in some areas while remaining separate in others, creating a sense of movement and emotional tension throughout the composition.

Mitchell varied the thickness of the paint across the canvas. In some sections, the paint became heavily layered as colors ran into one another, producing textured surfaces rich with depth and intensity. Other portions of the canvas remain nearly empty, allowing areas of openness and contrast within the composition. This balance between dense painted passages and unpainted spaces creates rhythm and visual movement while reflecting the emotional complexity of the work. Through paintings like *Lady Bug*, Mitchell

demonstrated how **abstract art** could communicate deeply personal emotions without relying on realistic imagery. Her expressive brushwork, layered colors, and physical approach to paint allowed viewers to experience emotion through movement, texture, and color relationships rather than through recognizable subjects.

Figure \(\PageIndex{3}\): *Lady Bug* (1957, oil on canvas, 197.8 x 274.3 cm) (CC BY-NC 2.0)

Joan Mitchell's *Quartet II for Betsy Jolas* (14.4.4) is a powerful example of her expressive style within **Abstract Expressionism** and demonstrates her remarkable ability to evoke the feeling of nature through abstraction. Rather than painting a realistic landscape, Mitchell used energetic brushwork, layered color, and movement to suggest the experience of vast fields, gardens, and natural environments. The painting reflects her emotional connection to nature and her interest in translating memory and sensation into abstract form. The composition is filled with thick, gestural brushstrokes applied in shades of **white**, **green**, **violet**, and **blue**. These vibrant layers of paint create rhythm, movement, and depth across the canvas. Mitchell's energetic handling of paint gives the work a dynamic quality, while the overlapping colors suggest dense vegetation, foliage, and changing light. Running drips of paint move vertically through the composition, emphasizing the physical process of painting and adding spontaneity and texture to the surface.

Throughout the painting, lighter passages appear to break through the dense arrangement of brushstrokes, creating the impression of glimpses of sky shining through an overgrown garden or field. This interplay between open spaces and concentrated paint creates a balance between chaos and harmony, movement and stillness. Although the image remains abstract, viewers often experience a strong connection to natural landscapes because of Mitchell's use of color, rhythm, and layered composition. *Quartet II for Betsy Jolas* demonstrates Mitchell's mastery of emotional and lyrical abstraction. Through her bold brushwork and complex color relationships, she transformed paint into a sensory experience that captures the energy, beauty, and emotional atmosphere of nature without directly representing it realistically.

Figure \(\PageIndex{4}\): *Quatuor II for Betsy Jolas* (1976, oil on canvas, 279.4 x 680.7 cm) (CC BY-NC-SA 2.0)

Abstract expressionist Joan Mitchell's life and art

During her lifetime artist Joan Mitchell (1925–1992) wasn't as celebrated as her male peers. But as evidenced in a new exhibition at the Baltimore Museum of Art, the abstract expressionist created startlingly colorful and lyrical works that reflect the intensity of a life lived on her own terms.

Lee Krasner

Lee Krasner (1908–1984) was an important American painter and one of the few highly recognized female artists associated with **Abstract Expressionism**. She studied at the **National Academy of Design** and developed strong technical skills before becoming involved with the modern art movement in New York. During the **Great Depression**, Krasner worked for the **WPA Art Project**, creating large public murals as part of government-sponsored art programs. Although figurative mural painting differed from the abstract styles she preferred, the work provided financial support during a difficult economic period. Krasner later became active in the **Artists Union** in New York, where she met many emerging abstract artists, including her future husband, Jackson Pollock. Despite working within a male-dominated art world, Krasner developed her own highly experimental artistic voice and played a major role in shaping Abstract Expressionism. She often organized her career into different artistic phases or series, continually reinventing her techniques and compositions.

In her earliest abstract series, Krasner worked directly on canvas by repeatedly applying paint, scraping it away, rubbing the surface, and repainting over it. This cycle of layering and erasing created heavily worked surfaces filled with texture and complexity. Because of the numerous overlapping layers, many of the paintings developed muted gray tones. Dissatisfied with much of this early work, Krasner destroyed nearly all of the paintings, leaving only one surviving example. Krasner's next major phase became known as the **Little Image series**, consisting of approximately forty paintings. In these works, she built up thick

layers of paint covered with intricate marks resembling **hieroglyphs** or symbolic writing. She added controlled drips and textured surfaces, creating rhythmic and highly detailed abstract compositions. Although her palette often remained limited in color variation, the surfaces became rich with texture and movement.

Shattered Color (14.4.5) is a strong example of Krasner's expressive technique. Thick chunks and drips of paint are layered in multiple colors, creating an energetic explosion of texture across the canvas. The paint appears carefully controlled while still maintaining the spontaneous energy associated with **Action Painting**. Like many Abstract Expressionist works, the composition has a **nonhierarchical** structure, meaning no single area dominates the painting; instead, the viewer's eye moves continuously across the entire surface. Through her innovative use of texture, layering, and gesture, Lee Krasner helped expand the possibilities of abstract painting and established herself as one of the most significant artists of the Abstract Expressionist movement.

Figure \(\PageIndex{5}\): *Shattered Color* (CC BY-NC 2.0)

Figure \(\PageIndex{6}\): *Alice in Wonderland* (CC BY-NC-SA 2.0)

In the early 1950s, Lee Krasner began creating a series of innovative **collage paintings** in which she pasted torn and cut shapes onto the canvas and combined them with expressive layers of paint. By arranging contrasting light and dark colors alongside soft and sharp lines, Krasner created dynamic abstract compositions filled with movement and emotional tension. Her collage works demonstrated her willingness to experiment with materials and composition while expanding the possibilities of **Abstract Expressionism** beyond traditional painting techniques. After the tragic death of her husband, Jackson Pollock, in a car accident in 1956, Krasner entered a deeply emotional period that influenced her powerful **Earth Green series**. These paintings were created on exceptionally large canvases and featured energetic brushstrokes, aggressive gestures, and expressive paint drips that reflected grief, anger, and emotional struggle. The sweeping movement of the paint and the intensity of the compositions revealed Krasner's personal response to loss while also demonstrating her mastery of large-scale abstract painting.

Throughout her career, Krasner struggled for recognition in an art world that often identified her primarily as "Pollock's wife" rather than as an accomplished artist in her own right. Despite these challenges, she continued painting and constantly reinventing her style until her death in 1984. Over time, her work gained greater recognition for its originality, emotional depth, and importance within modern American art. Her painting *Alice in Wonderland* (14.4.6) demonstrates Krasner's use of **hard-edge lines**, exaggerated forms, and open spaces to create a psychologically charged abstract composition. Although the painting remains largely abstract, recognizable facial features such as an eye, nose, and mouth emerge from the distorted forms. The exaggerated elements suggest emotional and psychological states, including greed or tension, while revealing Krasner's interest in expressing inner emotion through abstraction. Through these visible yet distorted figures, Krasner combined elements of abstraction and representation to communicate mood, personality, and psychological complexity.

Paul Jackson Pollock

Jackson Pollock (1912–1956) was one of the most influential American painters of the **Abstract Expressionist** movement and became internationally famous for developing his revolutionary style of **drip painting**. Pollock rejected traditional methods of placing a canvas on an easel and instead laid large canvases directly on the floor of his studio. This approach allowed him to move physically around the painting, dripping, pouring, splashing, and flinging paint across the surface using sticks, hardened brushes, and other tools rather than traditional brush techniques. In works such as *Alchemy* (14.4.7), Pollock created complex layers of paint that intertwined across the canvas in energetic webs of line and texture. The multiple layers built visual depth and movement while recording the physical gestures and movements of the artist. This method became known as **Action Painting** because the process of creating the artwork was as important as the finished painting itself. Pollock transformed painting into a physical and emotional performance, emphasizing spontaneity, motion, and subconscious expression.

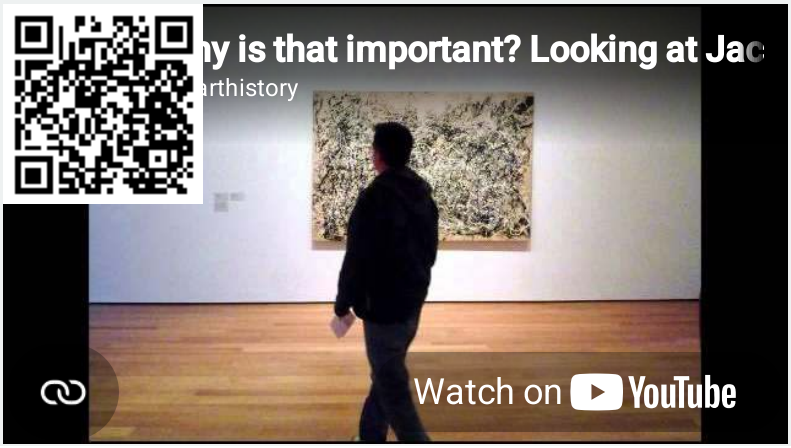
In *Greyed Rainbow* (14.4.8), Pollock combined thick accumulations of paint with delicate meandering lines in shades of gray, white, and black. Beneath the surface, hidden bursts of brighter colors emerge subtly throughout the composition, creating depth and complexity. The contrast between heavy paint textures and lighter flowing lines produces rhythm and visual energy across the entire canvas. Pollock's innovative drip paintings dramatically changed modern art and helped establish the United States as the center of the postwar art world. His radical techniques challenged traditional ideas about composition, control, and artistic process. Although Pollock died tragically in a car accident in 1956 at a relatively young age, he became a lasting symbol of **American abstract painting** and one of the most recognizable artists of the twentieth century.

Figure \(\PageIndex{7}\): *Alchemy* (CC BY-ND 2.0)

Figure \(\PageIndex{8}\): *Greyed Rainbow* (*CC BY-NC 2.0*)

Why is that important? Looking at Jackson Pollock

Why is that Important?: Looking at Jackson Pollock



Mark Rothko

Mark Rothko (1903–1970) was an American painter of **Russian-Jewish** descent and one of the leading figures of the **Abstract Expressionist** movement. Although associated with Abstract Expressionism, Rothko developed a unique style focused less on energetic gesture and more on the emotional and spiritual power of **color**. Influenced by **primitive art**, mythology, philosophy, and psychology, Rothko sought to create paintings that would evoke deep emotional and meditative experiences for viewers. Rothko's paintings often appear deceptively simple, consisting of large rectangular fields of softly layered color floating against contrasting

backgrounds. However, the visual effects are created through many subtle layers of paint that allow underlying colors to glow through the surface. The paintings are intentionally devoid of recognizable figures, objects, or traditional subject matter. Instead, Rothko used color itself as the primary language of emotion. His works create what many viewers describe as a silent yet emotionally intense experience — calm and contemplative on the surface while simultaneously overwhelming and powerful.

Unlike traditional compositions, Rothko's paintings usually have no clear top or bottom orientation. The soft-edged rectangular forms seem to hover weightlessly within undefined space, inviting viewers into an immersive visual environment. Rothko believed his paintings needed to be experienced in person because their scale, luminosity, and color relationships could not be fully understood through reproductions. He often created very large canvases designed to surround the viewer emotionally and psychologically. Rothko believed modern art had reached a dead end because of excessive **commercialism**, mass media imagery, and superficial visual culture. His paintings were intended to provide a moment of reflection and emotional escape from the distractions of modern life. Through vast "multiforms" of color, Rothko hoped to overwhelm viewers emotionally and create deeply personal, almost spiritual encounters with art.

Despite achieving great fame and influence during his lifetime, Rothko struggled with depression and personal difficulties. In 1970, after producing approximately 836 paintings, he tragically committed suicide. Today, Rothko remains one of the most celebrated artists of the twentieth century, known for transforming color into a powerful emotional and spiritual experience within modern art. *No. 5/No. 22* (14.4.9) has brilliantly colored rectangles, as each color influences those adjacent—the reddish-orange middle changes the band of yellow to a perception of some green. However, Rothko wanted his work to extend beyond the interest of color and into an emotional feeling. "Rothko said of this picture that he thought it was rather violent. Perhaps he means the scratching in the center, which is unusual in Rothko's work."[1] *Black, Red Over Black on Red* (14.4.10) is an example of when he stopped pictorial work and started somber paintings with reds, browns, and blacks. Rothko produced many of these style paintings with two or three forms stacked on each other. The colors did not always go to the edge. The black appears to be added on top of the red. Both sets of colors contained a unique opacity with brush marks and texture.

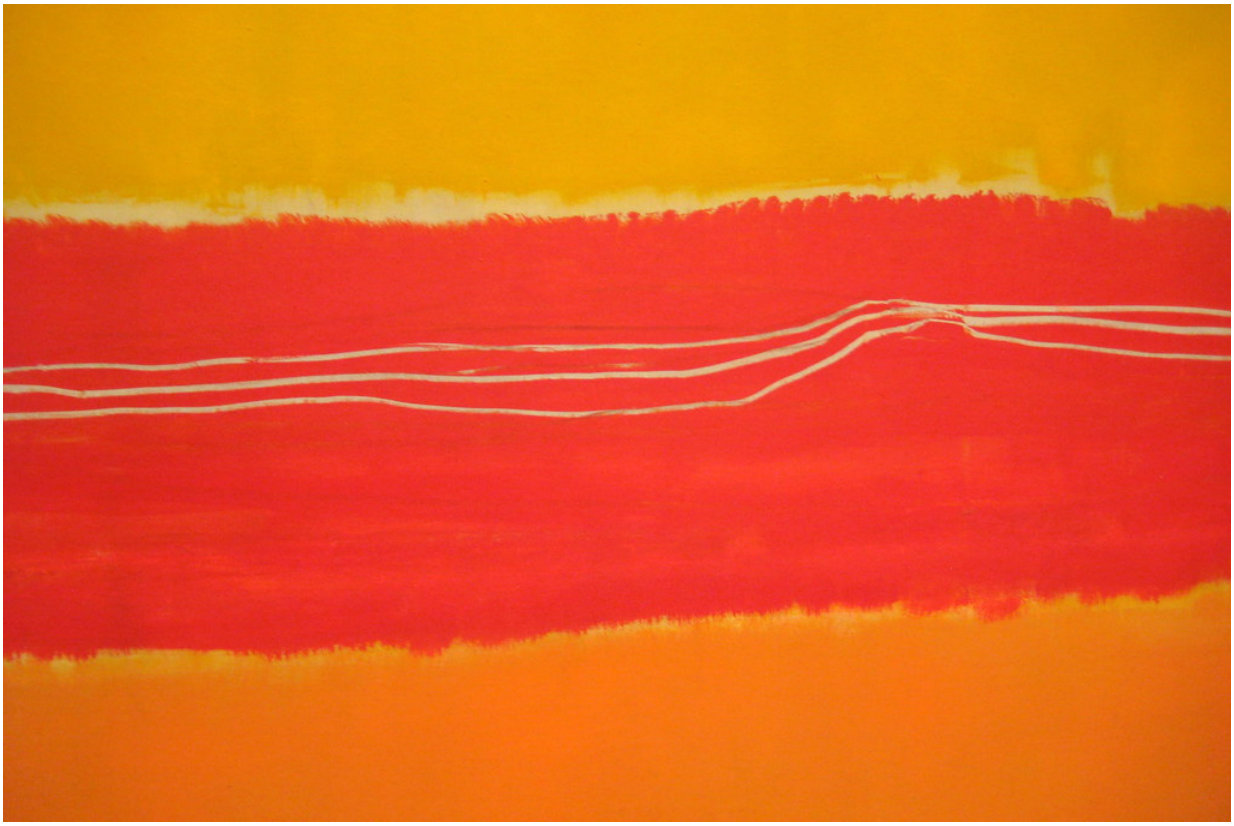


Figure \(\PageIndex{9}\): No. 5/No. 22 (oil on canvas, 297 x 272 cm) (CC BY-NC-ND 2.0)

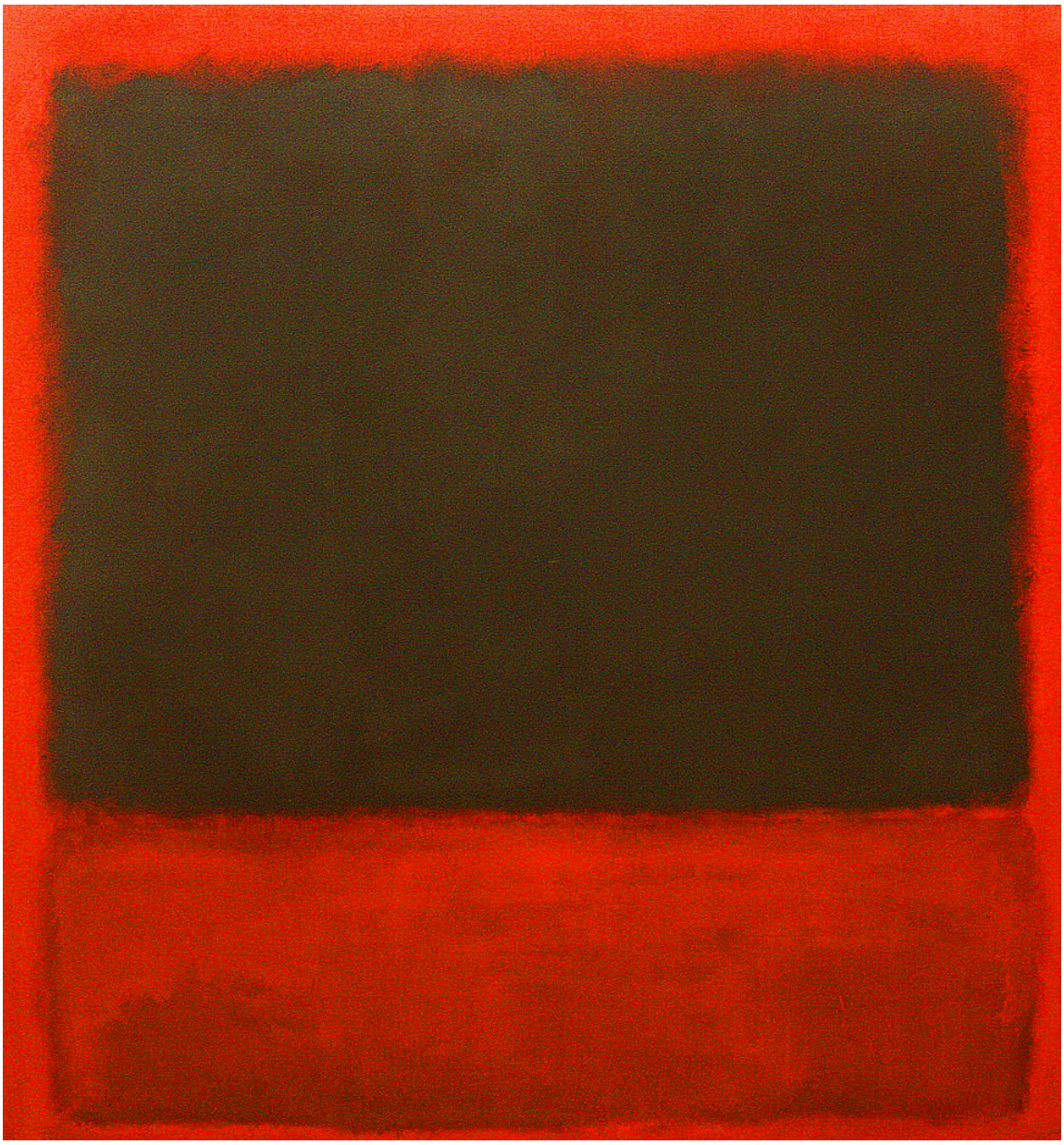


Figure \(\PageIndex{10}\): *Black, Red over Black on Red* (CC BY-NC 2.0)

The case for Mark Rothko

Rectangles after rectangles after rectangles. Rothko was a truly prolific artist who found his groove painting hazy swatches of color and stuck with it until the very end. Maybe you've wondered what the point of it all is, or why he did seemingly the same thing over and over again. Here's your answer.

Helen Frankenthaler

Helen Frankenthaler (1928–2011) was an American painter associated with **Abstract Expressionism** and later **Color Field Painting**. Born in **New York**, Frankenthaler studied art at university and was recognized early in her career as a talented and innovative artist whose work appeared in major exhibitions. She became known for developing experimental painting techniques that transformed modern abstract art and influenced a new generation of painters. One of her most important works, *Mountains and Sea* (14.4.11), introduced her groundbreaking **soak-stain painting** technique. Frankenthaler placed a large unprimed canvas directly on the floor and poured or brushed heavily thinned paint onto the surface. Instead of sitting on top of the canvas like traditional oil paint, the diluted pigments soaked directly into the fabric, creating soft, flowing areas of translucent color. Working from all sides of the canvas, she moved around the painting freely, allowing colors to spread, overlap, and float organically across the surface.

The resulting composition appears airy, fluid, and luminous, with transparent washes of color suggesting impressions of landscape, water, mountains, and atmosphere without directly depicting them realistically. Frankenthaler's process combined the physical freedom associated with **Action Painting** with a more delicate emphasis on color, openness, and spatial atmosphere. Her technique later became highly influential for artists connected to **Color Field Painting**, including Morris Louis and Kenneth Noland. In addition to painting, Frankenthaler experimented with a wide variety of artistic media throughout her career. She worked with sculpture, printmaking, and especially **woodcuts**, where she applied the same sensitivity to color, layering, and texture seen in her paintings. Through her innovations in stain painting and abstraction, Helen Frankenthaler became one of the most influential female artists of twentieth-century modern art.

Figure \(\PageIndex{11}\): *Mountains and Sea* (CC BY-NC-SA 2.0)

While traveling through **Arizona**, Helen Frankenthaler became deeply inspired by the vivid colors, open spaces, and atmospheric beauty of the **desert Southwest**. The dramatic landscape and physical experience of the environment strongly influenced her emotional response and artistic vision. During this period, she created *Desert Pass* (14.4.12), one of her notable abstract paintings inspired by the colors and sensations of the desert landscape. In *Desert Pass*, Frankenthaler used her signature **soak-stain technique** to create soft, flowing areas of color that evoke the natural environment without directly representing it realistically. The painting captures the subtle variations of the desert through layered tones of **brown**, **yellow**, and earthy neutrals spread across the canvas. These colors suggest the flat expanses of sand, rocky hills, and dry terrain characteristic of the Southwest. Rather than outlining specific forms, Frankenthaler allowed the transparent washes of color to blend organically, creating a sense of openness and atmosphere.

She also incorporated small areas of **green** to suggest the scattered vegetation and desert plants found throughout the landscape. The minimalist placement of these green forms provides visual contrast against the warmer earth tones while maintaining the simplicity and spaciousness of the composition. Through delicate color relationships and fluid movement, Frankenthaler conveyed not only the appearance of the desert but also the emotional and sensory experience of being immersed within it. *Desert Pass* demonstrates Frankenthaler's ability to transform landscape into lyrical abstraction. By combining color, movement, and transparency, she created a painting that captures both the physical beauty and emotional atmosphere of the desert environment while expanding the possibilities of modern abstract painting.

Figure \(\PageIndex{12}\): *Desert Pass* (1976, acrylic on canvas, 97.2 x 136.5 cm) (CC BY-NC-ND 2.0)

Frankenthaler, Mountains and Sea

Helen Frankenthaler, Mountains and Sea, 1952, oil and charcoal on unsized, unprimed canvas, 219.4 x 297.8 cm (National Gallery of Art, Washington)

Jean-Michel Basquiat

Jean-Michel Basquiat (1960–1988) was an American artist, musician, and producer who became one of the most influential figures of the **Neo-Expressionist** movement during the 1980s. Basquiat first gained attention as part of a graffiti duo in the **Lower East Side of Manhattan**, where he wrote cryptic social and political messages on city walls under the name **SAMO**. His early street art reflected themes of inequality, race, power, and urban life, subjects that would continue throughout his artistic career. Basquiat was largely **self-taught** and left high school during his senior year. To survive financially, he sold hand-painted postcards, T-shirts, and artwork on the streets of New York City. Within only a few years, his work attracted the attention of galleries and critics, and by the

age of twenty he was exhibiting in major art shows and quickly became internationally famous. His paintings combined elements of **graffiti**, **symbolism**, **text**, **drawing**, **collage**, and **mixed media**, creating energetic works filled with layered meanings and social commentary.

Basquiat's art often explored the contrasts between **poverty and wealth**, **segregation and integration**, fame and exploitation, while addressing issues of **racism**, **colonialism**, and class struggle. His paintings included fragmented figures, words, numbers, anatomical sketches, symbols, diagrams, and references to African heritage, jazz music, and popular culture. Although his works appear spontaneous and chaotic, they contain carefully layered messages about identity, power, and historical oppression. During a visit to **Los Angeles**, Basquiat created *Untitled (Black Tar and Feathers)* (14.4.13), considered one of his breakthrough works. The painting marked the development of many themes and stylistic elements that would define his career. Constructed from multiple wooden panels, the work combines painted imagery with **Xerox-generated photographs** and collage elements attached directly to the wood surface. Basquiat covered the composition with a distinctive yellow paint layer while using heavy black oil-stick lines, symbols, and expressive marks to unify the chaotic imagery. The complex arrangement of figures and symbols demonstrates his growing interest in combining text, image, and cultural references into a single visual language.

In another *Untitled* (14.4.14) painting, Basquiat explored themes of identity and emotional struggle. He frequently referenced **African masks** and African artistic traditions as a way to reconnect with cultural identity and challenge Western artistic conventions. The distorted face in the painting appears fragmented and misaligned, with uneven eyes and raised hands suggesting frustration, tension, or emotional exhaustion. Despite these troubling emotional themes, the painting bursts with vibrant colors and energetic black lines that create movement and rhythm. The figure appears alive within the atmosphere of **New York City**, possibly dancing or reacting to music from a nearby **boogie box**, reflecting Basquiat's strong connection to urban culture, music, and street life. Although Basquiat achieved enormous fame during the 1980s, he struggled with heroin addiction and died tragically in 1988 at the age of twenty-seven. Despite his short life, Basquiat left behind a powerful artistic legacy that continues to influence contemporary art, especially in discussions of race, identity, social justice, and urban culture.

Figure \(\PageIndex{13}\): *Untitled (Yellow Tar and Feathers)* (1982, acrylic, oilstick, crayon, paper collage, feathers on wood panel, 245.1 x 229.2 cm) (CC BY-NC-SA 2.0)

Figure \(\PageIndex{14}\): *Untitled* (CC BY-NC 2.0)

Artists Flight: Jean-Michel Basquiat

One of the most influential American artists of the 20th century, Jean-Michel Basquiat was a rock star of the early ’80s New York art scene.

Edgar Heap of Birds

Edgar Heap of Birds (born November 22, 1954) is a contemporary Native American artist known for working across many artistic disciplines, including **large-scale drawings**, **prints**, **public art**, **sculpture**, and politically charged text-based installations. Heap of Birds is **Southern Cheyenne** and a member of both the **Cheyenne and Arapaho Tribes**. Born in **Kansas**, he studied art at the **University of Kansas**, where he earned a **Bachelor of Fine Arts**, and later completed a **Master of Fine Arts** at **Temple University**. Heap of Birds first gained national attention through his powerful **political signage projects**, which used public spaces

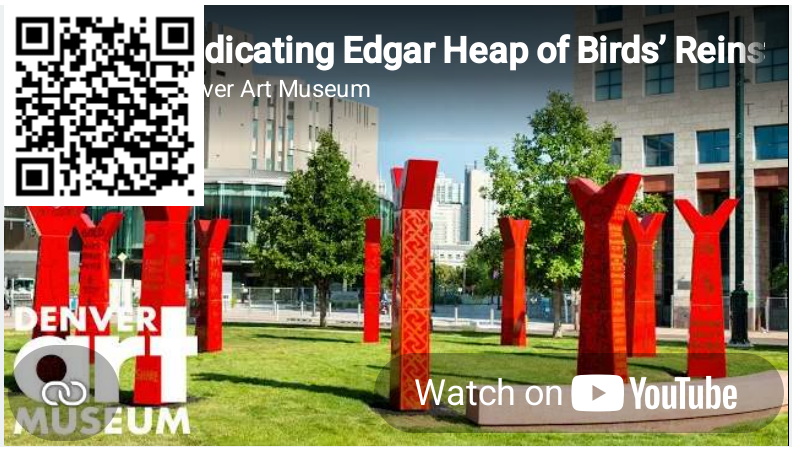
to confront historical injustice, colonialism, and the treatment of Indigenous peoples in North America. His works often consist of signs, text, and symbolic imagery placed in meaningful locations to force viewers to reconsider forgotten or ignored histories. One of his well-known projects involved installing forty signs along the **Mississippi River** in **Minneapolis** to honor the forty Dakota people executed following the **United States–Dakota Conflict of 1862**. Through language and public placement, Heap of Birds uses art to reclaim Indigenous history, land, identity, and memory.

Much of his work addresses themes of **displacement**, **colonial violence**, **cultural survival**, and the relationship between Indigenous peoples and the land. By using direct words and public installations, Heap of Birds challenges viewers to confront the historical treatment of Native communities and the ongoing consequences of colonization. His sculpture *Wheel* (14.4.15) is a large **porcelain enamel on steel** work inspired by the traditional **Medicine Wheel** of the **Big Horn Mountains in Wyoming**, a sacred ceremonial and spiritual site for many Indigenous peoples. Standing approximately 15.24 meters high and painted bright red, the sculpture incorporates upward-reaching tree branch forms that symbolize gathering, ceremony, and dance formations. The circular structure references spiritual unity, cultural continuity, and sacred space while connecting contemporary sculpture to Indigenous traditions and belief systems. In addition to his artistic career, Heap of Birds has taught at institutions such as **Yale University**, the **Rhode Island School of Design**, and the **University of Cape Town**. His teaching and seminars focused on issues facing contemporary artists, particularly Indigenous artists navigating cultural identity, political activism, and artistic expression. Today, Heap of Birds continues to work internationally with Indigenous communities, advocating for **social justice**, cultural visibility, and participation in creative and public artistic practices.

Figure \(\PageIndex{15}\): Wheel (1997-2005, porcelain enamel on steel and concrete) (CC BY-NC 2.0)

Dedicating Edgar Heap of Bird's Reinstalled "Wheel" Sculpture

As part of the Denver Art Museum's Martin Building renovation project, the sculpture "Wheel," by Cheyenne and Arapaho artist HOCK E AYE VI Edgar Heap of Birds, was relocated to the lawn on Martin Plaza outside of the museum's Hamilton Building.



Beyond the Chiefs was a public art exhibition created by Edgar Heap of Birds at the **University of Illinois** to encourage viewers to reflect on the Indigenous history of the land occupied by the university and the state itself. The installation challenged the community to reconsider the use of Native American imagery and mascots while recognizing the histories of Indigenous peoples connected to the region. The signs (14.4.16, 14.4.17) prominently display the words **"Fighting Illini"** printed backwards, an intentional strategy designed to disrupt familiar expectations and force viewers to look more carefully at the language and its meaning. By reversing the words, Heap of Birds transformed a well-known university phrase into a symbol of reflection and critique. Each sign also includes the name of a local **Cheyenne chief**, connecting contemporary viewers to Indigenous leadership and historical memory.

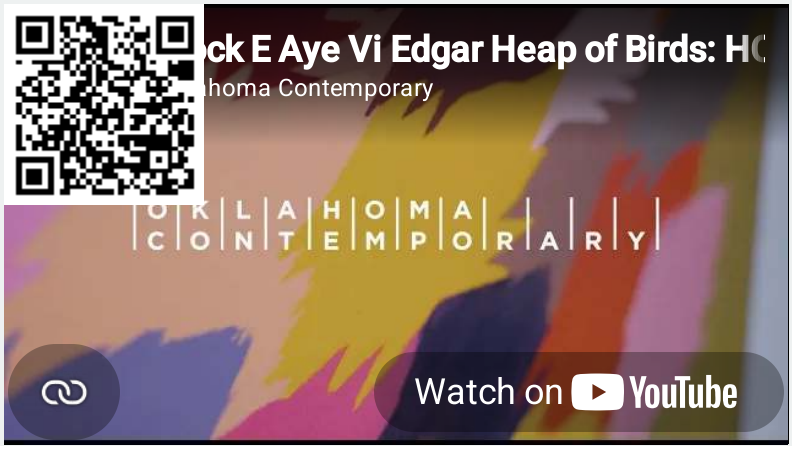
The exhibition emphasized that the lands occupied by the university once belonged to numerous Native nations whose histories are often ignored or erased in public memory. *Beyond the Chiefs* encouraged students, faculty, and visitors to acknowledge the Indigenous peoples whose homelands existed within the present-day boundaries of **Illinois**. The installation included references to multiple Native communities, many of which continue to exist today with active governments, living cultures, languages, and traditions. Through this combination of **public art**, **text**, and historical awareness, Heap of Birds used art as a form of social and political engagement. His work challenges viewers to confront issues of colonization, cultural identity, historical erasure, and Indigenous sovereignty while promoting greater recognition and respect for Native histories and communities. All of them remain, even if some are only remnants of what they once were. Members of these groups live, learn, and work on campus."[2]

Figure \(\PageIndex{16}\): *Beyond the Chief* signs (2009, metal with enamel) (C BY-NC-SA 2.0)

Figure \(\PageIndex{17}\): *Beyond the Chief* signs (CC BY-NC-SA 2.0)

Hock E Aye Vi Edgar Heap of Birds

Hock E Aye Vi Edgar Heap of Birds: HONOR SONG is a campus-wide installation that spans over four decades of artistic production by the renowned artist Edgar Heap of Birds.



[1] Retrieved from https://www.moma.org/audio/playlist/1/30

[2] Retrieved from https://americanindiansinchildrensli...it-beyond.html

14.5: Minimalism

Definition: Term

- **Minimalism** – An art movement that uses simple forms, limited colors, and minimal design elements to create works focused on clarity and simplicity.
- **Sparse Design** – A style using only a few carefully selected elements without unnecessary decoration or detail.
- **Geometric Abstraction** – Abstract art based on geometric shapes such as squares, rectangles, circles, and lines.
- **Abstract Expressionism** – A post–World War II art movement emphasizing emotional expression, spontaneity, and abstract forms.
- **Bauhaus** – A German school of art and design that emphasized simplicity, functionality, and the unity of art, craft, and technology.
- **Constructivism** – A modern art movement that used geometric forms and industrial materials to create structured and functional art.
- **Monochromatic Colors** – Different shades, tones, or variations of a single color.
- **Hard-Edged Lines** – Sharp, clean lines with clearly defined edges and little blending.
- **Geometric Forms** – Shapes such as circles, squares, rectangles, and triangles used in art and design.
- **Industrial Materials** – Manufactured materials such as steel, concrete, aluminum, plastic, and glass used in modern and contemporary art.
- **Repetition** – The repeated use of shapes, colors, lines, or patterns within an artwork.
- **Modernism** – A broad cultural and artistic movement that embraced experimentation, innovation, and the rejection of traditional styles.
- **Simplicity** – The quality of being clear, uncomplicated, and reduced to essential elements.
- **"Less is More"** – A design principle suggesting that simplicity and reduction can create stronger visual impact.
- **Contemporary Art** – Art created in recent or current times that reflects modern ideas, issues, and experimentation.
- **Visual Balance** – The arrangement of visual elements in a composition to create stability and harmony.
- **Form** – The shape, structure, or physical appearance of an object in art.
- **Space** – The area around, between, or within objects in an artwork.
- **Structure** – The organization and arrangement of parts within a work of art.
- **Perception** – The way the eyes and brain interpret visual information and understand what is seen.

Minimalism is an art movement based on the use of simple, sparse, and reduced design elements to create a work of art. Emerging after **World War II** and becoming especially prominent in **New York City** during the 1960s, Minimalism developed partly in response to the emotional intensity and energetic brushwork of **Abstract Expressionism**. Minimalist artists rejected highly personal expression and instead focused on simplicity, order, geometry, and clarity. The movement was strongly influenced by the ideas of the **Bauhaus** and **Constructivism**, both of which emphasized clean design, functionality, and geometric organization. Early Minimalist works often evolved from forms of **geometric abstraction**, gradually reducing art to its most basic visual elements. Artists commonly used **hard-edged lines**, **monochromatic colors**, repeated shapes, grids, and industrial materials while avoiding recognizable figures, symbolism, or narrative content.

Minimalist artworks frequently feature colored stripes, simple geometric forms, and carefully organized compositions stripped of decoration or unnecessary detail. The movement embraced the philosophy that **"less is more,"** meaning that simplicity itself could create powerful visual and intellectual experiences. Rather than overwhelming viewers with emotion or complexity, Minimalist artists sought to create calm, balanced works focused on form, space, proportion, and material. Many critics and viewers initially reacted negatively to Minimalism because its simplicity appeared cold, impersonal, or lacking artistic skill compared to earlier expressive movements. However, Minimalism became one of the most influential art movements of the twentieth century, shaping later developments in **architecture**, **design**, **sculpture**, and **contemporary art**. By reducing art to its bare essentials, Minimalism challenged viewers to focus more carefully on space, structure, material, and perception itself.

Anne Truitt

Anne Truitt (1921–2004) was an American artist associated with the **Minimalist** movement, best known for her elegant geometric sculptures emphasizing **color**, **space**, and form. Truitt graduated from **Bryn Mawr College** with a degree in **psychology** and briefly worked as a nurse before deciding to pursue a career in art. She initially created figurative sculptures but later shifted her

focus toward simplified geometric forms that became her signature artistic style. During the 1960s, Truitt developed a unique approach to Minimalist sculpture using large vertical wooden forms that often resembled columns or pillars. Unlike many Minimalist artists who used industrial materials and machine production, Truitt carefully handcrafted and personally finished her sculptures. Cabinet makers constructed the basic wooden forms from her drawings, after which she meticulously applied layers of **gesso** and numerous coats of **acrylic paint**. Between each layer, she carefully sanded the surfaces to eliminate visible brushstrokes and create smooth, luminous planes of color.

Truitt alternated the direction of her brushstrokes — moving side to side or vertically — to produce subtle visual depth and texture within the painted surfaces. The resulting sculptures appear calm, refined, and almost weightless despite their solid construction. She often placed the sculptures on recessed platforms, creating the illusion that the forms floated slightly above the ground and enhancing the viewer's awareness of surrounding space. A major exhibition titled *Anne Truitt: Perception and Reflection* highlighted many of her signature column sculptures and provided a broader understanding of her artistic contributions. In works such as those shown in images (14.5.1 and 14.5.2), Truitt wrapped carefully controlled color around geometric forms of varying heights, allowing the relationship between shape, color, light, and space to become the central focus. Although her work was often overlooked between the 1960s and 1980s, later exhibitions helped establish Truitt as an important figure in **Minimalism** and modern American sculpture. Through her precise craftsmanship and sensitive use of color, Anne Truitt transformed simple geometric structures into emotionally resonant sculptures that invite quiet contemplation and careful visual perception.

Figure \(\PageIndex{1}\): *Perception and Reflection* (CC BY-NC 2.0)

Figure \(\PageIndex{2}\): *Anne Truitt at the Hirshhorn* (CC BY-NC-ND 2.0)

Anne Truitt: Sculpture

Thirteen of Truitt's sculptures, made between 1962 and 2004, will be on view, making this the most comprehensive exhibition of Truitt's work in New York in almost 20 years. A number of works in the exhibition were included in the Hirshhorn Museum's acclaimed retrospective this past fall in Washington, D.C., which did not travel.

John McCracken

John McCracken (1934–2011) was an American contemporary artist associated with **Minimalism** and known for developing a distinctive sculptural form consisting of narrow painted planks leaning against walls. McCracken viewed these leaning planks as symbolic objects that connected the physical world with imagination and perception. He described the plank as representing

tangible objects found in everyday life, such as trees, buildings, or human-made structures, while the wall symbolized the realm of thought, illusion, and imagination. McCracken's sculptures were typically constructed from **plywood** coated with layers of **fiberglass** and **resin**, creating highly polished reflective surfaces. He carefully applied multiple layers of paint, sanding and polishing each coat to achieve smooth, luminous finishes that almost appeared industrially manufactured. His works often used bright and unconventional colors, as in *Love in Italian* (14.5.3), including intense reds, oranges, yellows, and unusual tones such as **bubble-gum pink**, allowing color itself to become an important visual and emotional element.

In works such as *Untitled* (14.5.4), featuring deep maroon and red tones, McCracken divided the composition into carefully balanced shapes and symmetrical forms. The polished surfaces and geometric simplicity create a sense of calm precision while also producing subtle reflections and optical effects. Through repetition, symmetry, and highly refined craftsmanship, McCracken created artworks that blur the boundary between **painting** and **sculpture**. Although Minimalism often emphasized industrial impersonality, McCracken's work introduced a more meditative and philosophical dimension. His sculptures invite viewers to consider relationships between object and space, reality and illusion, material and imagination. By reducing art to simple geometric forms enhanced through color and surface, McCracken expanded the possibilities of minimalist sculpture and contemporary abstract art.

Figure \(\PageIndex{3}\): *Love in Italian* (1967, plywood, fiberglass) (CC BY-NC 2.0)

Figure \(\PageIndex{4}\): *Untitled (Red Plank)* (1978, polyester resin on wood) (CC BY-NC 2.0)

Donald Judd

Donald Judd (1928–1994) was an American artist, critic, and sculptor who became one of the leading figures of the **Minimalist** movement. Although he initially worked as a painter, Judd gradually abandoned traditional painting in favor of three-dimensional structures defined by straight lines, geometric precision, and industrial materials. He believed art should exist as a real object in space rather than create illusions or emotional narratives. Judd preferred simple **geometric forms** such as squares, rectangles, and cubes because they allowed him to explore ideas of **scale**, **proportion**, repetition, and spatial relationships. He developed his own vocabulary to describe his artworks, referring to them as **"stacks," "boxes,"** and **"progressions."** These freestanding or wall-mounted forms emphasized order, clarity, and repetition while eliminating unnecessary decoration or symbolism.

To create his sculptures, Judd frequently used **metal**, **plywood**, **concrete**, **Plexiglas**, and industrially manufactured materials. He also experimented with **enamel on aluminum**, allowing him to incorporate brighter and more varied colors into his otherwise restrained minimalist works. Judd valued precision and often worked with professional fabricators to produce smooth, highly controlled surfaces that reflected the industrial aesthetic of Minimalism. As his sculptures increased in scale, Judd purchased a five-story building where he could design, construct, and permanently install large artworks. His interest in permanent installations reflected his belief that artworks should exist in carefully controlled spaces where viewers could experience the relationship between object, architecture, and environment.

Between 1980 and 1984, Judd created fifteen monumental concrete sculptures on land in **Texas**. In works such as *Untitled* (14.5.5), large concrete box-like structures were cast directly on-site using custom forms to shape the design. These massive geometric forms stand isolated within the open Texas landscape, emphasizing simplicity, permanence, and the interaction between sculpture and surrounding space. Judd also created numerous wall sculptures exploring repetition and modular design. In another *Untitled* (14.5.6), constructed from **wood** and **Plexiglas**, four identical corner boxes are connected through evenly sized wooden crossbars. The balanced symmetry and repeated forms create visual harmony while focusing attention on material, structure, and spatial organization.

Through his theoretical writings and innovative sculptures, Donald Judd helped define the principles of **Minimalism** and profoundly influenced contemporary sculpture, architecture, and design. His work emphasized simplicity, material honesty, and the direct physical experience of space and form. In the middle two boxes, Judd widened the cross bars and changed the background color—all minimal shapes of squares and rectangles with little embellishment. Judd wrote, "A shape, a volume, a color, a surface is something itself. It shouldn't be concealed as part of a fairly different whole."[1]

Figure \(\PageIndex{5}\): *Untitled* (CC BY-SA 3.0)

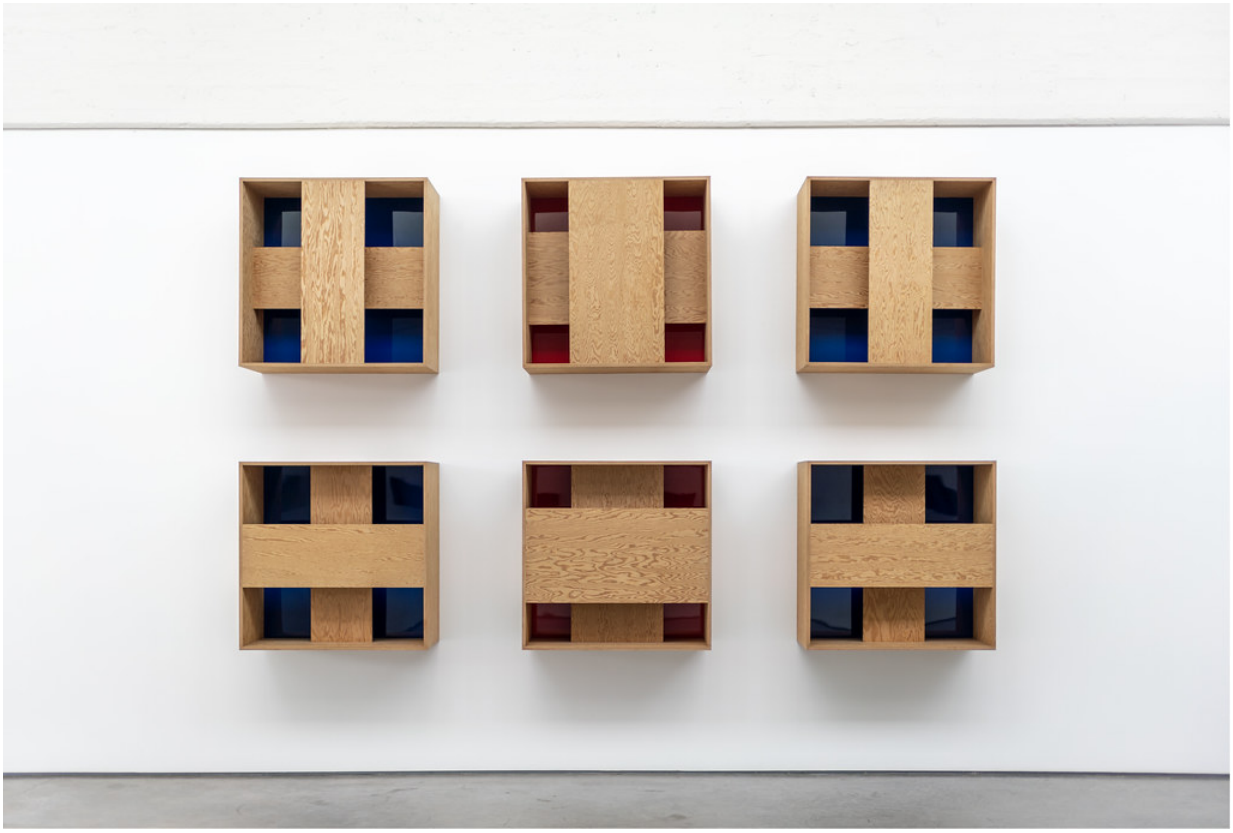
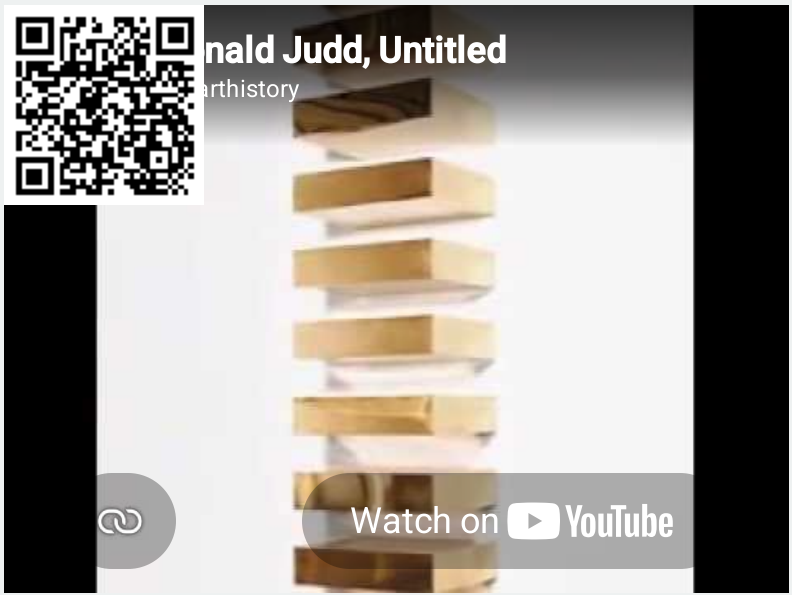


Figure \(\PageIndex{6}\): *Untitled (1991, plywood, Plexiglas, 100.1 x 100.1 x 49.8 cm)* (CC BY-NC-SA 2.0)

Donald Judd, Untitled

Donald Judd, Untitled , 1969, ten copper units, each 9 x 40 x 31 inches with 9 inch intervals (Guggenheim Museum, New York



Ellsworth Kelly

Ellsworth Kelly (1923–2015) was an American artist associated with **Minimalism**, **Color Field Painting**, and geometric abstraction. Born in **New York** and raised in **New Jersey**, Kelly developed an early fascination with the shapes and colors of nature, especially birds, through bird watching with his grandmother. The observation of natural forms, patterns, shadows, and spatial relationships strongly influenced his later artistic style. Kelly studied at the **Pratt Institute** before being drafted into the

United States Army during **World War II**. While serving, he worked in a camouflage unit where his artistic skills were used to create visual disguises and deceptive patterns. This experience deepened his understanding of shape, color, perception, and abstraction. After the war, Kelly devoted his artistic career to creating paintings, collages, sculptures, and works on paper focused on simplified forms and bold areas of color.

Rather than painting recognizable objects directly, Kelly often observed forms from the surrounding world — such as the shadow of a staircase, leaves, architectural details, or reflections — and transformed them into abstract geometric shapes. His work emphasized clarity, balance, color, and visual perception while removing unnecessary detail and emotional expression. Kelly also experimented with collage and mathematical organization. In one series, he created collages using eighteen different colors arranged according to a mathematical formula. After completing the larger composition, he used the leftover colored squares to create a smaller collage based on an **eight-by-eight grid**. He randomly positioned the remaining colored shapes while leaving multiple white spaces throughout the composition. The balance between color and empty space created rhythm, movement, and visual harmony within the otherwise simple geometric arrangement.

Through his careful use of shape, color, and abstraction, Ellsworth Kelly became one of the most influential artists of postwar American art. His work demonstrated how simplified forms inspired by the natural world could create powerful visual experiences through minimal means. Kelly decided to turn the concept into a painting and created *Colors for a Large Wall* (14.5.7). He liked how randomly placed patterns created an interesting painting without structure. Kelly said, "I feel that the freedom of colors in space is very much what I've always been involved in."[2] Kelly joined colored panels together in the painting *Red Orange White Green Blue* (14.5.8). The dominance of any one color is hidden in the unity of each panel, holding its own. He wanted to "find the freedom of colors in space.

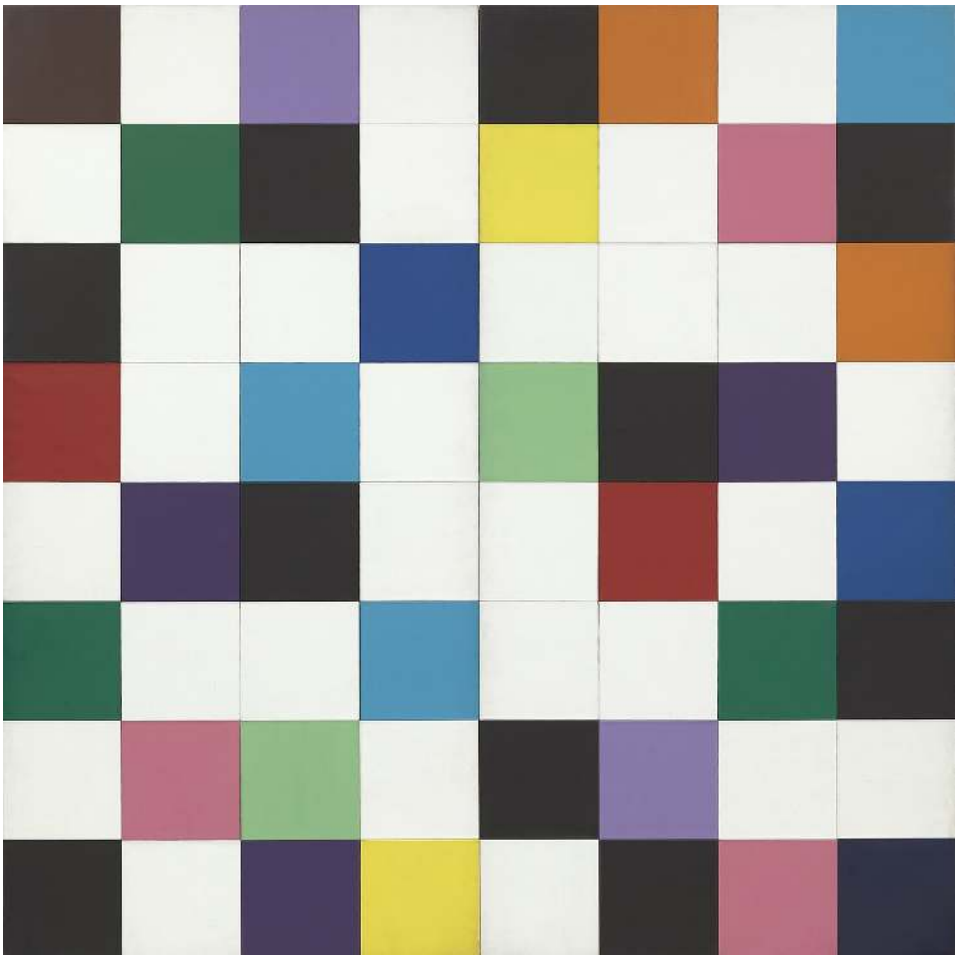


Figure \(\PageIndex{7}\): *Colors for a Large Wall* (1951, oil on canvas, 240 x 240 cm) (CC BY-SA 4.0)

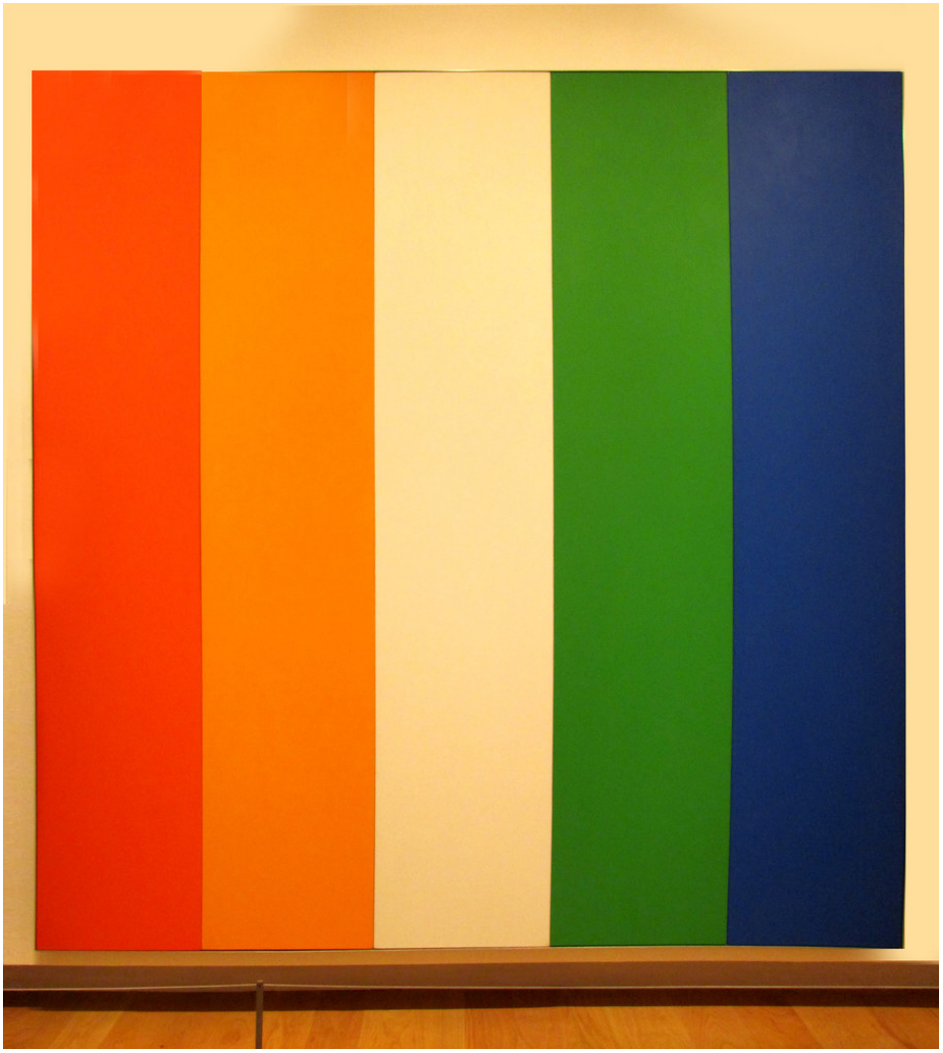


Figure \(\PageIndex{8}\): *Red Orange White Green Blue* (1968, oil on canvas, 304.8 x 305.7 cm) (C BY-NC 2.0)

[1] Retrieved from https://walkerart.org/calendar/2001/...xoCjigQAvD_BwE

[2] Retrieved from https://www.moma.org/artists/3048-ellsworth-kelly

14.6: San Francisco Bay Area Figurative

Definition: Term

- **San Francisco Bay Area Figurative Movement** – A modern art movement that emerged in California after World War II, combining abstract painting techniques with recognizable figures, landscapes, and everyday subjects.
- **Abstract Expressionism** – A postwar art movement emphasizing abstraction, emotional expression, gesture, and spontaneous painting techniques.
- **Figuration** – The use of recognizable human figures, objects, or scenes in artwork.
- **Expressionism** – An art movement emphasizing emotional intensity through exaggerated color, brushwork, and form.
- **Regionalism** – An American art movement focused on depicting local landscapes, communities, and everyday life.
- **Fauvism** – An early modern art movement known for bright, bold, and unrealistic colors used for emotional impact.
- **Flattened Perspective** – A style in which depth and three-dimensional space are reduced, making objects appear compressed against the surface of the painting.
- **Still Life** – Artwork depicting arranged objects such as fruit, flowers, dishes, or household items.
- **Landscape Painting** – Artwork representing outdoor scenery such as mountains, fields, rivers, or city views.
- **Brushwork** – The visible application and movement of paint made by an artist's brush.
- **Color Palette** – The range of colors chosen and used by an artist in a work of art.
- **Representation** – The depiction of recognizable people, objects, or scenes in art.
- **Modern Art** – Art created during the late nineteenth and twentieth centuries that emphasized experimentation and new artistic ideas.
- **First Generation** – The earliest group of artists associated with a movement who establish its style and ideas.
- **Bridge Generation** – Artists who connected the early and later phases of the Bay Area Figurative Movement.
- **Second Generation** – Later artists who continued and expanded the ideas of the movement.
- **David Park** – A painter who helped begin the Bay Area Figurative Movement by returning to figurative painting from abstraction.
- **Richard Diebenkorn** – A Bay Area Figurative artist known for combining abstraction with landscapes and figures.
- **Elmer Bischoff** – An artist associated with the Bay Area Figurative Movement recognized for expressive figurative paintings.
- **West Coast Art** – Art developed primarily in the western United States, often emphasizing experimentation, color, and regional identity.

The **San Francisco Bay Area Figurative Movement** emerged in the late 1940s and continued through the 1970s as an important transition in American modern art. The movement developed as artists began moving away from the purely nonrepresentational style of **Abstract Expressionism** and returned to painting recognizable figures, landscapes, and everyday objects. Unlike the emotional abstraction dominating the New York art scene, Bay Area artists combined abstraction with representation, creating a unique style rooted in observation, color, and personal experience. The movement is generally divided into three phases: the **first generation**, the **bridge generation**, and the **second generation**. It began when David Park, an art teacher in **San Francisco**, abandoned abstraction and returned to figurative painting. His decision inspired many other artists in the Bay Area to reconsider the role of the human figure and recognizable subject matter within modern art.

The Bay Area Figurative artists blended influences from multiple artistic traditions. They borrowed expressive brushwork and emotional energy from **Expressionism**, regional subject matter from **Regionalism**, and bold, vibrant color palettes from **Fauvism**. However, unlike purely abstract artists, they prioritized **figuration**, making recognizable people, landscapes, interiors, and still-life objects central to their compositions. Many works depicted scenes from everyday life and locations throughout the **San Francisco Bay Area**, emphasizing personal experience and local identity. One of the defining stylistic characteristics of the movement was the use of a **flattened perspective**, where space appears compressed and depth is reduced. This approach allowed artists to maintain the energetic surface qualities of abstract painting while still presenting identifiable subjects. Loose brushwork, broad areas of color, and simplified forms became hallmarks of the style. The three major artists associated with the first generation of the movement were David Park, Richard Diebenkorn, and Elmer Bischoff. Together, they helped establish a distinctly West Coast approach to modern art that balanced abstraction and representation while emphasizing color, atmosphere, and the human experience.

David Park

David Park (1911–1960) was an American painter and teacher at the **San Francisco Art Institute** who became one of the founders of the **San Francisco Bay Area Figurative Movement**. Park was deeply interested in **figurative art**, yet he also embraced many of the expressive qualities of **Abstract Expressionism**, combining abstraction with recognizable subjects. Rather than painting highly detailed scenes, he used bold color, expressive brushwork, and simplified forms to create emotional and visual impact. Born in **Boston**, Park moved to **Los Angeles** as a teenager and studied at the **Otis Art Institute**. After **World War II**, he began teaching at the San Francisco Art Institute, where he met fellow artists Richard Diebenkorn and Elmer Bischoff. Together, they experimented with color, shape, texture, and abstraction while returning to recognizable figures and everyday scenes. Their work helped establish a distinctly West Coast alternative to the purely abstract art dominating New York.

Park often painted ordinary scenes from daily life, focusing on people, interiors, beaches, musicians, and city streets. He worked with large brushes loaded with thick paint, creating energetic surfaces filled with texture and movement. His paintings maintained the freedom and spontaneity of abstraction while still depicting understandable subjects. In *Two Bathers* (14.6.1), Park used bold brushstrokes and richly layered paint to explore the relationship between human figures and nature. The two women are heavily abstracted, yet viewers can still recognize one figure drying herself with a towel. Their gazes move in different directions, creating a sense of emotional separation and quiet contemplation. Thick, expressive brushstrokes dominate the surface of the painting, emphasizing color and gesture as much as the figures themselves.

In *Newspaper* (14.6.2), Park transformed an ordinary household moment into a semi-abstract composition. Although the image remains simplified and lacks detailed realism, viewers can easily recognize the subject of a woman reading a newspaper. The newspaper itself is represented with minimal black-and-white sketches and shapes, yet it remains identifiable through suggestion rather than detail. Park's use of heavy paint and simplified forms causes parts of the figure, such as the woman's hand, to blend into the surrounding table through a few expressive strokes. Through his combination of abstraction, figuration, and expressive color, David Park helped redefine modern American painting and established the foundation for the Bay Area Figurative Movement.

Figure \(\PageIndex{1}\): *Two Bathers* (1958, oil on canvas) (C BY-NC 2.0)

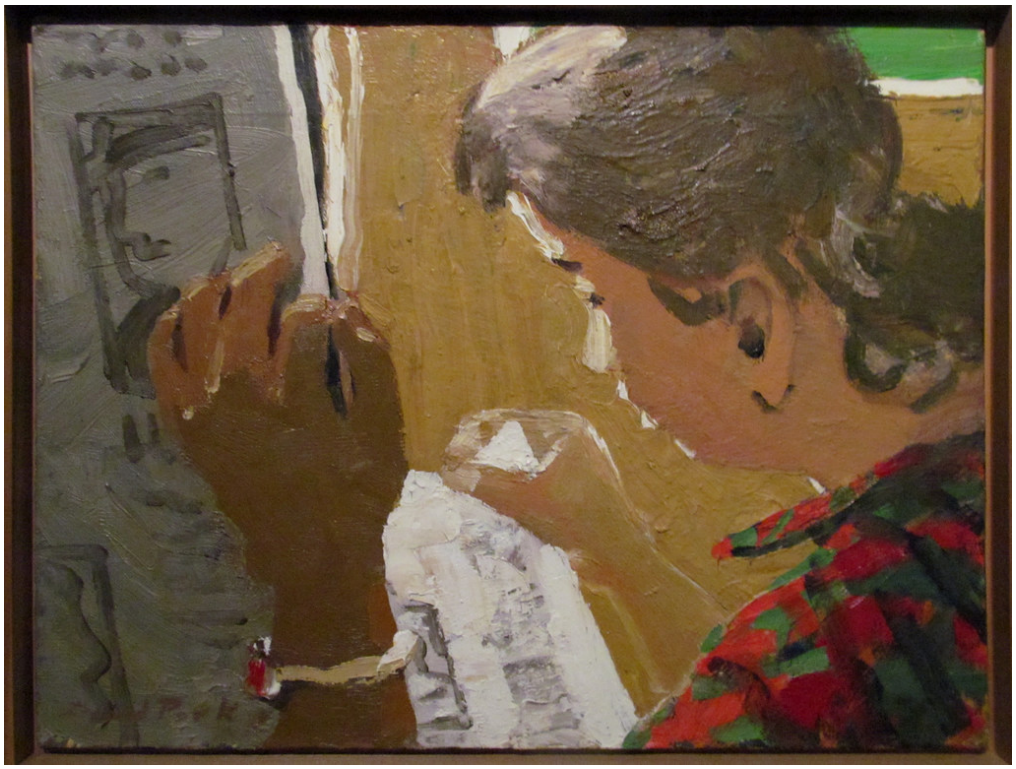


Figure \(\PageIndex{2}\): *Newspaper* (1953, oil on canvas) (CC BY-NC 2.0)

Richard Diebenkorn

Richard Diebenkorn (1922–1993) was an American painter whose work evolved from **Abstract Expressionism** into the **San Francisco Bay Area Figurative Movement**. He studied at **Stanford University**, served in the **United States Marine Corps** during **World War II**, and later returned to California to study at the **California School of Fine Arts** in San Francisco. Early in his career, Diebenkorn embraced the emotional freedom and expressive brushwork of Abstract Expressionism as a form of personal expression. While living in **Berkeley**, Diebenkorn became closely associated with David Park and Elmer Bischoff, whose return to figurative imagery inspired him to shift his own artistic style. Diebenkorn began combining abstraction with recognizable landscapes, figures, and everyday scenes while maintaining the bold colors and painterly surfaces of modern abstraction.

In *Cityscape I* (14.6.3), Diebenkorn depicted a suburban California street using a highly structured composition divided into geometric planes of color. The dark black roadway cuts strongly through the center of the painting before gradually shifting into gray as it climbs the hill. Simplified houses, fields, grasslands, and roads are reduced into blocks and shapes of color rather than detailed representations. The top of the composition suggests a hill or elevated landscape disappearing beyond the viewer's sight, emphasizing both abstraction and spatial depth. In *Figure on a Porch* (14.6.4), Diebenkorn portrayed a solitary figure gazing outward toward the sea and distant hills. The image balances recognizable subject matter with abstract arrangements of color and form. Large blocks of paint suggest landscape elements while remaining simplified and ambiguous. The "porch" itself appears almost like a patch of earth or dirt, yet the title guides viewers to interpret the area differently. A thin white fence stretches horizontally across the composition, visually dividing the painting into sections and contrasting with the thick, textured paint surrounding it.

Later in his career, Diebenkorn created approximately 140 paintings inspired by the **Ocean Park** area in California. These works combined aerial perspectives, abstract geometry, city streets, landscapes, and ocean imagery into complex compositions filled with sharp contrasts of color and form. Through his ability to merge abstraction with observation, Diebenkorn became one of the most important artists associated with both Abstract Expressionism and the Bay Area Figurative Movement.

Figure \(\PageIndex{3}\): *Cityscape I 360* (1963, oil on canvas) (CC BY-NC 2.0)

Figure \(\PageIndex{4}\): *Figure on a Porch* (1959, oil on canvas) (CC BY-NC 2.0)

Richard Diebenkorn on Beginning a Painting

n this excerpt, Richard Diebenkorn reveals how he approaches a blank canvas. Richard Diebenkorn: The Berkeley Years, 1953—1966 is on view at the de Young Museum June 22—September 29, 2013.

Elmer Bischoff

Elmer Bischoff (1916–1991) was an American visual artist closely associated with the **San Francisco Bay Area Figurative Movement**. Raised in **Berkeley, California**, Bischoff attended the **University of California, Berkeley**, where he completed both his undergraduate and master's degrees before beginning a teaching career. His academic background and artistic training helped shape his thoughtful approach to modern painting and abstraction. During **World War II**, Bischoff served in the military before returning to the San Francisco Bay Area after the war. It was during this period that he met fellow artists David Park and Richard Diebenkorn. Together, the three artists began exploring a new direction in modern painting that combined the emotional freedom and painterly surfaces of **Abstract Expressionism** with recognizable figures, interiors, and landscapes.

Rather than completely abandoning realism or abstraction, Bischoff and the other Bay Area artists studied the tension between the two approaches. Their paintings often featured simplified figures, expressive brushwork, flattened space, and bold color while still depicting everyday scenes and human subjects. This balance between recognizable imagery and abstract composition became one of the defining characteristics of the Bay Area Figurative Movement. Bischoff's work frequently emphasized mood, atmosphere, and emotional presence rather than precise detail. Through his exploration of color, texture, and form, he helped create a distinctly West Coast interpretation of modern American art that blended abstraction with personal and observational experience. Bischoff said, "My aim has been to have the paint in the canvas play a double role—one as an alive, sensual thing in itself, and the other conveying a response to the subject. Between the two is this tightrope."[1]

In *The Yellow Lampshade* (14.6.5), Elmer Bischoff portrayed an ordinary interior scene inspired by the large living room windows commonly found in homes overlooking the **San Francisco Bay Area**. Inside the room, faceless figures stand among sparse furniture while the gray city skyline outside the window dominates much of the composition. Although the expansive view beyond the window suggests openness and distance, the figures appear disconnected and emotionally isolated, seemingly unaware of the landscape outside. This contrast between interior stillness and the outside world creates a quiet but noticeable tension throughout the painting.

In *Orange Sweater* (14.6.6), Bischoff depicted a solitary figure seated at a desk, appearing to study or read in a calm and quiet environment. The interior space feels peaceful and contemplative, possibly resembling a library or study room. Light entering through the windows forms geometric planes across the composition, creating structure and atmosphere within the room. However, outside the windows, dark trees press closely against the glass, introducing an uneasy and somewhat threatening presence that contrasts with the serenity of the interior.

In both paintings, Bischoff used thick, expressive brushstrokes heavily loaded with paint, maintaining many qualities associated with **Abstract Expressionism**. The figures themselves become partially abstracted, with broad areas of color and loosely defined forms replacing precise detail. In *Orange Sweater*, patches of orange paint appear almost casually applied, yet they effectively define the figure and draw the viewer's attention. Through his combination of abstraction, mood, color, and ordinary subject matter, Bischoff explored emotional atmosphere and the tension between interior life and the outside world.

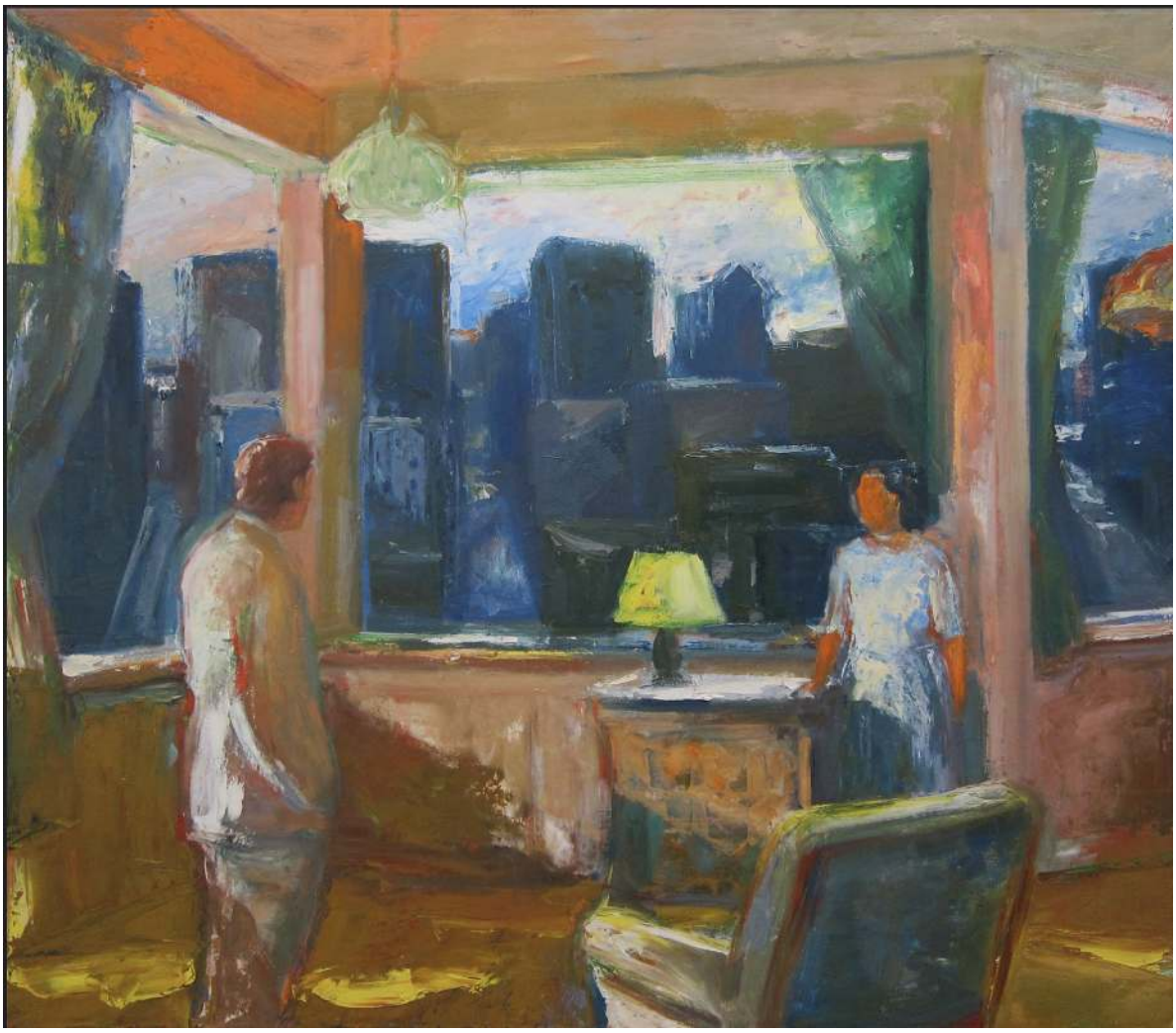


Figure \(\PageIndex{5}\): *Yellow Lampshade* (CC BY 2.0)

Figure \(\PageIndex{6}\): *Orange Sweater* (CC BY-NC 2.0)

Wayne Thiebaud

Wayne Thiebaud (born 1920) is an American painter widely recognized for his colorful and playful paintings of ordinary everyday objects such as **cakes**, **pies**, **ice cream cones**, **lipstick**, and urban or landscape scenes. Associated with both **Pop Art** and the **San Francisco Bay Area Figurative Movement**, Thiebaud transformed common objects into visually rich and whimsical compositions. His paintings celebrate ordinary life while also exploring color, light, texture, and form. Thiebaud used thick layers of **oil paint**, often applying paint so heavily that it resembled frosting spread across a cake. Using **palette knives** and brushes, he built textured surfaces with visible ridges and creamy applications of paint. His first major gallery exhibition sold out completely, launching a highly successful artistic career. Throughout his long life, Thiebaud continued painting scenes inspired by everyday experiences, often finding humor and beauty in familiar objects people normally overlook.

In *Cakes* (14.6.7), Thiebaud transformed simple desserts into a vibrant and imaginative composition. Cakes, often associated with celebration, comfort, and community gatherings, are arranged across a table for viewers to admire. Each cake appears unique, suggesting homemade creations rather than identical bakery products. Although the cakes are painted realistically enough to be recognizable, their exaggerated colors, thick paint, and delicate stands create a whimsical and slightly surreal effect. The cakes balance on unusually thin supports, adding visual tension and humor to the composition. One of Thiebaud's defining artistic features was his attention to **light** and **shadow**. In *Cakes*, strong lighting casts dramatic colored shadows beneath the desserts, giving the objects weight and depth while also adding visual excitement to the painting. These exaggerated shadows became an important part of his style. In *Betty Jean and Book* (14.6.8), Thiebaud painted his second wife, whom he frequently used as a model in his portraits. Betty Jean sits quietly holding an open book that appears to contain drawings or illustrations. Her thoughtful expression suggests contemplation as she gazes away from the pages. Even within this quieter and more intimate portrait, Thiebaud carefully observed the effects of light. A wedge of light appears in front of her figure, emphasizing the subtle play of illumination and shadow that remained central to his work. Through his use of vibrant color, thick paint, and everyday subject matter, Wayne Thiebaud elevated ordinary objects into memorable works of modern American art while blending humor, nostalgia, and technical mastery.

Figure \(\PageIndex{7}\): *Cakes* (1963, oil on canvas, 152.4 x 182.9 cm) (CC BY 2.0)

Figure \(\PageIndex{8}\): *Betty Jean and Book (1969, oil on canvas, 91.4 x 76.2 cm)* (CC BY-NC 2.0)

Wayne Thiebaud

"If we don't have a sense of humor, we lack a sense of perspective."

Nathan Oliveira

Nathan Oliveira (1928–2010) was an American painter, printmaker, and sculptor associated with the **bridge generation**of the **San Francisco Bay Area Figurative Movement**. A graduate of the **California College of the Arts**, Oliveira later became a professor of studio art at **Stanford University**, where he influenced generations of artists through his teaching and creative practice. Although connected to the Bay Area Figurative artists, Oliveira's work was also strongly influenced by **Expressionism**. His paintings often featured isolated human figures rendered in loose, improvisational brushstrokes that appeared sketch-like or unfinished. Rather than carefully describing physical details, Oliveira focused on emotion, movement, atmosphere, and psychological presence. His figures remain recognizable, yet they dissolve into abstraction through rough paint application, blurred forms, and open spaces.

One of Oliveira's signature techniques was leaving portions of the canvas unpainted, allowing areas of white background to remain visible. These open spaces created a sense of incompleteness and emotional tension while emphasizing the expressive nature of the brushwork. The unfinished appearance became an important hallmark of his artistic style. Oliveira was also an accomplished sculptor. His bronze sculpture *Universal Woman* (14.6.9), created for a research center at **Stanford University**, reflects many of the same qualities found in his paintings. The elongated figure appears abstracted and simplified, with long limbs and only minimal facial features. Through abstraction, Oliveira explored themes connected to the human condition, spirituality, isolation, and the relationship between humanity and the universe. His figures move beyond literal representation into symbolic and emotional forms.

In *Nineteen Twenty-Nine* (14.6.10), Oliveira painted an image of his mother from memory rather than direct observation. Like many of his works, the painting balances figuration and abstraction, focusing less on exact realism and more on emotional memory and personal connection. Through expressive brushwork and simplified forms, Oliveira transformed ordinary human subjects into deeply emotional and universal images. By blending **Expressionism**, abstraction, and figurative imagery, Nathan Oliveira became one of the most influential artists of the Bay Area Figurative Movement and a major figure in modern American art. The alternating colors abstractly clash; her clothes are oddly positioned. "My concern was to use the language of the abstract expressionists, the gesture of the pigment, and somehow put it together to represent the human figure, to restate classical subjects. I built figures out of the pigment gestures themselves."[2]

Figure \(\PageIndex{9}\): *Universal Woman* (C BY-NC 2.0)

Figure \(\PageIndex{10}\): *Nineteen Twenty-Nine* (1961, oil on canvas, 137.4 x 127.2 cm) (CC BY-NC 2.0)

KQED Spark: Nathan Oliveria

Spark remembers Nathan Oliveira and his lifelong fascination with the painted surface. Original air date: February 2005.

Joan Brown

The **Second Generation** of the **San Francisco Bay Area Figurative Movement** included important artists such as Joan Brown and Manuel Neri. These artists expanded the movement by combining expressive figuration with personal symbolism, experimentation, and emotional storytelling. Joan Brown (1938–1990) became one of the most innovative and independent painters of her generation. Influenced by her mentor Elmer Bischoff, Brown blended the expressive brushwork of **Abstract Expressionism** with highly personal figurative imagery. She quickly gained recognition for her bold painting style, vibrant colors, and fearless artistic experimentation. Brown was also connected to the growing **Women's Movement**, becoming known for creating powerful works centered on personal identity, daily life, spirituality, relationships, and self-reflection.

Brown's life experiences strongly influenced her art. She was an active member of the **South End Rowing Club** in San Francisco and frequently swam in the waters of the **San Francisco Bay**. During one dangerous swim to **Alcatraz Island**, she nearly drowned, an experience that became an important subject in several of her paintings. In *After the Alcatraz Swim No. 3* (14.6.11), Brown transformed the frightening experience into a symbolic and emotional composition. The waters of the bay swirl dramatically in the background, while the dark silhouette of **Alcatraz** looms ominously behind the figure. Brown incorporated images of the freighter involved in the near accident into the pattern of her dress, blending memory and symbolism together within the painting. Bright contrasting colors such as **yellow**, **blue**, **red**, and **purple** intensify the emotional energy of the scene. A telephone placed at the end of the table appears to symbolize danger, isolation, or the possibility of rescue, adding psychological tension to the work.

Brown also created numerous **self-portraits**, both traditional portraits and narrative scenes that explored her identity and experiences. *Self-Portrait in a Fur Hat* (14.6.12) is an example of her portrait work, where she used expressive color, simplified forms, and confident brushwork to create a direct and personal image of herself. Tragically, Brown's life ended in 1990 during the installation of an obelisk at **Sai Baba's Eternal Heritage Museum**when she was killed in a construction accident. Although her career was cut short, Joan Brown left behind a remarkable body of work that continues to influence contemporary figurative painting and feminist art history. She dons a fur hat for no particular reason while wearing her brown paint-stained shirt, sitting in front of a checkered background. Writer Lisa Liebmann opined on Brown's self-portraits, saying, "Brown, as she appears in her self-portraits, is part hippie and part jock, a lone witch as well as a suburban mother."[3]

Figure \(\PageIndex{11}\): *After the Alcatraz Swim, Number 3* (1976) (CC BY-NC-SA 2.0)

Figure \(\PageIndex{12}\): *Self-Portrait in fur Hat* (1972, oil enamel on canvas) (CC BY-NC 2.0)

The Art of Joan Brown

Although Joan Brown was considered a regional artist, emerging as a member of the San Francisco Bay Area Abstract Expressionist and Figurative schools of Art in the mid 1950's, her work is now being re-considered in a National and International context. Brown's work is important because of the unique and deeply personal style that she developed over the course of her career and the broad significance of the themes in her work.

Manuel Neri

Manuel Neri (1930–) is an American painter and sculptor associated with the **San Francisco Bay Area Figurative Movement**. Born to immigrant parents who fled **Mexico** during the **Mexican Revolution**, Neri grew up in California and later attended the **California College of Arts and Crafts**, where he studied under influential Bay Area artists Richard Diebenkorn and Elmer Bischoff. Early in his career, Neri worked in the style of **Abstract Expressionism**, but under the influence of his teachers, he gradually shifted toward figurative art while maintaining expressive and abstract qualities in his work. Neri became especially known for his sculptural figures, which combined the emotional energy of painting with the physical presence of sculpture. He frequently worked with **plaster**, a material that allowed him to carve, chip, sand, scrape, and repaint surfaces repeatedly. His sculptures often appear rough, unfinished, and highly textured, emphasizing gesture and movement rather than polished realism. This painterly treatment of sculpture became one of the defining characteristics of his style.

From 1962 to 1966, Neri was married to fellow Bay Area Figurative artist Joan Brown. During this period, both artists influenced and supported one another's creative development. In *Mary and Julia* (14.6.13), Neri depicted two seated female figures positioned on a bench. One figure has an arm painted blue, while splashes of blue paint appear across portions of the sculpture, emphasizing the connection between painting and sculpture in his work. Neri used the model Mary Julia for both figures, creating two versions of the same individual within the composition. Although the women sit close together, they appear emotionally distant, staring forward without interacting, suggesting tension or unresolved conflict between them. *Mejur Pegada Series No. 7* (14.6.14) belongs to one of Neri's recurring sculptural series created in **plaster**, **bronze**, and **marble**. Across these works, Neri repeatedly explored the human figure through abstraction, gesture, and texture. Rather than aiming for perfect anatomical realism, he emphasized emotional presence, physical surface, and expressive form. Through his combination of sculpture, painting, and abstraction, Manuel Neri became one of the leading sculptors of the Bay Area Figurative Movement and an important figure in modern American art. He cast the figure in bronze and added oil paint for the color. Neri was devoted to the figure and said, "I've always been intrigued with the spirit the figure conveys…It is the God-spirit that I think is the real God for us. It is the thing inside us that I want to talk about in the figure."[4]

Figure \(\PageIndex{13}\): *Mary and Julia* (1979, plaster with pigment, 132 x 111.7 x 87.6 cm) (CC BY-NC 2.0)

Figure \(\PageIndex{14}\): *Mejur Pegada Series No. 7* (2006, bronze, oil paint) (CC BY-NC 2.0)

[1] Retrieved from https://www.famsf.org/artworks/yellow-lampshade

[2] Retrieved from https://americanart.si.edu/artwork/n...nty-nine-19032

[3] Retrieved from https://sarahmccoll.substack.com/p/j...itics-the-hell

[4] Retrieved from https://kiosk.sfartscommission.org/o...ort=9&page=276

14.7: First Nation Group of Seven

Definition: Term

- **Indian Group of Seven** – A collective of Indigenous Canadian artists founded in 1973 to promote Native art within the mainstream art world.
- **Professional Native Indian Artists Association** – The official name of the Indian Group of Seven, formed to support and advance Indigenous professional artists in Canada.
- **Indigenous Art** – Art created by the original peoples of a region that reflects their cultural traditions, histories, beliefs, and identities.
- **Numbered Treaties** – Agreements made between the Canadian government and various Indigenous nations during the nineteenth and early twentieth centuries.
- **Modern Art** – Art of the late nineteenth and twentieth centuries that emphasized experimentation, abstraction, and new artistic ideas.
- **Contemporary Indigenous Art** – Modern and current artwork created by Indigenous artists that combines traditional cultural themes with contemporary artistic methods.
- **Impressionism** – An art movement emphasizing visible brushstrokes, light, color, and the impression of a scene rather than detailed realism.
- **Cultural Identity** – The shared traditions, beliefs, language, history, and customs that define a group of people.
- **Spiritual Symbolism** – The use of symbols or imagery to represent spiritual beliefs, traditions, or sacred ideas.
- **Native Peoples' Art** – Artwork created by Indigenous peoples reflecting their cultural experiences, traditions, and histories.
- **Canadian Art** – Art created in Canada or by Canadian artists reflecting the country's diverse cultures and histories.
- **Artistic Community** – A group of artists who collaborate, support, and influence one another creatively and professionally.
- **Scholarship Programs** – Financial support programs that help students or artists continue their education or artistic careers.
- **Modern Artistic Value** – Recognition of artwork as important and meaningful within contemporary and modern art history.
- **Exhibitions** – Public displays of artworks in museums, galleries, or other spaces.
- **Marketing Strategy** – A planned approach used to promote and sell artwork to the public.
- **Cultural Preservation** – The protection and continuation of cultural traditions, languages, histories, and artistic practices.
- **Daphne Odjig** – An Indigenous Canadian artist and founder of the Indian Group of Seven.
- **Norval Morrisseau** – An Indigenous Canadian artist known for vibrant spiritual imagery and Woodland School painting.
- **Bill Reid** – A Haida artist celebrated for sculptures and artworks inspired by Northwest Coast Indigenous traditions.

Founded in 1973, the **Indian Group of Seven**, also known as the **Professional Native Indian Artists Association**, was an important collective of Indigenous professional artists from **Canada** dedicated to promoting Native art within the broader Western art world. The group was founded by Daphne Odjig after the success of a collaborative exhibition in 1972 featuring Indigenous artists and artwork inspired by Native cultural traditions and histories. The exhibition's works were organized according to the **Numbered Treaties**, agreements made between the Canadian government and Indigenous nations. Odjig invited several prominent Indigenous artists to join the group, including Alex Janvier, Jackson Beardy, Eddy Cobiness, Norval Morrisseau, Carl Ray, and Joseph Sanchez. Later, Bill Reid, a well-known **Haida** artist, also became associated with the movement.

The artists often used expressive and colorful painting styles influenced partly by **Impressionism** and modern art while incorporating Indigenous stories, symbolism, spiritual beliefs, and cultural traditions. Their work challenged stereotypes that Indigenous art belonged only to anthropology museums or traditional crafts. Instead, they argued that Indigenous art should be recognized as an important form of **modern contemporary art** with equal artistic and cultural value. Although the group officially remained together for only about three years, its influence was significant and long-lasting. The artists collaborated to improve opportunities for Indigenous creators by organizing exhibitions, developing marketing strategies, creating scholarship and trust funds, and encouraging younger Indigenous artists throughout remote communities across Canada. They also worked to establish financial support systems that allowed Indigenous artists to pursue art as a professional career. In a relatively short time, the Indian Group of Seven helped transform Indigenous art's position within Canadian culture and the international art world. Their efforts

opened doors for future generations of Indigenous artists while increasing recognition, visibility, and respect for Native artistic traditions and contemporary expression.

Daphne Odjig

Daphne Odjig (1919–2016) was an influential Indigenous Canadian artist born in **Ontario** on the **Wikwemikong Unceded Indian Reserve**. A member of the **Ojibwa (Anishinaabe)** Nation, Odjig became one of the most important figures in contemporary Indigenous art in Canada. During her youth, she suffered from **rheumatic fever**, and while recovering she began drawing, developing the artistic skills that would shape her future career. After her marriage, Odjig moved to **British Columbia**, where she dedicated herself to painting and artistic exploration. She adopted and expanded the **Woodlands style**, a form of Indigenous painting known for its flowing lines, vibrant colors, spiritual symbolism, and interconnected forms. At a time when relatively few women worked within this artistic tradition, Odjig became one of the leading female artists associated with the style.

Odjig gained early recognition through her detailed **pen-and-ink drawings** depicting the lives and experiences of the **Cree people**. Her artwork frequently explored Indigenous culture, spirituality, history, family, and social experience. She was also notable for addressing **erotic themes** in some of her work, a subject rarely explored openly in **First Nations art** during that period. By incorporating themes of intimacy, relationships, and the human body, Odjig expanded the boundaries of Indigenous artistic expression. As a founding member of the **Professional Native Indian Artists Association**, also known as the **Indian Group of Seven**, Odjig played a major role in advancing Indigenous art within the Canadian and international art world. She worked tirelessly to gain recognition for Indigenous artists as contemporary professionals rather than simply creators of traditional craft objects.

Odjig also opened the first gallery in Canada dedicated exclusively to **First Nations art**, creating an important space for Indigenous artists to exhibit and sell their work. Through her leadership, innovation, and artistic vision, Daphne Odjig helped transform the visibility and recognition of Indigenous art in Canada while inspiring future generations of Native artists. Odjig said her mural, *Indian in Transition* (14.7.1), was "a rebirth of Indian consciousness, " which created emotions that made the subject matter of my art more spontaneous. I was no longer preoccupied with the mechanical aspects of art, or with personal survival. My work was empowered by the joys, sorrows, and survival of my people in transition."[1] *The Creation of the World* (14.7.2) has strong curving contours with outlines and overlapping shapes. The mural also represents Odjig's use of bright colors. The mural was made to celebrate Manitoba's centennial, where it was one of her first major successes. The mural blended First Nations traditions and storytelling.

Figure \(\PageIndex{1}\): *The Indian in Transition* (1978) (CC BY-NC-ND 2.0)

Figure \(\PageIndex{2}\): *The Creation of the World* (1970) (CC BY-NC-SA 2.0)

Daphne Odjig First Nations Artist, Native Canadian Paintings in Motion

Daphne Odjig, CM OBC (b. September 11, 1919), is a Canadian First Nations artist of Odawa-Potawatomi-English heritage. Her many awards include the Order of Canada and the Governor General's Award. Her painting is often characterized as Woodlands Style. Daphne Odjig was the driving force behind the Indian Group of Seven.

Alex Janvier (born 1935) is an Indigenous Canadian artist of **Dene Suline** and **Saulteaux** heritage who was born on the **Le Goff Reserve in Alberta, Canada**. At the age of eight, Janvier was sent to a residential boarding school, part of the Canadian system that separated Indigenous children from their families and cultures. Despite the hardships of this experience, his artistic talent was recognized early, encouraging him to pursue art as a career. Janvier later became recognized as one of the first Indigenous Canadian artists to achieve prominence as a modernist painter. Janvier developed a highly personal and abstract visual style rooted in the

spiritual traditions, symbolism, and cultural heritage of the **Dene people**. His paintings are known for their sweeping lines, vivid colors, flowing forms, and large-scale compositions. Rather than creating realistic scenes, Janvier developed what he described as a unique **"visual language"** inspired by Indigenous storytelling, spirituality, landscapes, and cultural identity. His work combines elements of modern abstraction with traditional First Nations philosophies and symbols.

One of Janvier's most celebrated works is *Morning Star* (14.7.3), a monumental painting located in the dome of the **Canadian Museum of History**. The enormous artwork stretches seven stories above the museum floor and covers approximately **418 square meters**. Designed as a symbolic guide and spiritual map, the circular composition is divided into four major color quadrants, each representing a different period in the history and experiences of Indigenous peoples in Canada. The **yellow quadrant** symbolizes a time of harmony when First Peoples lived in balance with nature, the **Great Spirit**, and one another. The **blue quadrant** represents the disruption and weakening of Indigenous culture caused by the arrival and influence of European colonization. The **red quadrant** reflects a period of struggle, resistance, and growing optimism as Indigenous peoples work to reclaim identity and define their future paths. The final quadrant symbolizes healing, reconciliation, renewed self-respect, and a return to harmony and cultural strength. Through works like *Morning Star*, Alex Janvier transformed Indigenous history, spirituality, and resilience into powerful modern abstract art. His paintings serve not only as artistic achievements but also as visual expressions of survival, identity, and cultural renewal for Indigenous communities in Canada.

Figure \(\PageIndex{3}\): *Morning Star* (C BY-SA 2.0)

Norval Morrisseau

Norval Morrisseau (1932–2007), an **Ojibwa** artist also known as **Copper Thunderbird**, was one of the most influential Indigenous artists in Canada and is often referred to as the "Picasso of the North." Morrisseau became internationally recognized for developing a highly original visual style that blended Indigenous spirituality, storytelling, symbolism, and modern art. His paintings frequently explored the legends, beliefs, and cultural traditions of the **Anishinaabe** people while also addressing the political and cultural tensions between Indigenous communities and European Canadian society. Morrisseau developed a distinctive artistic style characterized by **thick black outlines** surrounding brightly colored forms and figures. The bold black lines divide the composition into interconnected sections filled with vivid colors such as red, blue, green, yellow, and orange. He painted on many available surfaces, including **moose hide**, **birch bark**, canvas, and paper, incorporating traditional Indigenous materials whenever possible.

Early in his career, Morrisseau focused primarily on Anishinaabe myths, spiritual teachings, animals, and cultural stories. Later, his work evolved to include more personal themes connected to his own struggles, spirituality, identity, and emotional experiences. His paintings often depict humans, animals, and spiritual beings interconnected through flowing lines and symbolic relationships,

reflecting Indigenous beliefs about harmony and the unity of life. In *A Separate Reality* (14.7.4), Morrisseau created a highly symbolic composition centered around a glowing green orb surrounded by unusual spiritual figures and characters. The work is filled with vivid, intense colors, including the striking yellow eyes of the human figures. The four main figures symbolize the four directions — **north**, **south**, **east**, and **west** — important spiritual concepts within many Indigenous traditions. The painting explores themes connected to spirituality, transformation, and the afterlife.

In *Cycles* (14.7.5), Morrisseau used brilliant reds, blues, greens, and oranges outlined with bold black contours to create interconnected mythical figures and creatures. The painting reflects Indigenous concepts of balance, renewal, and the interconnectedness of all living beings within the natural and spiritual worlds. Through repeating patterns, flowing forms, and symbolic imagery, Morrisseau expressed the cultural and spiritual meanings rooted in his Indigenous heritage. Through his innovative use of color, symbolism, and storytelling, Norval Morrisseau helped establish contemporary Indigenous art as a major force within modern art history while inspiring generations of Indigenous artists throughout Canada and beyond.

Figure \(\PageIndex{4}\): *A Separate Reality* (1976, acrylic on canvas, 3.0 x 6.4 meters) (CC BY-NC-SA 2.0)

Figure \(\PageIndex{5}\): *Cycles* (1985, acrylic on canvas, 137.2 x 225.4 cm) (CC BY-NC-ND 2.0)

Norval Morrisseau Shaman Artist at the National Gallery in 2006

Norval Morrisseau - Letting people and paintings speak for themselves. "Actions Speak Louder Than Words" Norval Morrisseau

Cal Ray

Carl Ray (1943–1978) was a Canadian **First Nations** artist associated with the **Woodland School of Art**. A member of the **Cree community** in **Ontario**, Ray was given the Indigenous name **Tall Straight Poplar**, a reference to his height of 6’4”. Although his artistic career was relatively short, he became an important figure in the development of contemporary Indigenous art in Canada. Ray’s paintings often focused on **Cree spiritual beliefs**, legends, wildlife, and the natural environment. He blended Indigenous storytelling and symbolism with aspects of European artistic traditions, creating a distinctive style that balanced spiritual imagery with landscape painting. His work frequently used a limited color palette dominated by **brown**, **blue**, and **black**, often combining **ink** and **watercolor** to create strong visual contrasts and flowing forms.

In many of his landscape paintings, Ray used intense shades of **electric blue** to capture the atmosphere and beauty of the **Sandy Lake** region in northern Ontario. These vivid blues became one of the recognizable features of his work, adding emotional intensity and spiritual energy to scenes of forests, lakes, and wildlife. At times, Ray combined landscape imagery with Cree legends and spiritual symbolism, creating paintings filled with both cultural meaning and dramatic color. *Taboo Island* (14.7.6) is an example of Ray’s spiritually inspired imagery. Using a restrained palette of **red**, **gray**, and **black**, along with mixed watercolor and ink techniques, he created an atmospheric composition suggesting mystery, sacred space, and spiritual presence. The limited colors heighten the emotional impact of the image while emphasizing the symbolic and spiritual elements connected to Cree traditions and storytelling. Through his combination of Indigenous spirituality, natural imagery, and expressive color, Carl Ray helped expand the recognition of contemporary Indigenous Canadian art and contributed significantly to the growth of the Woodland School movement.

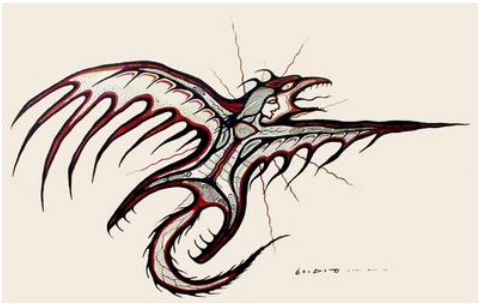


Figure \(\PageIndex{6}\): *Taboo Island* (1972) (CC BY-NC-ND 2.0)

Carl Ray A First Nations Artist

Carl Ray A First Nations Artist and Founding Member of The Indian Group of Seven

William (Bill) Ronald Reid Jr.

Bill Reid (1920–1998), formally known as **William (Bill) Ronald Reid Jr.**, was a celebrated Canadian artist of **Haida** heritage whose work played a major role in the revival and international recognition of Indigenous Northwest Coast art. Reid was born in Canada, and his mother belonged to the **Haida Nation**, whose traditional territories are located along the coast of **British Columbia**. Through his family connections, especially his grandfather, Reid developed a deep understanding of Haida artistic traditions and cultural history. Reid's grandfather was a respected **Haida silversmith** who introduced him to traditional Haida design, carving, and jewelry-making techniques. Inspired by these teachings, Reid initially began his artistic career creating jewelry and silverwork. Over time, he expanded into larger sculptural works using traditional Northwest Coast materials such as **red cedar** and **yellow cedar**.

Much of Reid's artwork was inspired by **Haida folklore**, mythology, and oral traditions. His sculptures frequently depicted animals, spirits, and supernatural beings central to Haida stories and cultural identity, including ravens, bears, eagles, and mythological creatures. Reid carefully combined traditional Haida forms with modern artistic approaches, helping preserve and revitalize Indigenous cultural practices while also introducing them to wider audiences. His large cedar sculptures often featured highly detailed carvings and interconnected figures arranged in dynamic compositions that reflected themes of ancestry, transformation, spirituality, and the relationship between humans and nature. Through his work, Reid celebrated both his family heritage and the broader traditions of the Haida people. Bill Reid became one of the most influential Indigenous artists in Canada, helping establish Northwest Coast Indigenous art as a respected and significant part of contemporary world art while inspiring future generations of Indigenous artists.

Figure \(\PageIndex{7}\): Spirit of Haida Gwaii (CC BY-SA 3.0)

One of Bill Reid's most famous works is the monumental bronze sculpture *Spirit of Haida Gwaii* (14.7.7), a powerful representation of the cultural heritage, mythology, and spiritual traditions of the **Haida people**. Reid created two castings of the sculpture: a green bronze version installed at the **Vancouver International Airport** and a black bronze version placed at the **Canadian Embassy in Washington, D.C.** The massive dugout canoe sculpture measures approximately six meters long, four meters high, and weighs around 5,000 kilograms. The canoe is filled with a complex gathering of human, animal, and supernatural figures drawn from **Haida folklore** and oral traditions. At the center is **Raven**, the well-known Haida trickster figure associated with transformation, creation, and mischief. Beneath Raven's tail sits **Mouse Woman**, while nearby are **Grizzly Bear**, **Mother Bear**, and their cubs, **Good Bear** and **Bad Bear**. Other important figures include **Beaver**, Raven's uncle; **Eagle**; **Frog**; **Wolf**; a human paddler; and the central spiritual figure of a **Shaman** dressed in traditional Haida clothing.

Although the passengers appear crowded together and not always harmonious, the sculpture symbolizes the Haida understanding of **interdependence** within the natural and spiritual world. Each being depends upon the others for balance and survival, reflecting Indigenous beliefs about the close relationship between humans, animals, spirits, and nature. The canoe itself becomes a metaphor for shared existence, cultural continuity, and collective survival. Another important work by Reid is the bronze sculpture *Bear Mother* (14.7.8), based on a well-known **Haida legend**. The story tells of a woman who disrespected the bears and was compelled to marry the chief of the bears as punishment and transformation. This legend appears frequently in Northwest Coast Indigenous art and on **totem poles**, symbolizing respect for nature, spiritual transformation, and the relationship between humans and animals. Reid's sculpture captures the emotional and cultural significance of the story while preserving Haida oral traditions through contemporary sculpture.

Through works such as *Spirit of Haida Gwaii* and *Bear Mother*, Bill Reid helped preserve and revitalize Haida culture while introducing Indigenous Northwest Coast art to international audiences. His sculptures remain powerful symbols of Indigenous identity, storytelling, spirituality, and cultural resilience. Carved from a large piece of yellow cedar, *Raven* (14.7.9) is a powerful

creature of a myth that plays tricks on the world. "According to Haida legend, the Raven found himself alone one day on Rose Spit beach, on Haida Gwaii. Suddenly, he saw an extraordinary clamshell at his feet, and protruding from it were several small creatures. The Raven coaxed them to leave the shell to join him in his wonderful world. Some were hesitant at first, but eventually, overcome by curiosity, they emerged from the partly open clamshell to become the first Haida."[2]

Figure \(\PageIndex{8}\): *Bear Mother* (public domain)

Figure \(\PageIndex{9}\): *The Raven* (CC BY-SA 2.0)

Bill Reid Gallery: A Landmark Gift of Art

The Bill Reid Foundation has gifted its entire collection of Northwest Coast art, worth more than $10 million and consisting of 158 works (including 112 masterworks by Bill Reid) to Simon Fraser University.

[1] Retrieved by https://resilienceproject.ca/en/artists/daphne-odjig

[2] Retrieved from https://moa.ubc.ca/wp-content/upload..._First_Men.pdf

14.8: Quilting

Definition: Term

- **Quilting** – The process of stitching layers of fabric together to create decorative and functional textile artworks or blankets.
- **Textile Art** – Art created using fibers, fabrics, thread, or cloth materials.
- **Fabric Scraps** – Small leftover pieces of fabric used to create patchwork designs.
- **Padding** – Soft material placed between fabric layers to add thickness, warmth, and cushioning.
- **Batting** – The middle insulating layer inside a quilt, usually made of cotton, wool, or polyester.
- **Backing Fabric** – The fabric layer forming the back side of a quilt.
- **Binding** – Fabric strips sewn around the edges of a quilt to strengthen and finish it.
- **Geometric Patterns** – Designs made from shapes such as squares, triangles, circles, or rectangles.
- **Abstract Expression** – Artistic imagery focused on emotion, color, texture, and form rather than realistic representation.
- **Medieval Art** – Art produced during the Middle Ages, roughly from the 5th to the 15th centuries.
- **Crusades** – Religious military campaigns between Christians and Muslims during the medieval period.
- **Doublet** – A padded fitted jacket worn in Europe from the Middle Ages through the Renaissance.
- **Patchwork** – A sewing technique in which small pieces of fabric are stitched together into a larger design.
- **Needlework** – Decorative sewing or embroidery done by hand with a needle and thread.
- **Craft Tradition** – Artistic skills and techniques passed down through generations by practice and teaching.
- **Decorative Design** – Visual patterns or arrangements created to enhance the appearance of an object.
- **Modern Quilting** – Contemporary quilting styles that incorporate abstract forms, artistic experimentation, and modern design concepts.
- **Fiber Arts** – Artistic practices using fibers, yarn, fabric, thread, or textiles as the primary medium.
- **Hand Stitching** – Sewing completed manually with a needle and thread rather than by machine.
- **Durability** – The ability of a material or object to remain strong and withstand wear over time.

Quilting is a textile art form with origins tracing back to the medieval period, although some historians believe versions of quilting may have existed as early as **ancient Egypt**. The word *quilt* is derived from the Latin word **"culcita,"** meaning cushion or padded sack. Because fabric rarely survives over long periods unless preserved in protected environments such as tombs, limited physical evidence remains from the earliest forms of quilting. One of the earliest documented uses of quilting in **Europe** occurred during the **Crusades** in the twelfth century. Soldiers wore quilted garments beneath their armor to provide padding and protection during battle. These padded garments later evolved into quilted coats and doublets worn as everyday clothing.

Over the centuries, quilting developed into both a practical craft and an important artistic tradition. Traditionally, quilts were made using organized geometric patterns and carefully structured designs. As artistic movements evolved during the modern era, quilting also changed, moving beyond rigid patterns toward more **abstract**, expressive, and experimental compositions influenced by developments in modern painting and design. The quilting process involves sewing together pieces of fabric, often called **fabric scraps** or patches, into decorative designs or patterns. These stitched pieces form the top layer of the quilt. The top is then combined with a middle layer of padding, known as **batting**, typically made from materials such as wool or cotton, along with a backing fabric underneath. The three layers are stitched together through the entire surface, creating texture, strength, and durability. Finally, the edges are bound with an additional strip of fabric to secure and protect the quilt. Today, quilting exists as both a functional craft and a recognized form of fine art, incorporating traditional techniques alongside modern abstract designs, storytelling, cultural identity, and personal expression.

See some of the quilts filmmaker Ken Burns has collected since the 1970s

Filmmaker Ken Burns has collected quilts since the 1970s. Unlike his films, Burns has not publicly shared his collection until recently when he allowed the International Quilt Study Museum to host an exhibit of a small selection of them. We talk with the filmmaker to learn why he chose to share his quilts and why he chose Nebraska.

The earliest surviving quilt is the *Tristan Quilt* (14.8.1), created in the late **fourteenth century** during the medieval period. The quilt is notable for depicting scenes from the famous romantic legend of **Tristan and Isolde**, a popular medieval story involving love, loyalty, and betrayal. Rather than serving only as a functional textile, the quilt also acted as a form of visual storytelling, similar to illustrated manuscripts or tapestries of the time. The quilt was constructed by sewing together two layers of **linen** with **wadding** placed between them for padding and texture. The layers were stitched together using **brown thread**, creating detailed outlines and decorative patterns that define the figures and scenes. The stitching technique demonstrates the high level of craftsmanship and artistic skill present in medieval textile production. The scene shown in this image portrays **King Mark** from scene seven of the Tristan and Isolde narrative. Through carefully stitched lines and simplified forms, the quilt visually communicates important moments from the story while also showcasing the decorative and practical functions of medieval quilting. The *Tristan Quilt* remains an important example of early European textile art and demonstrates how quilting developed as both a craft and an artistic tradition centuries ago.

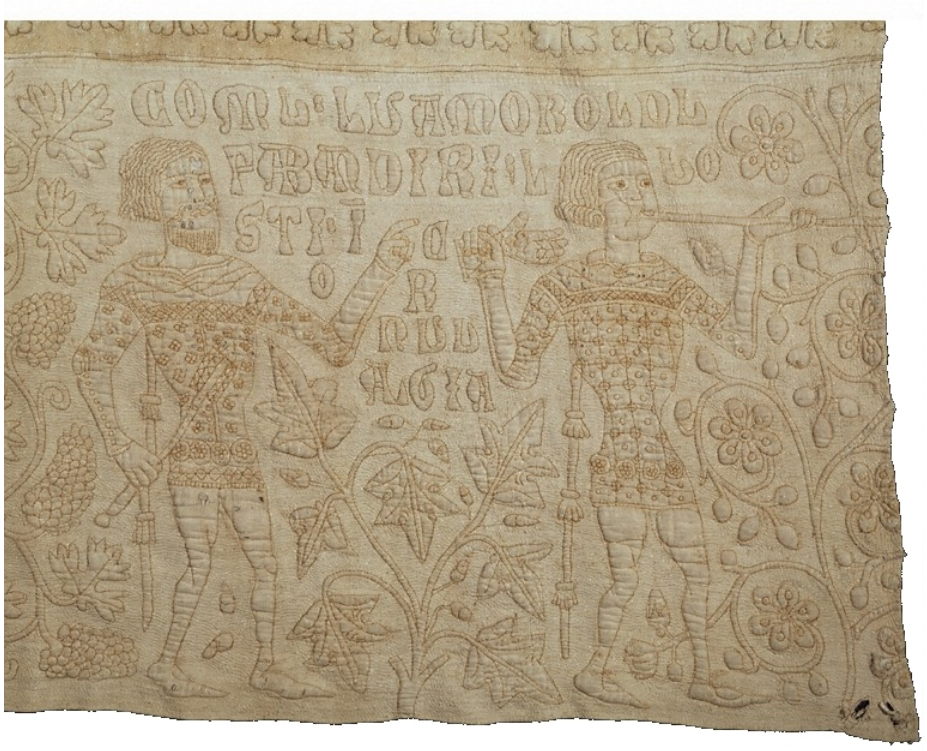


Figure \(\PageIndex{1}\): *Tristan Quilt* (Public Domain)

Early **whole-cloth quilts** were constructed from a single large piece of fabric or from narrow strips carefully sewn together to appear as one continuous surface. During earlier centuries, weaving technology limited the width of fabric produced on looms, making it difficult to create cloth wide enough to cover an entire bed. To solve this problem, quilt makers often used a decorative printed fabric panel in the center and surrounded it with additional fabric sections to complete the quilt. The inner padding, or

batting, was commonly made from **wool** because wool provided excellent insulation, helping keep people warm during winter while remaining breathable and cooler during warmer seasons. The quilt consisted of three layers: the decorative top fabric, the wool filler, and the backing fabric underneath.

These layers were sewn together entirely by **hand stitching**, a process that gradually evolved from practical necessity into an elaborate decorative art form. Quilters developed highly detailed stitching patterns and techniques that added texture, visual rhythm, and beauty to the finished quilts. The stitching itself became an important artistic element rather than simply a structural method of holding the layers together. This *Whole-Cloth Quilt* (14.8.2), created in the **eighteenth century** in the **Netherlands**, demonstrates the international trade and cultural exchange connected to textile production during the period. Although assembled in Europe, the textile used for the quilt originated in **India**, whose printed and dyed fabrics were highly prized throughout Europe. The quilt reflects both the craftsmanship of European quilting traditions and the influence of global textile trade during the eighteenth century.

Figure \(\PageIndex{2}\): Whole-Cloth Quilt (Public Domain)

Figure \(\PageIndex{3}\): Medallion Quilt (Public Domain)

The **Industrial Revolution** greatly transformed the art and practice of quilting. As industrialization increased the availability of manufactured textiles and household goods, women no longer needed to complete every stage of cloth production themselves. Previously, creating fabric involved time-consuming tasks such as shearing sheep, spinning wool into thread, and weaving cloth by

hand. During the nineteenth century, ready-made fabrics, thread, and sewing supplies became available in local **mercantile shops**, giving women more time to focus on decorative and artistic aspects of quilting. As quilting evolved, quilts changed from simple utilitarian coverings made from single pieces of fabric into highly decorative artworks composed of carefully arranged fabric pieces. Quilt makers layered decorative tops with padding and backing fabrics before stitching the layers together by hand. Over time, the stitching itself became increasingly elaborate. Instead of simple straight lines used only for function, quilters created decorative stitched patterns that added texture, movement, and visual beauty to the quilt surface.

One popular style that emerged during this period was the **medallion quilt**, designed around a large central motif such as the **tree of life**, an **eagle**, flowers, or patriotic imagery. The center image was surrounded by pieced or **appliqué** designs and bordered by multiple decorative bands. The *Medallion Quilt* (14.8.3), created by Elizabeth Welsh in 1830 using cotton fabric, is an example of a patriotic quilt intended both for decoration and everyday bedding. The quilt demonstrates the growing complexity and artistic sophistication of nineteenth-century quilting traditions. The **American Civil War** also had a major impact on quilting traditions and production. Quilts became important tools for fundraising and wartime support. Abolitionist groups organized fairs where quilts were stitched and auctioned to raise money for the war effort. Other quilts were sent directly to soldiers along with essential supplies to provide warmth and comfort in military camps.

The *Nine-Patch Quilt* (14.8.4) was made specifically for a Civil War soldier. Because military cots were narrow, quilts designed for soldiers were made smaller so they would not drag on the ground. Soldiers on both sides of the war used these quilts heavily, and relatively few examples survive today. The **nine-patch pattern** became especially popular because it allowed quilters to use small scraps of fabric from worn clothing, regardless of color or pattern, making the quilts economical, practical, and deeply personal. Through these developments, quilting evolved beyond a household necessity into a respected artistic and cultural tradition that reflected social history, community support, creativity, and personal expression.

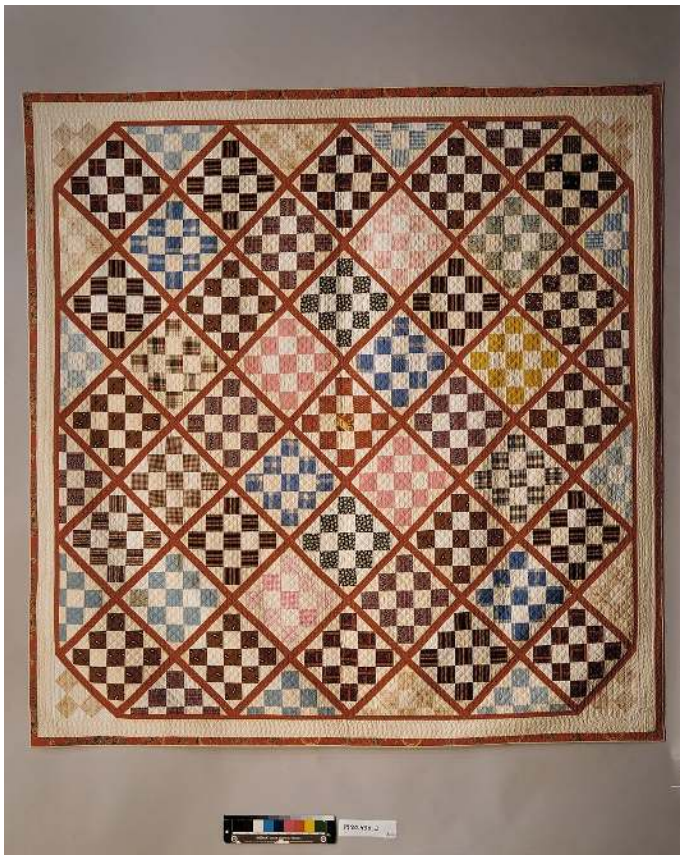


Figure \(\PageIndex{4}\): Nine Patch Quilt (Public Domain)

Harriet Powers

Harriet Powers (1837–1910) was an enslaved African American woman who became one of the most celebrated **folk artists** and quilt makers in American history. Powers is especially recognized for creating narrative quilts that recorded **Bible stories**, local legends, historical events, and astronomical phenomena through carefully arranged appliqué images and symbolic designs. Using

the traditional technique of **appliqué**, Powers cut shapes from fabric and stitched them onto larger cloth backgrounds to create detailed storytelling scenes. Her quilts combined artistic creativity with oral storytelling traditions, transforming quilts into visual historical records and spiritual narratives. The imagery in her quilts reflects both African American cultural traditions and Christian religious themes.

Only two of Harriet Powers' quilts survive today: the *Bible Quilt 1896* (14.8.5) and the *Pictorial Quilt 1898* (14.8.6). Both quilts combine **machine stitching** and **hand stitching**, demonstrating her technical skill and craftsmanship. The quilts contain multiple panels filled with symbolic figures, animals, celestial bodies, and narrative scenes carefully organized across the surface of the fabric. The *Bible Quilt* illustrates scenes drawn from biblical stories, while the *Pictorial Quilt* includes historical events, legends, and astronomical occurrences such as unusual weather phenomena and celestial observations. Through these works, Powers preserved stories and experiences visually at a time when many African Americans had limited opportunities for written documentation. Letters written by Powers in the late nineteenth century mention several additional quilts she created, although those works have not been located and may no longer survive. Despite the loss of much of her work, Harriet Powers remains an important figure in American art history, recognized for elevating quilting into a powerful form of storytelling, cultural preservation, and artistic expression.

Figure \(\PageIndex{5}\): Bible Quilt (Public Domain)

Figure \(\PageIndex{6}\): Pictorial Quilt (Public Domain)

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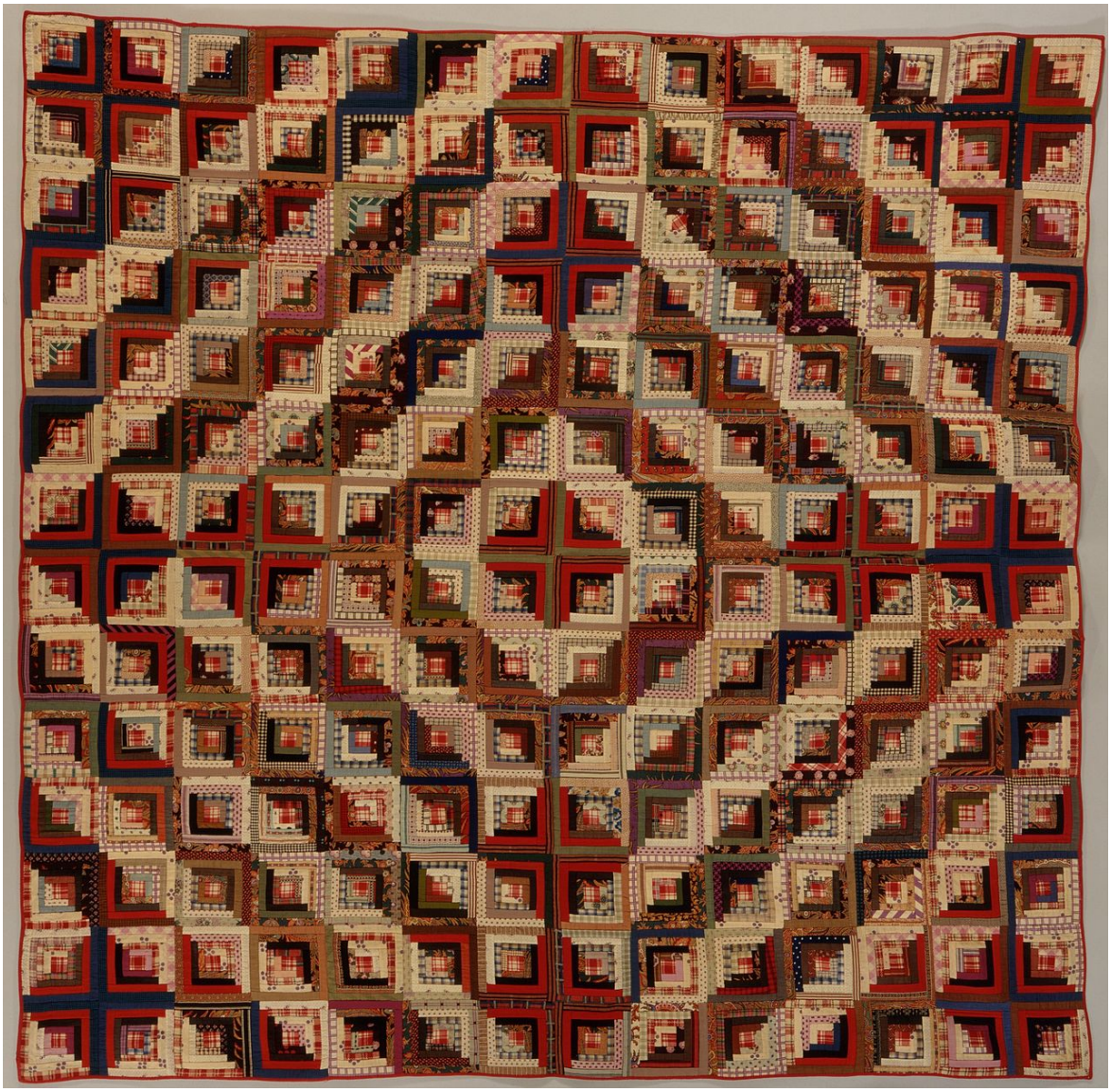


Figure \(\PageIndex{7}\): Log cabin, barn raising variation (Public Domain)

Gee's Bend

The women quilters of **Gee's Bend, Alabama**, created one of the most important artistic and cultural quilting traditions in American history. Located along the **Alabama River**, the isolated rural community of Gee's Bend (14.8.8) was home to generations of African American families whose ancestors had been brought to the area as enslaved laborers on cotton plantations. After the end of slavery, many families remained in the region as tenant farmers and sharecroppers, continuing to grow and harvest cotton well into the twentieth century. During the 1930s, the United States government purchased portions of the land and redistributed smaller parcels back to local residents. Because Gee's Bend remained geographically isolated from much of the outside world for many decades, the community developed unique cultural traditions, including a highly original approach to quilting. Quilting bee's (14.8.9) began there during the nineteenth century as a practical necessity. Women pieced together strips and scraps of fabric from worn clothing, work uniforms, and leftover textiles to create warm bedding for their families during cold winters.

Over time, the quilts evolved beyond practical use into remarkable examples of artistic innovation. The quilters developed bold **geometric patterns (**14.8.9), asymmetrical designs, and highly creative improvisational compositions based on whatever materials were available. Rather than strictly following traditional quilting patterns, the women adapted and transformed designs freely, creating quilts filled with rhythm, color, balance, and abstract visual energy. Their improvisational approach has often been compared to modern abstract painting because of the quilts' strong geometry and expressive organization. The quilts of Gee's Bend

became internationally recognized for their artistic importance and cultural significance. Today, many of the quilts are exhibited in major museums throughout the world and are celebrated as extraordinary contributions to both **American folk art** and **modern art history**. The women of Gee's Bend also continue to create and sell quilts, helping support their community while preserving a rich artistic tradition passed down through generations.

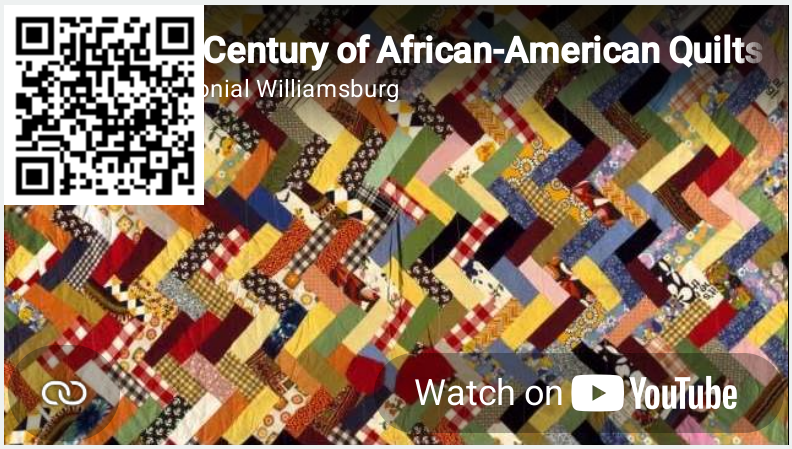
Figure \(\PageIndex{8}\): Quilting in 1937 (Public Domain)

Figure \(\PageIndex{9}\): Quilting Bee (CC BY 2.0)

Figure \(\PageIndex{10}\): Pieced quilt (Public Domain)

A Century of African-American Quilts at the Art Museum of Colonial Williamsburg

This video explores "A Century of African-American Quilts," our exhibit showcasing twelve colorful and stunning quilts, half of which have never before been seen by the public, spanning more than a century after 1875.



During the twentieth century, especially after the 1950s, the rise of a modern **consumer society** dramatically changed the role of quilting in everyday life. Mass-produced blankets, comforters, and bedding became widely available in department stores, reducing the practical need for handmade quilts in many households. As industrial products replaced handcrafted textiles, quilting began to decline as a common domestic tradition in many parts of the United States. Only certain communities, including places such as **Gee's Bend** and some **Amish** communities, continued quilting as an active cultural and artistic practice. By the late twentieth century, however, quilting experienced a major revival. During the 1990s, artists and craftspeople helped transform quilting from primarily a utilitarian craft into a respected form of **fine art**. Traditional quilts, originally designed with three functional layers — a quilt top, padding or batting, and backing fabric — evolved into decorative **art quilts** intended for display rather than use as bedding.

These modern art quilts often became smaller wall-hanging pieces featuring **landscapes**, abstract imagery, symbolic themes, or highly detailed pictorial scenes. Artists began combining traditional quilting methods with modern artistic styles, creating innovative freeform designs that blended textile techniques with concepts from painting, collage, photography, and contemporary art. Some quilts remained abstract, while others achieved almost photographic realism through fabric and stitching. Today, quilting has become both a major artistic movement and a significant economic industry in the United States. Quilting generates approximately **$3.76 billion annually** and involves more than **16 million quilters**, meaning roughly one out of every twenty Americans participates in quilting activities. Quilt shows and exhibitions have become increasingly popular worldwide, attracting artists, collectors, and audiences who travel internationally to attend major events. Modern quilting competitions often award cash prizes, ribbons, and professional recognition, further elevating quilting as a respected artistic medium. Contemporary art quilting now exists as a sophisticated fine art form capable of expressing abstraction, realism, storytelling, political commentary, and personal identity while continuing the long historical tradition of quilting craftsmanship and creativity.

14.9: Conclusion

The five modern art movements each approached art in very different ways, reflecting the diversity and experimentation of the second half of the twentieth century. **Pop Art**, represented by Roy Lichtenstein, focused on imagery from popular culture such as comic books, advertising, and mass media. Pop Art used bold outlines, flat areas of color, and recognizable imagery to blur the distinction between fine art and commercial culture. In contrast, **Op Art**, represented by Wen-Ying Tsai, emphasized optical illusion, movement, and viewer perception through repetitive lines, geometric forms, light, and kinetic motion. **Abstract Expressionism**, seen in the work of Jean-Michel Basquiat, focused on emotional intensity, gesture, spontaneity, and personal symbolism. Basquiat combined abstract forms with expressive figures, text, and social commentary. **Minimalism**, represented by Anne Truitt, reduced art to simple geometric forms, smooth surfaces, and limited colors, emphasizing clarity, balance, and simplicity. The **San Francisco Bay Area Figurative Movement**, shown through Elmer Bischoff, blended abstraction with recognizable figures and scenes, creating emotionally expressive paintings rooted in everyday life.

Each movement also used color differently. Pop Art used bright, commercial colors to imitate printed advertisements and comic strips. Op Art used contrasting colors and patterns to create visual vibration and movement. Abstract Expressionist artists often used color emotionally and symbolically, layering intense hues to express psychological or social ideas. Minimalist artists reduced color to carefully controlled surfaces or monochromatic tones, emphasizing purity and simplicity. Bay Area Figurative painters used rich, expressive color inspired by Fauvism and Expressionism to create mood and atmosphere in landscapes and figures.

The forms and shapes used in these movements also varied greatly. Pop Art relied on recognizable figures and objects simplified into graphic forms. Op Art used precise geometric patterns, lines, and repeated shapes to create illusions. Abstract Expressionism emphasized loose, gestural, and spontaneous forms that often appeared fragmented or chaotic. Minimalism reduced form to basic geometric structures such as columns, cubes, or rectangles. Bay Area Figurative artists balanced recognizable human figures and landscapes with abstracted shapes and flattened perspectives.

Pattern played a different role within each movement as well. In Pop Art, patterns often came from printed imagery and commercial design. Op Art depended heavily on repeated patterns to create optical effects and movement. Abstract Expressionism generally avoided structured pattern, favoring expressive gesture and improvisation. Minimalism used repetition and symmetry to create visual order and balance. Bay Area Figurative painting used less obvious pattern, focusing more on brushwork, color relationships, and composition.

Quilting also evolved alongside modern art movements. Traditionally, quilts were created by layering a decorative top, batting or padding, and a backing fabric stitched together for warmth and durability. Over time, quilting became more artistic and experimental. **Appliqué quilts** are made by sewing cut fabric shapes onto a larger background fabric to create decorative scenes or imagery. **Block quilts** use repeated geometric blocks or patterns arranged into structured compositions. **Abstract quilts** move away from traditional patterns and instead use freeform shapes, improvisation, bold color, and asymmetrical arrangements inspired by modern abstract art. Like modern painting, quilting evolved from practical craft into an expressive and respected art form.

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CHAPTER OVERVIEW

15: The New Millennium (2000 - 2020)

15.1: Overview
15.2: Installation and Sculpture
15.3: Architecture for the 21st Century
15.4: Digital Art
15.5: Contemporary Figurative
15.6: Conclusion and Contrast

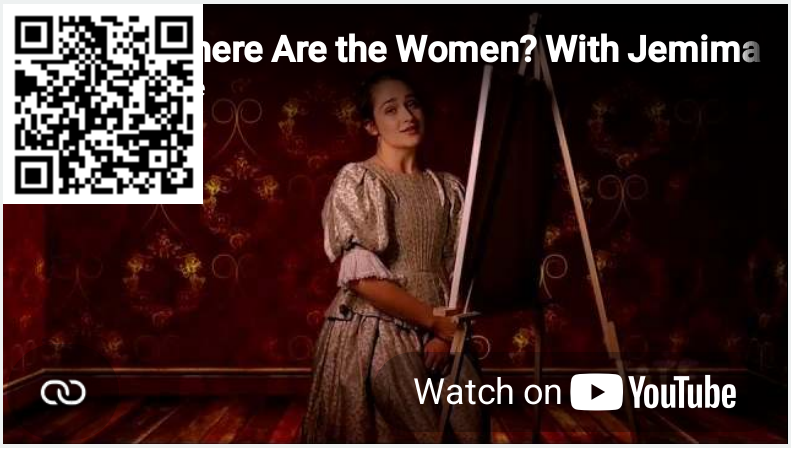
The new millennium of the 21st century brought cultural issues to the forefront, starting with 9/11, the Indian Ocean tsunami, Hurricane Katrina, Google becoming a public company, the Iraq war, the first African American president, gender issues, same-sex marriage, and a more liberal pope. Art in the new millennium is as varied as society, and art explores public policy and cultural changes around the world as art lost geographic boundaries. Art becomes an inquiry about life, a discussion about equal rights, and support for artistic freedom. Our contemporary world requires the artist to be creative, break cultural boundaries, and inspire new ways to depict liberty for all people. They must acknowledge global warming and produce sustainable environmental art, and reaffirm that we are all the same inside.

Digital images and the proliferation of art on the internet heavily influence art. New materials are available, and artists now combine traditional crafts and forms with new concepts based on local cultures that have morphed into more global cultures. Now interconnected through mass media, the patterns of an African blanket or a flower in Mexico manifest themselves in a Parisian fashion show. Globalization is not only an economic force, but it is also a force that is expanding the market for artists beyond their local borders, spreading their potential designs worldwide.

The emergence of women artists began in the late 19th century, but during the 20th century, more women artists became known and acknowledged as artists. Women are half the population of the world, yet less than five percent of the artists in art museums are women. There was a famous poster from 1989 asked, "Do women have to be naked to get into the Met. Museum?" as eighty-five percent of the nudes in the Metropolitan Museum of Modern Art are women. New movements in art and modern ideas are bringing forth opportunities for women in today's art world.

Where are the Women?

Girls actress Jemima Kirke (known as Jessa Johansson in the HBO series) addresses the topic of women in art (or the lack them). She looks at the changing role of female artists in a male dominated art world over the centuries - and how some of them eventually took on the establishment in the 1970s.



Chapter 15, *The New Millennium (2000 -)* looks at the impact and change of a global world on art, no longer a local enterprise. Interconnection, through the technology of the internet, allows art and architecture to be viewed by all. Artists work with new

technologies, changing the concepts and dimensions of how art or a structure appears.

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15.1: Overview

The beginning of the twenty-first century introduced dramatic cultural, political, environmental, and technological changes that profoundly influenced contemporary art around the world. Events such as **September 11, 2001**, the **Indian Ocean tsunami**, **Hurricane Katrina**, the **Iraq War**, the election of the first African American president in the United States, debates over gender identity and same-sex marriage, and the increasing visibility of global social justice movements all shaped artistic expression during the new millennium. Contemporary artists increasingly used their work to explore questions about identity, equality, freedom, environmental responsibility, and human rights. Unlike earlier periods in art history, contemporary art in the twenty-first century no longer remains confined by geographic boundaries. Artists today are connected through global communication, travel, social media, and the internet, allowing ideas, techniques, and visual traditions to spread rapidly across cultures. Art has become an international conversation addressing public policy, political conflict, globalization, environmental concerns, and cultural diversity. Contemporary artists often challenge traditional boundaries and seek innovative ways to represent freedom, equality, and shared human experiences.

Technology and digital media have become especially important influences on modern art. The internet allows artists to share their work instantly with worldwide audiences, while digital photography, video, graphic software, and social media have transformed how art is created, distributed, and viewed. New materials and technologies also allow artists to combine traditional crafts and historical techniques with modern concepts and global influences. Patterns from African textiles, Indigenous designs, Asian calligraphy, or Latin American folk traditions can now appear in fashion, architecture, graphic design, and fine art throughout the world, reflecting the interconnected nature of global culture. Globalization has expanded artistic opportunities beyond local communities, allowing artists to reach international audiences and participate in worldwide artistic exchanges. Contemporary art increasingly reflects multicultural influences and hybrid identities, combining local traditions with global ideas and experiences.

The twenty-first century has also continued the struggle for greater recognition of women artists and other historically marginalized groups. Although women began gaining visibility in the late nineteenth and twentieth centuries, significant inequalities still remain within museums, galleries, and art institutions. A famous 1989 poster by the feminist art collective the Guerrilla Girls asked, “Do women have to be naked to get into the Met. Museum?” highlighting the imbalance between the number of female artists represented in museums and the large number of female nude figures displayed in artworks. Contemporary art movements continue to challenge these inequalities by promoting diverse voices, cultural inclusion, gender equality, and artistic freedom. Artists today use painting, sculpture, installation, performance, environmental art, digital media, and public art to advocate for social change while encouraging viewers to reconsider issues of identity, justice, sustainability, and humanity’s shared future.

Chapter 15, *The New Millennium* (2000– Present), examines how globalization and rapidly advancing technology transformed the world of art and architecture in the twenty-first century. Art is no longer limited to local communities or regional traditions; instead, it exists within a globally connected society where ideas, styles, and cultural influences move instantly across borders. Through the power of the **internet**, social media, and digital communication, artists and architects can share their work with worldwide audiences, allowing people everywhere to experience and study art from different cultures and perspectives.

Contemporary artists increasingly use new technologies and digital tools to redefine artistic expression. Digital imaging, computer-generated design, video, virtual reality, interactive installations, and new building materials have changed the ways art and architecture are created and experienced. Artists experiment with innovative forms, combining traditional artistic methods with

modern technology to explore new dimensions of creativity. Architects similarly use advanced engineering and digital modeling programs to design structures that challenge previous limitations in shape, sustainability, and function. As a result, art in the new millennium reflects a highly interconnected world shaped by globalization, technology, cultural exchange, and continuous experimentation.

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15.2: Installation and Sculpture

Definition: Term

- **Globalization** – The increasing connection and exchange of ideas, cultures, technology, and economies across the world.
- **Public Art** – Artwork created for display in public spaces where it can be experienced by everyone.
- **Art Installation** – A large-scale or immersive artwork designed to transform a space and engage viewers directly.
- **Interactive Art** – Art that requires participation or involvement from the viewer.
- **Immersive Environment** – An artistic space that surrounds and fully engages the viewer through multiple sensory experiences.
- **Contemporary Art** – Art created during the present time that reflects current ideas, issues, and technologies.
- **Collaboration** – The process of artists and other specialists working together to create a project or artwork.
- **Multidimensional Views** – Viewing an artwork from multiple angles or perspectives, often involving space and movement.
- **Digital Media** – Artistic tools and technologies using computers, video, photography, software, or the internet.
- **Site-Specific Art** – Artwork designed specifically for a particular location or environment.
- **Large-Scale Sculpture** – Oversized three-dimensional artwork created for public or open spaces.
- **Public Space** – Areas accessible to the public such as parks, streets, plazas, or museums.
- **Architectural Art** – Art that incorporates or interacts with buildings and structural design.
- **Experimental Art** – Art that explores new ideas, materials, techniques, or unconventional methods.
- **Mixed Media** – Artwork created using more than one artistic material or technique.
- **Community Engagement** – Public involvement or participation in artistic projects and cultural activities.
- **Interdisciplinary Art** – Art that combines methods, concepts, or practices from multiple fields or disciplines.
- **Environmental Art** – Art connected to nature, ecology, or environmental awareness.
- **Urban Art** – Art created in city environments, often including murals, installations, or street art.
- **Participatory Art** – Art in which viewers actively contribute to or become part of the artwork itself.

With the globalization of art and the increasing exchange of ideas across cultures, **public art** has expanded far beyond traditional paintings displayed on walls or statues placed in public squares. Contemporary artists now create large-scale **art installations**, immersive environments, and experimental sculptures that transform entire rooms, buildings, parks, and urban spaces into artistic experiences. These installations often surround or engage viewers directly, allowing the public to become active participants within the artwork rather than simply observers standing outside of it. Modern installations frequently incorporate multiple dimensions, movement, sound, light, video, digital projections, and interactive elements that encourage viewers to explore the artwork from different perspectives. Oversized sculptures and room-sized environments create immersive experiences that blur the boundaries between art, architecture, and public space. Instead of focusing on a single object, contemporary public art often emphasizes atmosphere, participation, and emotional or sensory engagement.

The creation of these complex works usually requires collaboration between many people. Artists frequently work alongside **architects**, engineers, fabricators, local artisans, digital designers, and community members to produce successful installations. This collaborative process reflects the increasingly interdisciplinary nature of contemporary art, where creativity combines with technology, construction, and public interaction. As a result, public art in the twenty-first century has become more accessible, interactive, and globally connected, transforming public spaces into places of shared cultural experience and creative exploration.

Ai Weiwei

Ai Weiwei (born 1957) is a contemporary Chinese artist, activist, architect, and political commentator known internationally for combining art with social and political criticism. Ai studied animation at the **Beijing Film Academy** and became one of the founding members of the Chinese avant-garde art group known as the **"Stars."** The group challenged government restrictions on artistic freedom and promoted greater freedom of expression in China. Ai later attended the **Parsons School of Design** in **New York City**, where he spent several years studying art and documenting urban life through photography. During this period, he developed an interest in conceptual art, political activism, and experimental artistic practices. After returning to China because of his father's illness, Ai increasingly focused on creating politically engaged art addressing issues such as **human rights**, censorship, freedom of speech, government power, and social justice. Because of his outspoken criticism of the Chinese government, Ai Weiwei frequently faced government surveillance, censorship, and restrictions. In 2010, Chinese authorities placed him under house arrest due to objections to his political activism and artistic work.

One of Ai's most important installations was created in 2014 at Alcatraz Island, the former prison located in **San Francisco Bay**. The installation explored themes of imprisonment, political oppression, freedom of speech, and human rights. Although Ai was prohibited from leaving China and could not attend the exhibition in person, he coordinated the project remotely and relied on collaborators to install the artwork according to his instructions. The installation included enormous portraits of political prisoners made from approximately **12 million LEGO pieces** (15.2.1). The 176 tiled portraits represented individuals imprisoned for their beliefs or activism, encouraging viewers to think about liberty, justice, personal responsibility, and the meaning of individual rights. Ai also incorporated delicate **porcelain flowers**, traditional **Chinese kites**, and symbolic objects throughout the prison spaces. In one large room, an enormous colorful **dragon kite** (15.2.2) suspended from the ceiling filled the space with movement and symbolism. Other areas contained binders with information about political dissidents and postcards visitors could write and send, allowing the public to actively participate in the dialogue surrounding freedom and human rights. Through installations, sculpture, photography, architecture, and activism, Ai Weiwei has become one of the most influential contemporary artists in the world, using art as a powerful tool for political expression, social awareness, and global human rights advocacy.

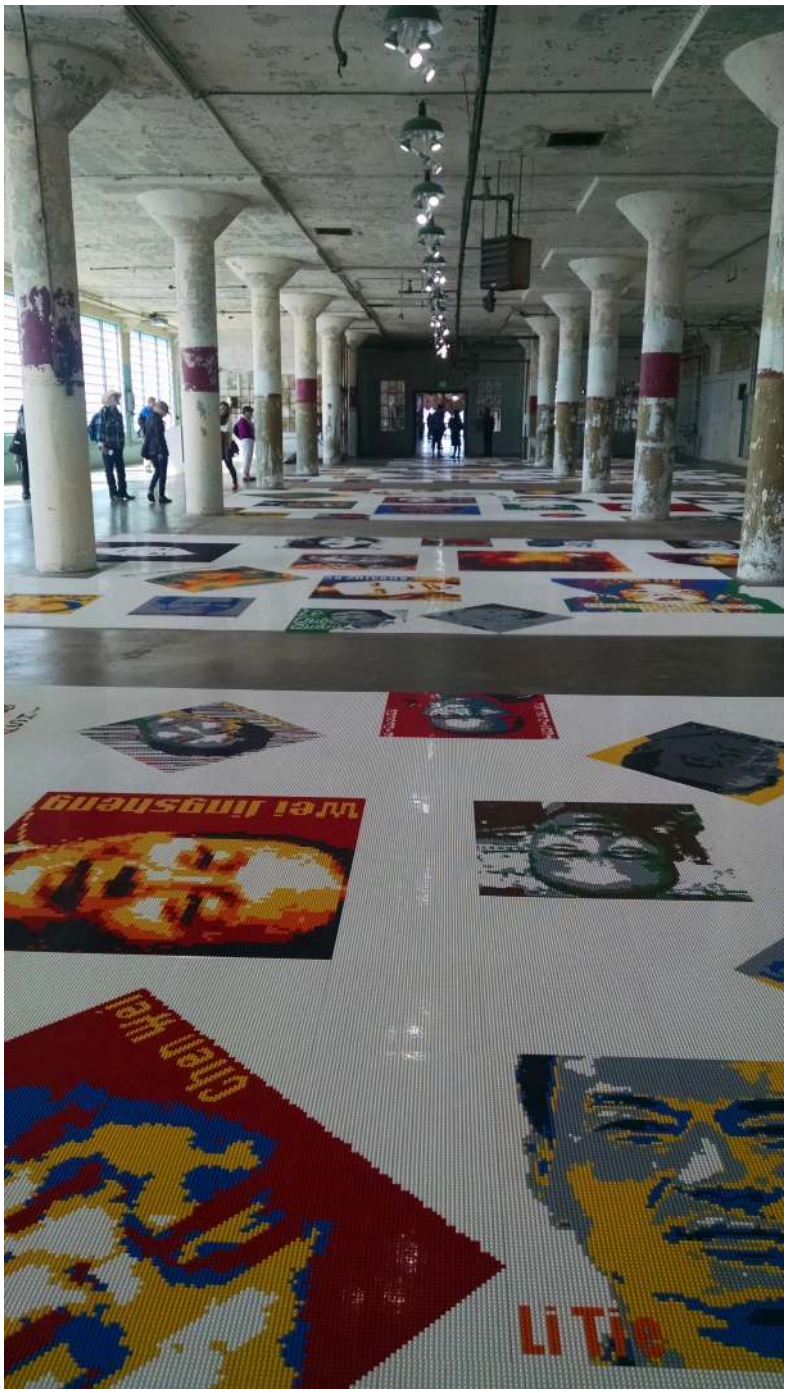
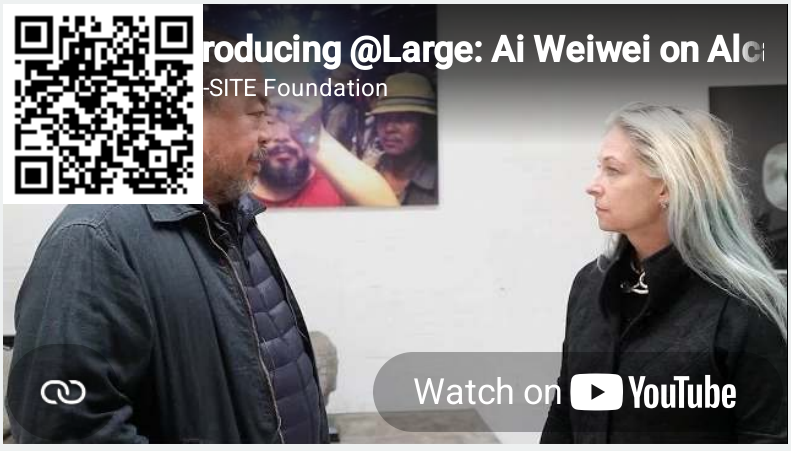


Figure \(\PageIndex{1}\): *Ai Weiwei at Alcatraz, Trace* (CC BY-SA 4.0)

Figure \(\PageIndex{2}\): Copy and Paste Caption here. (Photo: Jylian Gustlin, *@Large: Ai Weiwei at Alcatraz, With Wind* by Ai Weiwei, 2015)

Introducing @Large: Ai Weiwei on Alcatraz

Artist and activist Ai Weiwei and others discuss the ideas behind "@Large: Ai Weiwei on Alcatraz," an exhibition of new work created for Alcatraz that raises urgent questions about human rights and freedom of expression. On view September 27, 2014-April 26, 2015.



Additional text/introduction.

In the installation *Moon Chest* (15.2.3), Ai Weiwei created a carefully arranged series of **81 wooden chests**, each constructed with circular openings cut into the upper and lower panels on both sides. The size and placement of the openings vary slightly from chest to chest, and when the pieces are aligned together in sequence, they visually resemble the changing **phases of the moon**. The installation combines sculpture, architecture, craftsmanship, and spatial design to create a quiet and contemplative visual experience. Ai designed the work using simple geometric forms and traditional materials while maintaining a sense of function and craftsmanship. The chests were constructed from **Huali wood**, a valuable hardwood traditionally used in fine Chinese furniture making. Following ancient Chinese woodworking traditions, the pieces were assembled without nails, screws, or modern joining materials. Instead, they were built using traditional interlocking construction methods associated with classical Chinese furniture design.

Unlike many of Ai Weiwei's installations that directly address political oppression, censorship, or human rights issues, *Moon Chest* focuses more on formal beauty, balance, and meditative simplicity. The repeating forms, carefully aligned openings, and gradual visual transformation encourage viewers to move around the installation and experience shifting perspectives and spatial relationships. Through this work, Ai demonstrates how traditional craftsmanship and minimalist design can create a powerful contemporary artwork centered on harmony, structure, and visual poetry rather than explicit political commentary.

Figure \(\PageIndex{3}\): *Moon Chest* (2008, Huanghuali wood, 320 x 160 x 80 cm) (CC BY-NC-ND 2.0)

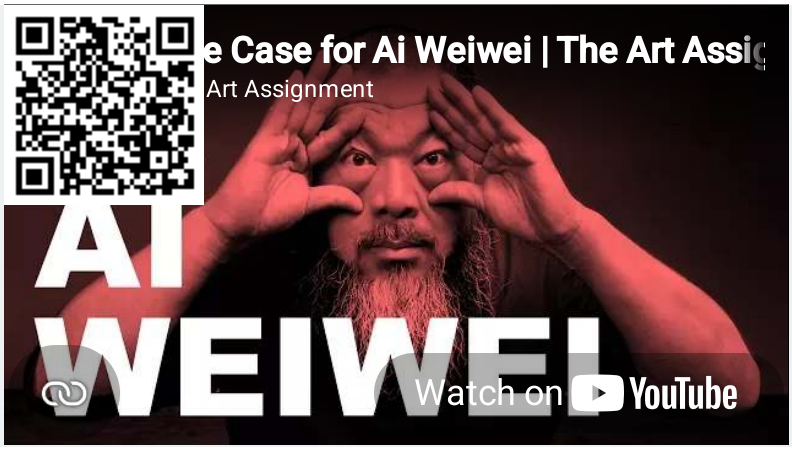
Ai Weiwei created several large-scale bicycle installations that reflect on China's cultural history, industrial production, and rapid modernization. For many decades, bicycles were one of the most common forms of transportation in China and symbolized everyday life, labor, and collective identity. As China modernized and automobile ownership increased, bicycles gradually became less central to urban life. Ai used the bicycle as both a cultural symbol and a sculptural form to examine themes of social change, mass production, and obsolescence. One of his best-known bicycle installations is *Forever* (15.2.4), named after the well-known Chinese bicycle company **Forever Bicycles**. The installation is composed of numerous interconnected bicycle frames arranged into large geometric formations and circular patterns. Ai frequently reconfigured the bicycles into different shapes and installations depending on the exhibition space, emphasizing repetition, movement, and industrial uniformity.

Although the bicycles appear complete at first glance, important functional parts such as the **chains** and **pedals** have been removed. As a result, the bicycles can no longer operate as vehicles and instead become sculptural objects. Their loss of function symbolizes how once-essential cultural objects can become outdated or obsolete as society changes. In *Forever*, the bicycles are often arranged in circular formations that create the illusion of motion and endless continuation. The repeated wheels and frames suggest movement and rhythm even though the sculptures remain physically still. The title “Forever” creates an ironic contrast because the bicycles themselves no longer function, challenging viewers to think about permanence, industrial production, memory, and the rapid transformation of modern society. Through simple everyday objects transformed into monumental installations, Ai Weiwei combines social commentary, historical reflection, and visual beauty while encouraging viewers to reconsider the meaning of ordinary objects within contemporary culture.

Figure \(\PageIndex{4}\): *Forever* (2003, forty-two bicycles) (CC BY-NC-ND 2.0)

The Case for Ai Weiwei - The Art Assignment

Ai Weiwei has been called an iconoclast, a radical, a voice for the voiceless, and was once named the most powerful artist in the world. Who is Ai Weiwei? And why is he considered one of the most renowned artists of our time?



Yayoi Kusama (born 1929) is a Japanese contemporary artist, writer, and installation artist internationally recognized for her bold use of **polka dots**, repetitive patterns, immersive environments, and vibrant color. Often called the **"Princess of Polka Dots,"** Kusama has worked across many artistic media including painting, sculpture, performance art, installation, fashion, and literature. Her work combines elements of **Pop Art**, **Minimalism**, **Surrealism**, **Conceptual Art**, and abstraction while remaining highly personal and visually distinctive.

Kusama was born in Japan to a family that operated a nursery specializing in plants and seeds. From childhood, she became fascinated with organic forms such as pumpkins, flowers, and repeating natural patterns. She often described her artistic inspiration as connected to the hallucinations and psychological experiences she endured throughout her life. By the age of ten, Kusama experienced visions of flashing lights, endless fields of dots, and repeating forms that seemed to surround and engulf her. These experiences became central themes in her art. Her childhood was emotionally difficult. Kusama's mother strongly disapproved of her artistic interests and was often abusive, while her father's repeated affairs created additional emotional trauma. Kusama's mother forced her to spy on her father and report his behavior, experiences that deeply affected her psychologically and later influenced the emotional intensity of her artwork.

Kusama initially studied the traditional Japanese painting style known as **Nihonga**, but she soon became dissatisfied with its limitations and turned toward Western avant-garde art and experimentation. Seeking greater artistic freedom and opportunities unavailable to women in postwar Japan, Kusama moved to the **United States** in 1957 and lived in **New York City** until 1972. During this period, she became associated with major contemporary art movements and developed her signature installations and environments. Kusama's installations often transform entire spaces through repetitive patterns and vibrant color. In some works, she covered trees with red backgrounds and white polka dots (15.2.5), while in others she filled entire rooms with pink spheres covered in black dots (15.2.6). These immersive environments create a sense of endless repetition and visual infinity, inviting viewers to feel surrounded by pattern and color.

Her obsessive repetition of dots, mirrors, and repeated forms became one of her defining artistic trademarks. Kusama frequently used everyday objects and environments as canvases, covering surfaces with glowing dots and repeated imagery. Through this approach, she transformed ordinary spaces into surreal and psychologically charged environments. Today, Yayoi Kusama is considered one of Japan's most important living artists and one of the most influential contemporary artists in the world. Her work explores themes of identity, infinity, obsession, mental health, and the relationship between the individual and the universe through visually overwhelming and unforgettable artistic experiences.

Figure \(\PageIndex{5}\): *Polka Dots on the Trees* (CC BY-SA 3.0)

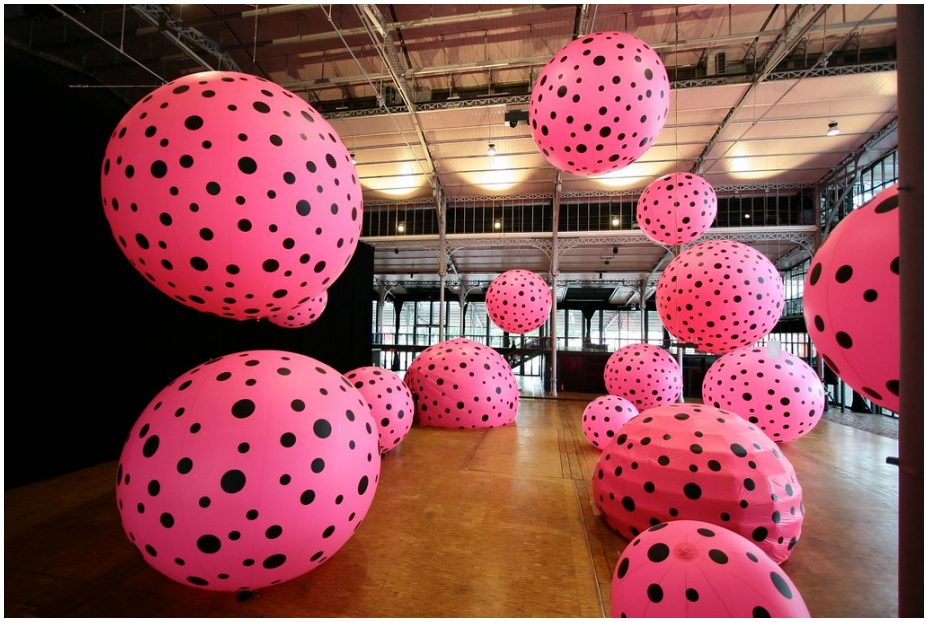


Figure \(\PageIndex{6}\): *Pink Balls* (CC BY-NC-ND 2.0)

In Japan, pumpkins are commonly called **kabocha**, and they became one of the most important and recognizable symbols in the artwork of Yayoi Kusama. As a child, Kusama spent countless hours drawing pumpkins, fascinated by their organic shapes, textured surfaces, and rich colors. To her, pumpkins represented feelings of **comfort**, **stability**, and familiarity during an emotionally difficult childhood. Their rounded forms and natural patterns also connected closely with the repetitive imagery and visual obsessions that later became central to her art. Beginning in the late 1970s, Kusama increasingly incorporated pumpkins into her paintings, sculptures, and installations. She transformed the humble vegetable into a highly personal artistic symbol by covering its surface with her signature **polka dots** and bold repetitive patterns. Over time, pumpkins became recurring motifs throughout her work, appearing in immersive rooms filled with pumpkin forms, monumental outdoor sculptures, paintings, and installations.

Kusama's pumpkin artworks combine playful imagery with deeper emotional and psychological meanings. The repeated dots covering the pumpkins reflect her ongoing exploration of infinity, repetition, and hallucination, while the pumpkin itself symbolizes comfort and emotional grounding. One of her best-known sculptures is *Yellow Pumpkin* (15.2.7), a monumental yellow pumpkin positioned beside the sea. The large sculpture is covered with black dots of different sizes arranged in flowing lines across the surface. The contrast between the bright yellow form, the dark dots, and the surrounding natural landscape creates a striking visual experience. The oversized pumpkin appears both whimsical and surreal while also serving as a powerful symbol of Kusama's lifelong artistic vision and personal identity.

Figure \(\PageIndex{7}\): *Yellow Pumpkin* (CC BY-NC-ND 2.0)

Need to escape reality? Step into infinity with Yayoi Kusama

At the Hirshhorn Museum, visitors are lining up to experience Japanese artist Yayoi Kusama's world of whimsy, color, shapes and a peek into the beyond. Jeffrey Brown tells us why this new exhibit is currently the toughest ticket in Washington, D.C.

Kara Walker (born 1969) is an American contemporary artist known for her powerful and often unsettling explorations of **race**, **gender**, **sexuality**, violence, and the legacy of slavery in American history. She earned her **Master of Fine Arts (M.F.A.)** degree from the **Rhode Island School of Design** and became internationally recognized for her large-scale silhouetted installations that confront difficult historical and social realities. Walker's work is especially known for its use of **cut-paper silhouettes**, a technique historically associated with decorative portraiture and genteel nineteenth-century craft traditions. However, Walker transformed this delicate visual form into a vehicle for confronting the brutal history of slavery, racism, oppression, and power relationships in the American South. Her installations often feature life-sized black paper silhouettes mounted against stark white gallery walls, creating dramatic visual contrast and theatrical storytelling.

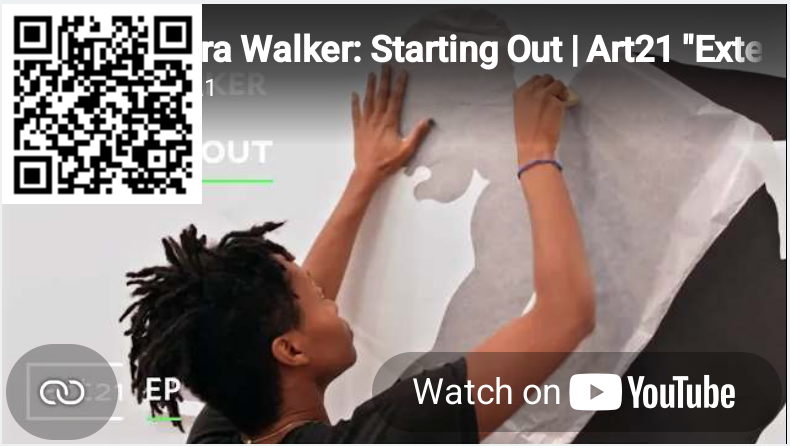
Lighting plays an important role in her installations. Overhead projectors and gallery lighting cast shadows from both the artwork and the viewers themselves onto the walls, causing audiences to become physically connected to the scenes. This effect adds emotional depth, movement, and a ghostlike atmosphere while forcing viewers to confront their own relationship to the historical narratives represented. Walker's artistic perspective was deeply influenced by her experiences after moving to **Georgia**, where she encountered ongoing racial discrimination and witnessed reminders of the **Ku Klux Klan** and segregationist history. These experiences shaped her focus on the realities of slavery, racial violence, and systemic oppression in American culture.

In *African't* (15.2.8), Walker created nearly life-sized silhouette scenes depicting men, women, and children — both Black and white — in scenes set before the **American Civil War**. The panoramic composition presents disturbing images of violence, terror, domination, and exploitation associated with slavery and race relations in the American South. Walker's work addresses both physical violence and sexual abuse, exposing the spoken and unspoken realities endured by enslaved African Americans. Rather than arranging her works as isolated images, Walker typically extended her silhouettes across long walls, stairways, or entire gallery spaces, encouraging viewers to move physically through the narrative. Each scene contains symbolic and layered meanings, requiring audiences to interpret the complex and often uncomfortable relationships between race, history, power, and identity. Through her confrontational imagery and innovative installations, Kara Walker has become one of the most influential contemporary artists addressing the ongoing impact of racism and historical memory in American society.

Figure \(\PageIndex{8}\): African't (1996, cut paper on wall, 365.7 x 2011.6 cm) (CC BY-ND 2.0)

Kara Walker: Starting Out

From her New York City studio, Kara Walker reflects on her early success and offers advice to the next generation of artists. Walker received widespread attention after being included in a group exhibition at The Drawing Center in New York City in 1994, not long after graduating from the Rhode Island School of Design in Providence, Rhode Island. Walker remained in Providence until she “felt ready” to make the move to New York.



Dale Chihuly (born 1941) is an American glass sculptor internationally recognized for transforming the art of **glass blowing** into a large-scale contemporary art form. Chihuly revolutionized the ways glass could be shaped, colored, and displayed, creating dramatic sculptural installations filled with movement, light, and organic forms. Originally studying **interior design** at the **University of Washington**, Chihuly became fascinated with glassmaking after being introduced to the medium during his studies. His interest in the artistic possibilities of glass led him to continue his education at the **Rhode Island School of Design (RISD)**, where he developed advanced glass-blowing techniques and began experimenting with sculptural forms.

Working with molten glass presented many technical challenges because glass is fragile, extremely hot, and difficult to control during the shaping process. Chihuly pushed beyond traditional limitations of the medium by developing innovative methods for manipulating glass into flowing, twisting, oversized forms. His sculptures often feature brilliant colors, dramatic curves, and

biomorphic shapes inspired by flowers, sea life, plants, and natural environments. To support experimentation and collaboration in glass art, Chihuly founded the **Pilchuck Glass School** in **Washington State**. The school became one of the world's leading centers for contemporary glass art, attracting artists from around the globe to study and innovate in the medium. Through Pilchuck, Chihuly helped elevate glassmaking from a decorative craft into a respected form of fine art and large-scale sculpture. Chihuly's installations are known for transforming entire rooms, ceilings, gardens, and public spaces into immersive environments filled with glowing glass forms and vibrant color. His work demonstrates how traditional craftsmanship and technical experimentation can combine to create monumental contemporary art.

Figure \(\PageIndex{9}\): Glass Garden (CC BY-NC 4.0)

Figure \(\PageIndex{10}\): The Boat of Glass (CC BY 2.0)

Dale Chihuly is especially known for creating monumental glass installations designed to interact directly with their surrounding environments. Rather than displaying glass sculptures as isolated objects, Chihuly often places his works within natural landscapes, museums, gardens, lakes, and architectural spaces where light, reflection, color, and movement become part of the artistic experience. In botanical garden installations (15.2.9), Chihuly positions large glass spheres, twisting spikes, and flowing organic forms among flowers, trees, and plants. The brilliant glass colors either complement or sharply contrast with the surrounding vegetation, creating dynamic visual relationships between natural and artificial forms. The reflective quality of glass allows sunlight and changing weather conditions to constantly alter the appearance of the sculptures throughout the day.

One of his striking installations features a **boat filled with colorful glass balls** (15.2.10) floating on a lake. The floating vessel reflects across the water's surface while additional glass spheres appear scattered around the boat as though they have spilled or fallen into the lake. The interaction between water, reflection, transparency, and color creates a dreamlike environment where sculpture and nature merge together. Another important work, *The Sun* (15.2.11), demonstrates Chihuly's innovative approach to glassblowing. The sculpture consists of numerous long, twisted pieces of brilliantly colored glass mounted onto metal supports. Arranged together, the forms radiate outward like flames or solar rays, creating an enormous glowing sculpture that can either hang overhead or rise dramatically from the ground. The energetic movement and explosive arrangement of the glass give the installation a sense of motion and vitality. Chihuly's large-scale works often transform entire spaces into immersive artistic environments. His permanent exhibition space, the Chihuly Garden and Glass, showcases many of his most famous sculptures and installations, combining glass art with gardens, architecture, and lighting to create a comprehensive experience of his artistic vision. Through his experimentation with color, scale, and form, Dale Chihuly expanded the possibilities of contemporary glass sculpture and helped redefine glass as a major medium in fine art.

Figure \(\PageIndex{11}\): The Sun (CC BY 2.0)

An Introduction to Dale Chihuly

An introduction to the art of Dale Chihuly

Nam June Paik

Nam June Paik (1932–2006) was a Korean American artist widely regarded as the founder of **video art**. Working across multiple forms of media, Paik combined television, music, sculpture, performance, and technology to create innovative installations that transformed the relationship between art and electronic media. His work explored how technology shapes modern life, communication, entertainment, and human interaction. During the **Korean War**, Paik and his family fled Korea and eventually settled in **Germany**, where he became involved with avant-garde music, experimental art, and performance movements. Later, he moved to **New York City**, where he began integrating video technology with sound, performance art, and sculpture. Paik became one of the first artists to treat television and electronic media as artistic materials rather than simply tools for communication.

In many installations, Paik used televisions in unexpected and experimental ways. In one work, he scattered television sets throughout a space and used powerful **magnets** to distort the images and sounds produced by the screens, creating constantly changing electronic effects. In another installation, he arranged a line of aquariums filled with fish in front of television monitors displaying moving images of other fish, blending natural life with electronic imagery and questioning the relationship between reality and technology. Paik also became famous for transforming televisions into sculptural forms, particularly robotic figures. In *Pre-Bell-Man* (15.2.12), he assembled televisions, metal parts, wire, and radio components into a structure resembling a horse with a robotic rider. The sculpture combines technology, machinery, and humor while reflecting Paik's fascination with communication devices and modern culture.

One of Paik's most celebrated works is *Electronic Superhighway: Continental U.S., Alaska, and Hawaii* (15.2.13), now permanently installed at the Smithsonian American Art Museum. The enormous installation uses hundreds of television monitors, bright neon lights, and video clips arranged into the shape of a map of the United States. The work comments on America's obsession with television, media, entertainment, and electronic communication. Paik also introduced the term **"electronic superhighway,"** which anticipated the later phrase **"information superhighway"** used to describe the internet and digital communication networks.

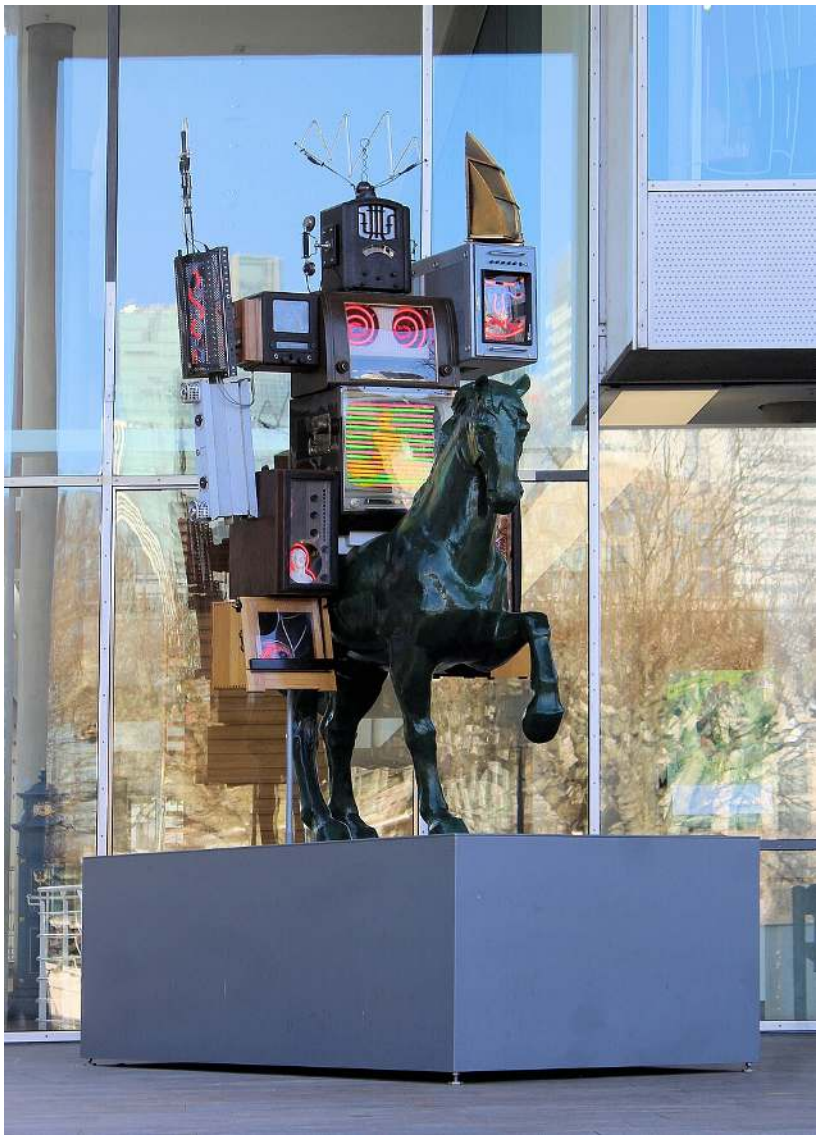


Figure \(\PageIndex{12}\): *Pre-Bell-Man* (CC BY-SA 3.0)

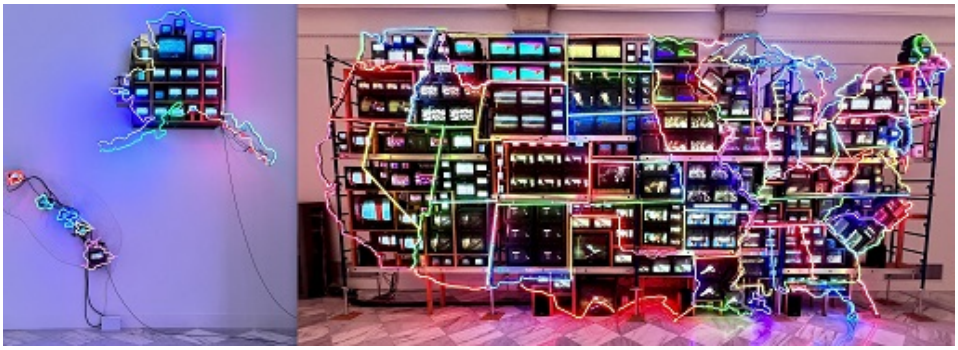


Figure \(\PageIndex{13}\): *Superhighway: Continental U.S., Alaska, and Hawaii* (Public Domain)

Andy Goldsworthy

Andy Goldsworthy (born 1956) is a British sculptor, photographer, and environmental artist best known for creating **land art** using natural materials found directly within the environment. Goldsworthy studied fine art at **Bradford College of Art** and **Preston Polytechnic** before developing a unique artistic practice centered on nature, change, and impermanence. Goldsworthy creates sculptures and installations in both natural landscapes and urban environments using materials such as **leaves, flowers, stones, snow, ice**, **twigs**, **mud**, and **icicles**. Rather than importing materials into a setting, he works with objects already present in the

environment, allowing the location itself to shape the artwork. Many of his sculptures are temporary and exist only for a short time before wind, water, sunlight, or natural decay causes them to disappear.

The sculpture *Stacked Whale Bones* (15.2.14) is made from the complete skeleton of a 5-meter pilot whale that washed ashore in Northumberland. Goldsworthy arranged the bones into a dense stacked formation, transforming the whale remains into a sculptural meditation on nature, death, time, and transformation. Goldsworthy is known for using natural materials such as stone, wood, leaves, clay, ice, and bone in works that explore environmental change and the passage of time.

Because many of his works are ephemeral, Goldsworthy relies heavily on **photography** to document the sculptures at different stages of their existence. The photographs preserve moments in the life cycle of the artwork, capturing both its creation and eventual transformation by nature. In this way, the process of decay and change becomes part of the artwork itself. Goldsworthy prefers to work with his **bare hands** and simple natural tools instead of manufactured equipment, believing this direct physical connection strengthens his relationship with the environment. His quote, *"I enjoy the freedom of just using my hands,"* reflects his commitment to working closely with natural materials and processes.

One of Goldsworthy's best-known forms involves carefully balanced stone sculptures such as *Cairn* (15.2.15), where rocks are stacked into delicate vertical arrangements without mortar or adhesive. Many people credit Goldsworthy with popularizing contemporary **rock balancing** as a form of environmental sculpture. These works demonstrate balance, patience, gravity, and the fragile relationship between natural forces and human intervention. Although many of Goldsworthy's installations disappear naturally over time, some works are designed to remain permanent. *Stone River* (15.2.16), for example, consists of carefully stacked stones placed along a dry creek bed, integrating sculptural form into the surrounding landscape while still reflecting natural movement and erosion.

Figure \(\PageIndex{14}\): Sculpture (CC BY-SA 2.0)

Figure \(\PageIndex{15}\): Cairn (CC BY-SA 3.0)

Figure \(\PageIndex{16}\): *Stone River* (CC BY 4.0)

Andy Goldsworthy - Earth Artist and His Process

Andy Goldsworthy is a British artist known for his site-specific installations involving natural materials and the passage of time. Working as both sculptor and photographer, Goldsworthy crafts his installations out of rocks, ice, leaves, or branches, cognizant that the landscape will change, then carefully documents the ephemeral collaborations with nature through photography. “It's not about art,” he has explained. “It's just about life and the need to understand that a lot of things in life do not last.”

El Anatsui

El Anatsui (born 1944) is a Ghanaian sculptor internationally recognized for transforming everyday materials into monumental contemporary artworks. He taught at the **University of Nigeria** and became associated with the **Nsukka group**, a movement of artists beginning in the 1970s that sought to revive and reinterpret traditional Nigerian artistic practices, especially the art of **uli**. **Uli** is a traditional design system created by the **Igbo people** of Nigeria, historically used for body painting and wall decoration. Uli designs are characterized by flowing linear patterns, asymmetry, organic forms, and minimal use of perspective. As modernization threatened the continuation of this tradition, artists of the Nsukka group incorporated uli principles into contemporary art to preserve and revitalize the cultural practice.

Early in his career, El Anatsui worked primarily with **clay** and **wood**, creating sculptures inspired by Ghanaian history, beliefs, proverbs, and spiritual traditions. He often carved large wooden pieces using **chainsaws**, intentionally leaving the rough marks and cuts visible as part of the artwork's texture and meaning. Rather than hiding the evidence of the tool, Anatsui emphasized the physical process of creation and the relationship between labor and material. After carving the wood, he frequently used an **acetylene torch** to blacken or burn portions of the surface, creating dramatic contrasts of texture and color. These darkened surfaces added visual depth while also symbolizing transformation, history, destruction, and renewal. Through his experimentation with traditional African concepts and contemporary sculptural methods, El Anatsui developed a highly distinctive artistic language that bridges African cultural heritage with global contemporary art.

Figure \(\PageIndex{17}\): *The Restless Earth* (2017) (CC BY-NC 2.0)

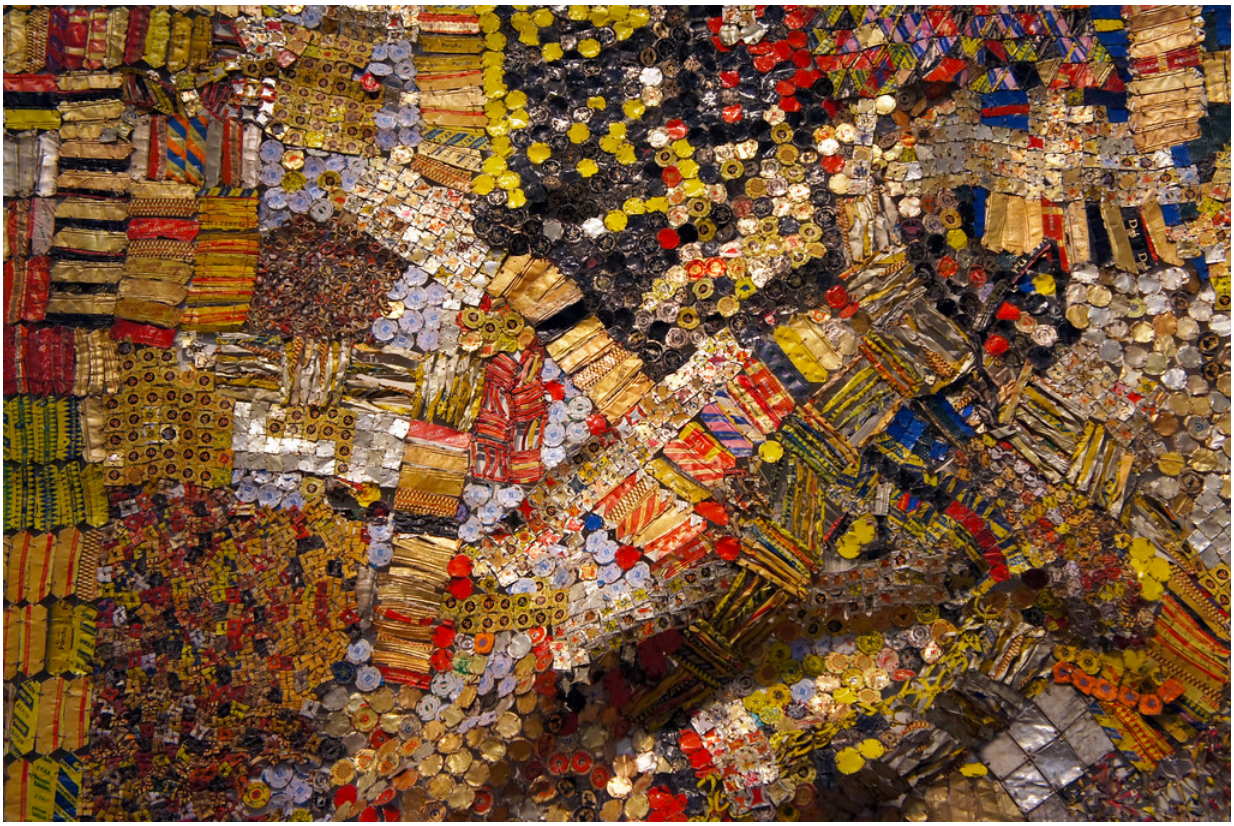


Figure \(\PageIndex{18}\): Close up (CC BY-NC 2.0)

El Anatsui later became fascinated with the artistic possibilities of using large amounts of **recycled materials** gathered from the surrounding environment. Moving away from wood and clay, he began creating monumental sculptural installations from discarded objects such as **bottle caps**, aluminum seals, flattened metal containers, and scraps of found metal. Through these materials, Anatsui explored themes of consumption, waste, history, trade, environmental issues, and African cultural identity. One of his major works, *The Restless Earth* (15.2.17), resembles a vast shimmering textile hanging across a wall. The layered metallic surfaces recall the appearance and movement of traditional **Kente cloth**, the woven ceremonial fabric associated with Ghanaian culture. Instead of fabric, however, Anatsui used discarded bottle caps and crumpled metal pieces collected from recycling stations and waste areas. He connected the pieces together individually using thin **copper wire** (15.2.18), allowing the sculpture to remain flexible enough to fold, drape, and flow like cloth.

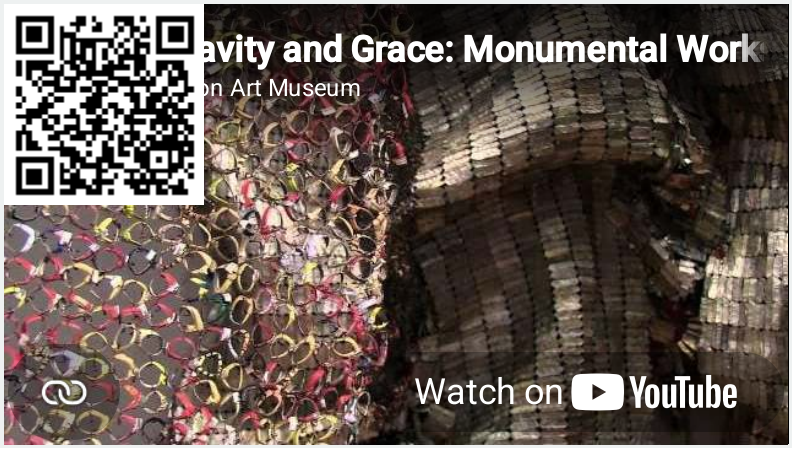
The reflective surfaces of the metal interact dramatically with gallery lighting, causing the installation to shimmer and change appearance as viewers move around it. Because the sculptures are flexible rather than rigid, they appear alive and constantly shifting, creating a strong visual relationship between material, light, movement, and space. Many of Anatsui's works are enormous in scale, often covering entire walls and transforming gallery environments into immersive visual experiences. In *Peak* (15.2.19), Anatsui again used discarded bottle tops, milk tins, and other pieces of metal debris collected from the environment. Rather than concealing the materials' origins, he embraced their imperfections, dents, and signs of wear. The metal fragments were loosely wired together (15.2.20), allowing gravity and installation methods to shape the folds and contours of the sculpture naturally. The resulting forms resemble flowing fabric, mountains, or landscapes while simultaneously referencing consumer culture and environmental waste.

Figure \(\PageIndex{19}\): *Peak* (CC BY-NC 2.0)

Figure \(\PageIndex{20}\): *Peak* closeup (CC BY-NC 2.0)

Gravity and Grace: Monumental Works by El Anatsui

Artist El Anatsui visited the Akron Art Museum in preparation for world premiere of "Gravity and Grace: Monumental Works by El Anatsui" in June 2012. Watch breathtaking footage and hear from Anatsui about his art, processes and influences.



Christo Jeanne-Claude

Christo (1935–2020) and Jeanne-Claude (1935–2009) were a husband-and-wife artistic team internationally known for creating monumental environmental and installation artworks. Over a collaboration lasting more than thirty-five years, they transformed landscapes, buildings, and public spaces through temporary large-scale fabric installations that explored ideas about space, transformation, visibility, politics, and human interaction with the environment. Christo was born in **Bulgaria**, and Jeanne-Claude was born in **Morocco**. Together, they developed a highly distinctive artistic practice centered on wrapping, draping, or altering

architectural structures and natural environments using enormous quantities of fabric, steel, rope, and engineered supports. Their projects often required years of planning, engineering, legal negotiations, and public approval before installation could begin.

Unlike many contemporary artists, Christo and Jeanne-Claude deliberately avoided relying on galleries, museums, corporations, or government sponsorship for financial support. Instead, they independently funded their projects by selling preparatory drawings, prints, posters, books, and related artworks. Their refusal to participate in traditional commercial art systems often attracted criticism but also reinforced their artistic independence. One of their most famous projects was *The Gates* (15.2.21), installed in Central Park. The installation consisted of **7,503 saffron-colored gates** positioned along the park's pathways. Each gate supported flowing fabric panels that moved gently in the wind and transformed the experience of walking through the park. Although the installation itself was assembled in only five days, the planning, design, and negotiations required many years of preparation. The bright orange-saffron color contrasted dramatically with the winter landscape of Central Park, creating a temporary visual environment that encouraged viewers to interact physically with the artwork by walking beneath and around the gates. The project was completed without city funding or corporate sponsorship, financed entirely through the artists' own sale of posters, drawings, and merchandise such as T-shirts.

Figure \(\PageIndex{21}\): *The Gates* (CC BY-SA 3.0)

Another major environmental installation created by Christo and Jeanne-Claude was *The Umbrellas* project, an ambitious artwork installed simultaneously in both **Japan** and **California**. The project explored the similarities and differences between two distant cultures, landscapes, and environments while emphasizing the shared human experience of gathering beneath shelter. The installation consisted of enormous freestanding umbrellas placed across large outdoor landscapes. In **Japan**, the artists installed more than **1,300 blue umbrellas** (15.2.22) within narrower valleys and tightly confined spaces, reflecting the denser and more compressed landscape. In **California**, over **1,700 yellow umbrellas** (15.2.23) were spread widely across the open rolling terrain, emphasizing the expansive character of the environment.

The project required extensive engineering and planning. Steel bases were permanently anchored into the ground to support the massive umbrella structures, and approximately **2,000 workers** participated in assembling and installing the umbrellas. Christo and Jeanne-Claude carefully coordinated both sites so the installations would open and exist simultaneously despite being located on opposite sides of the world. Although *The Umbrellas* remained in place for only a few months, the project attracted enormous public attention. Visitors traveled from around the world to experience the installations, and the sites became gathering places for

tourists, photographers, weddings, and family events. The colorful umbrellas transformed ordinary landscapes into immersive artistic environments, encouraging viewers to interact physically with the artwork and reconsider their relationship with nature and public space. Like many of Christo and Jeanne-Claude's projects, *The Umbrellas* emphasized temporality, collaboration, and environmental transformation. The temporary nature of the installation reinforced the idea that art could exist as a shared experience rather than a permanent object, leaving behind memories, photographs, and altered perceptions of the landscape after the structures were removed.

Figure \(\PageIndex{22}\): *The Umbrellas* (CC BY-SA 3.0)

Figure \(\PageIndex{23}\): *The Unbrellas* (Public Domain)

Ruth Asawa

Ruth Asawa (1926–2013) was an American sculptor and educator best known for her delicate suspended wire sculptures and her dedication to arts education. Born in **California** to Japanese immigrant parents, Asawa's early life was deeply affected by World War II. Following the attack on Pearl Harbor, she and her family were forcibly relocated to Japanese American **internment camps**, where thousands of Japanese Americans were detained during the war. Despite the hardships of internment, Asawa continued to pursue creative activities and developed an enduring interest in art and education. After the war, Asawa initially worked as a teacher before fully dedicating herself to art. During her travels and studies, she learned traditional basket-weaving techniques that greatly influenced her artistic development. Inspired by the weaving process, she began experimenting with **galvanized wire**, discovering how a single continuous line could move in multiple directions and create complex three-dimensional forms.

Using woven wire techniques, Asawa created airy, transparent sculptures (15.2.24) that hang freely in space. Her forms often resemble organic shapes such as flowers, pods, cells, or floating biomorphic structures. Because the sculptures are suspended, they

interact dynamically with light and movement, casting constantly shifting shadows that become an important part of the artwork itself. The interplay between line, transparency, shadow, and surrounding space gives her sculptures a sense of lightness, rhythm, and transformation. Asawa believed deeply in the importance of art education and community involvement. Beyond her artistic career, she worked tirelessly to establish educational programs for children and create opportunities for artists through training and employment initiatives. She helped expand access to arts education and advocated for creativity as an essential part of public life and learning.

Figure \(\PageIndex{24}\): *Wire Sculpture Reflection* (CC BY 2.0)

Esther Mahlangu

Esther Mahlangu (born 1935) is a South African artist of the **Ndebele people** who is internationally recognized for her vibrant geometric paintings inspired by traditional Ndebele mural art. Mahlangu began painting as a child, learning the artistic traditions of her culture from her mother and grandmother, both of whom were mural painters. Among the Ndebele community, women traditionally painted homes and decorative surfaces using bold geometric patterns and symbolic designs. Mahlangu's artwork is characterized by large-scale compositions filled with **bright colors**, strong **black outlines**, and carefully balanced geometric shapes. Her designs are inspired by traditional Ndebele patterns found in clothing, beadwork, architecture, and community decoration. Although rooted in cultural traditions, her work also demonstrates modern abstraction through its symmetry, rhythm, and striking use of color.

One of Mahlangu's most famous achievements was becoming the first female artist invited to participate in the BMW **Art Car Project**, a program in which internationally known artists design custom-painted automobiles. Her *BMW Art Car* (15.2.25) featured traditional Ndebele geometric patterns painted across the surface of the vehicle using vivid colors and bold black lines. Through this project, Mahlangu introduced traditional African artistic traditions to an international contemporary art audience. Her artistic style has also appeared on numerous corporate products, public artworks, and architectural projects. In many Ndebele communities, houses are painted with brightly colored geometric murals, and Mahlangu continued this tradition by decorating homes (15.2.26) with her distinctive visual language. These painted surfaces transform architecture into vibrant expressions of

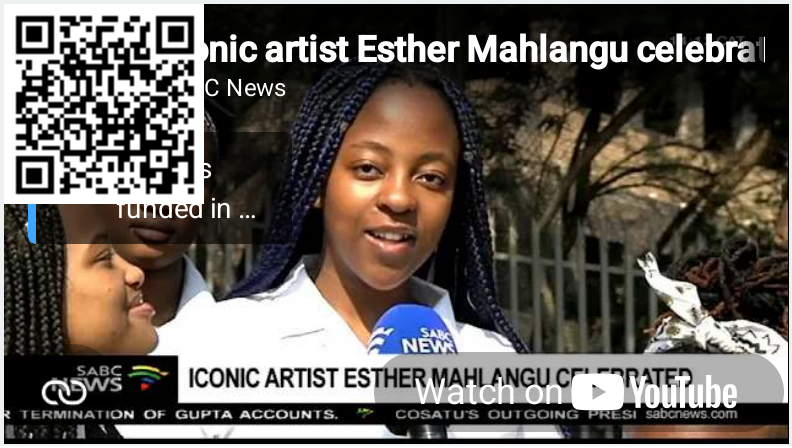
cultural identity and community heritage. Beyond her own artistic career, Mahlangu has devoted significant energy to **arts education** and community support. She founded and directed a school dedicated to teaching artistic skills to children and supporting artists within her homeland. Her commitment to preserving Ndebele artistic traditions while promoting contemporary African art earned her international recognition, including an honorary doctorate from the University of Johannesburg.

Figure \(\PageIndex{25}\): *BMW Art Car* (CC BY 2.0)

Figure \(\PageIndex{26}\): *Homestead* (CC BY 4.0)

Iconic artist Esther Mahlangu celebrated

She was the first woman artist to be invited to make a BMW art car and has represented South Africa globally with her unique take on art, culture, and entrepreneurship. And today the National School of the Arts in Johannesburg celebrated the legacy of the legendary internationally renowned artist, Dr. Esther Mahlangu.



15.3: Architecture for the 21st Century

Definition: Term

- **CAD (Computer-Aided Design)** – Computer software used to create detailed architectural, engineering, and design drawings and models.
- **Architectural Design** – The planning and creation of buildings and structures, including their appearance, function, and construction.
- **3-Dimensional Modeling** – The creation of digital objects or structures that have height, width, and depth and can be viewed from multiple angles.
- **Digital Rendering** – A computer-generated visual image showing realistic representations of a building, object, or design.
- **Blueprint** – A detailed technical drawing used as a guide for constructing buildings or structures.
- **Structural Engineering** – The branch of engineering focused on designing and supporting buildings, bridges, and other structures safely.
- **Parametric Design** – A design process using algorithms and digital parameters to generate complex architectural forms and structures.
- **Virtual Walkthrough** – A digital simulation allowing viewers to explore a building or space as if physically walking through it.
- **Sustainable Architecture** – Architectural design focused on environmental responsibility, energy efficiency, and sustainable materials.
- **Intelligent Buildings** – Buildings equipped with advanced technologies that automatically manage systems such as lighting, temperature, and security.
- **Modern Architecture** – A style of architecture emphasizing simplicity, functionality, clean lines, and new materials and technologies.
- **Innovative Materials** – Newly developed or creatively used construction materials that improve design, function, or sustainability.
- **Engineering** – The application of science and mathematics to design, build, and maintain structures, machines, and systems.
- **Digital Technology** – Electronic tools, software, and systems used to create, process, and share information.
- **Urban Planning** – The organization and design of cities, towns, and public spaces to improve functionality and quality of life.
- **Construction Plans** – Detailed drawings and specifications used by builders to construct a structure.
- **Architectural Visualization** – The process of creating visual representations of architectural designs before construction.
- **Mock-Up Model** – A physical or digital model built to demonstrate the appearance or function of a design.
- **Contemporary Architecture** – Architecture created in the present time using current ideas, technologies, and materials.
- **Futuristic Design** – Design that emphasizes innovative, forward-looking forms and technologies that suggest the future.

The invention of **CAD (Computer-Aided Design)** in 1961 transformed the field of architecture by dramatically changing how architects design, visualize, and construct buildings. Before CAD technology, architects created plans entirely by hand using drafting tools, a process that required significant time and precision. CAD programs introduced a faster, more accurate, and more affordable method for producing architectural drawings and structural plans. Modern CAD systems allow architects to generate highly detailed two-dimensional plans and realistic three-dimensional digital models. These digital models can be viewed from multiple angles, modified quickly, and tested for structural efficiency before construction begins. The technology also enables architects, engineers, and construction companies to collaborate more effectively throughout the design process. Instead of relying only on physical models or blueprints, clients can now experience virtual walkthroughs and realistic simulations of buildings before they are built.

The development of CAD also opened new possibilities for architectural creativity. Complex curves, unusual forms, and experimental structures that would have been difficult to calculate manually became achievable through computer technology. Contemporary architects increasingly use digital modeling, parametric design, and advanced engineering software to create innovative buildings that challenge traditional ideas of form and space. Zaha Hadid became one of the most influential architects associated with these new technologies. Known for her futuristic and fluid architectural designs, Hadid pushed the boundaries of what buildings could look like by embracing CAD technology, advanced materials, and innovative engineering. Her structures

often featured sweeping curves, dynamic movement, and complex geometries that seemed impossible before the development of sophisticated computer modeling.

Although architects like Hadid designed buildings that appeared futuristic, their work still built upon earlier traditions in engineering, mathematics, and architectural history. Contemporary architecture continues to be influenced by past innovations even as it moves toward new technologies and ideas. As the twenty-first century progresses, the future of art and architecture will likely become even more interconnected with digital technology, sustainability, and global culture. Future structures may incorporate artificial intelligence, responsive materials, renewable energy systems, and environmentally sustainable designs. Architects and artists will continue blending past traditions with emerging technologies to create spaces that reflect the changing needs, values, and imagination of future societies.

Sustainable Architecture

Sustainable architecture, also called **green architecture**, is a modern architectural approach focused on reducing the environmental impact of buildings through energy efficiency, responsible design, and the use of sustainable materials. The goal of sustainable architecture is to create buildings that meet present needs while protecting natural resources and preserving the environment for future generations. Awareness of environmental problems began increasing during the **1960s**, when concerns about pollution, industrial growth, deforestation, and energy consumption led many people to reconsider humanity's relationship with the environment. By the mid-1980s, environmentally conscious design had developed into an important architectural movement. Architects, engineers, and designers began exploring ways to conserve energy and reduce waste in building construction and operation.

Sustainable architecture emphasizes the use of **energy-efficient systems** and environmentally responsible materials. Architects may incorporate features such as **solar panels**, **wind energy systems**, natural lighting, water conservation systems, green roofs, recycled materials, and improved insulation to lower a building's energy consumption. Buildings are often designed to work with local climate conditions, maximizing natural ventilation and reducing the need for artificial heating or cooling. This approach requires architects to carefully consider how buildings affect both people and the environment throughout the structure's entire life cycle. Sustainable design seeks to minimize pollution, reduce reliance on nonrenewable resources, and lower carbon emissions while creating healthy and functional spaces for human use. As environmental concerns such as **global warming**, climate change, and resource depletion continue to grow in importance during the twenty-first century, sustainable architecture has become one of the most influential movements in contemporary design. It reflects a commitment to balancing technological advancement, human needs, and environmental responsibility to ensure that future generations inherit a healthier and more sustainable world.

BedZED

BedZED, located in **Beddington Corner** near London, England, is one of the earliest and most influential examples of a modern **sustainable community**. Developed as part of the **Hackbridge Masterplan**, BedZED stands for **Beddington Zero Energy Development** and was created as England's first large-scale **carbon-neutral residential community**. Designed by Bill Dunster, the development covers approximately **1,405 square meters** and contains **82 homes** along with workspaces and community facilities. BedZED was created to demonstrate how architecture and urban planning could significantly reduce environmental impact while still providing comfortable living spaces.

The community uses innovative sustainable building techniques and materials to conserve energy and reduce carbon emissions. Many of the construction materials are **recycled**, **reclaimed**, or naturally sourced. The buildings are designed with thick insulation and materials capable of storing heat during warm weather and gradually releasing it when temperatures cool, helping regulate indoor temperatures naturally and reducing the need for additional heating. One of BedZED's major innovations is its centralized energy system. Instead of each home using an individual water heater, a shared power plant generates hot water and distributes it throughout the community using highly insulated underground pipes (15.3.1, 15.3.2). This system increases energy efficiency and reduces wasted heat. The development also incorporates natural ventilation systems, solar energy strategies, energy-efficient appliances, and carefully planned building orientation to maximize sunlight. BedZED became an important model for sustainable architecture and environmentally conscious urban design in the twenty-first century. The project demonstrated that communities could significantly lower energy consumption and carbon emissions through thoughtful architectural planning, shared resources, and environmentally responsible construction methods.

Figure \(\PageIndex{1}\): *BedZED* (CC BY 2.0)

Figure \(\PageIndex{2}\): *BEDZED roof* (CC BY 2.0)

One Central Park

One Central Park in Sydney, Australia, is an internationally recognized example of **sustainable architecture** that combines environmental technology, urban renewal, landscape design, and contemporary art. The residential development demonstrates how modern architecture can integrate ecological responsibility with visually innovative design. The building incorporates numerous sustainable features, including extensive **hanging gardens**, a **water recycling system**, and a large **cantilevered heliostat**

connected to a low-carbon energy system. Gray water collected from sinks, showers, and laundry is recycled and reused throughout the complex for bathrooms, laundry systems, and irrigation of outdoor green spaces. These systems significantly reduce water waste and improve environmental efficiency. One of the most striking features of One Central Park is its extensive vertical gardens designed by Patrick Blanc. Covering approximately **1,120 square meters**, the gardens contain more than **35,200 plants** representing **383 species**, including many native Australian plants such as acacias. Blanc developed an innovative planting system in which plants are attached to **mesh-covered felt panels** that absorb and distribute water. This technique allows vegetation to grow directly along the walls of the building without the use of traditional soil (15.3.3, 15.3.4). A remotely controlled drip irrigation system maintains the gardens and supports plant growth across the structure's exterior.

The building also includes rooftop reflector panels that redirect natural sunlight into shaded areas of the surrounding park and nearby buildings, improving natural lighting within the urban environment. At night, the structure transforms into a large-scale LED artwork known as *Sea Mirror*, created by Yann Kersale. The illuminated installation adds a dynamic artistic element to the building while blending architecture, technology, and public art. One Central Park serves as an important example of how sustainable design and advanced architecture can coexist successfully. The project demonstrates how cities can incorporate nature, renewable systems, public art, and innovative engineering into dense urban environments, supporting the idea expressed in its slogan: *"where the city meets nature."*

Figure \(\PageIndex{3}\): One Central Park (CC BY 3.0)

Figure \(\PageIndex{4}\): *One Central Park vegetation* (CC BY-SA 4.0)

Gardens by the Bay is one of the world's most innovative examples of sustainable landscape architecture and urban environmental design. Located in Singapore on approximately **101 hectares** of reclaimed land, the project was developed as part of the government's vision to transform Singapore into a **"city in a garden."** The goal of the project is to improve urban life by integrating architecture, sustainability, greenery, and public recreation into the city environment. The park contains three major waterfront gardens and combines advanced environmental technology with spectacular horticultural displays. One of the most recognizable features of the site is the pair of enormous **column-less glass conservatories** built from sustainable materials. These conservatories house specialized plant environments from different climates around the world.

One conservatory, known as the *Cloud Forest* (15.3.5), recreates the cool, moist atmosphere typically found in tropical mountain regions approximately **1,000 meters above sea level**. The indoor environment contains mist, waterfalls, lush vegetation, and elevated walkways that immerse visitors in a simulated cloud forest ecosystem. A major feature of Gardens by the Bay is its environmentally sustainable infrastructure. Rainwater is collected throughout the site and reused within the gardens' cooling and irrigation systems. The cooling system works together with the famous **Super Trees**, giant vertical garden structures that function as environmental support systems for the conservatories and surrounding landscape.

The **Super Trees** rise between **25 and 50 meters** high and are covered with living plants such as **ferns**, **orchids**, **bromeliads**, and other exotic species. Like natural trees, the structures help regulate temperature and support plant life. They also contain **photovoltaic cells** that capture solar energy to power lighting systems throughout the gardens. In addition, the Super Trees collect rainwater used for irrigation, fountains, and the conservatory cooling systems. Suspended between two of the Super Trees is an elevated walkway (15.3.6) that provides visitors with panoramic views of the gardens and city skyline. The walkway allows people to experience the vertical landscape from above while emphasizing the integration of architecture, engineering, ecology, and public space. Gardens by the Bay represents a major achievement in sustainable urban planning and environmental architecture. The project demonstrates how cities can successfully combine advanced technology, renewable energy, ecological systems, and artistic landscape design to create healthier and more beautiful urban environments.

Figure \(\PageIndex{5}\): *Garden by the Bay* (CC BY 2.0)

Figure \(\PageIndex{6}\): *Cloud Forest* (CC BY 2.0)

Contemporary architecture in the twenty-first century continues to evolve beyond the traditional forms of earlier building design. Rather than focusing primarily on simple upright rectangular structures, many contemporary architects now create buildings with

organic forms, flowing shapes, and designs that connect more closely with the surrounding environment. Architecture has become increasingly concerned with how buildings interact with nature, public spaces, sustainability, technology, and the experiences of the people who use them. Modern architects are challenged to design structures that are both visually innovative and environmentally responsible. Advances in **engineering**, **digital modeling**, and **construction technology** allow architects to create forms that would have been impossible in earlier centuries. Curved surfaces, twisting towers, floating structures, and highly complex geometries can now be designed and constructed using advanced computer software and modern building materials.

Contemporary buildings often serve multiple functions simultaneously, combining residential, commercial, recreational, and environmental purposes within a single structure. Architects increasingly integrate natural light, green spaces, water systems, renewable energy sources, and sustainable materials into their designs to reduce environmental impact and improve quality of life. The use of twenty-first-century materials such as lightweight steel, advanced glass systems, carbon composites, engineered concrete, and smart technologies has expanded architectural possibilities even further. Buildings may now incorporate intelligent systems that regulate lighting, temperature, ventilation, and energy use automatically. As contemporary architecture progresses, architects continue exploring new ways to merge technology, sustainability, art, and engineering into structures that reflect the changing needs and values of modern society.

Marina Bay Sands

Marina Bay Sands (15.3.7) is one of the most recognizable examples of twenty-first-century contemporary architecture and urban design. Located along Singapore's waterfront, the massive integrated resort complex combines multiple functions into a single architectural development, reflecting the modern trend toward multifunctional urban environments. The structure consists of **three soaring towers** connected across the top by the enormous **SkyPark**, a platform approximately 340 meters long that visually anchors the buildings together. The development contains a wide variety of facilities, including a casino, luxury hotel, shopping mall, theaters, restaurants, a convention center, museums, entertainment spaces, and even an ice-skating rink, demonstrating how contemporary architecture often combines recreation, commerce, tourism, and public gathering spaces into one integrated complex.

One of the most famous features of Marina Bay Sands is the rooftop SkyPark infinity pool (15.3.8), which stretches approximately 150 meters across the top of the towers and overlooks Marina Bay. The pool creates the visual illusion that the water extends seamlessly into the city skyline and surrounding bay, making it one of the most photographed architectural features in the world. The dramatic engineering required to support the SkyPark demonstrates the advanced construction techniques and materials available to contemporary architects. The design merges innovative engineering with luxury, entertainment, and visual spectacle while also creating strong connections between the building and the surrounding urban landscape.

Figure \(\PageIndex{7}\): Marina Bay Sands Hotel (C BY 4.0)

Figure \(\PageIndex{8}\): *Aerial view of rooftop* (CC BY 2.0)

The Metropol Parasol

Metropol Parasol (15.3.9) is a striking example of contemporary architectural design located in **La Encarnación Square** in **Seville, Spain**. Designed by Jürgen Mayer-Hermann, the structure is considered one of the world's largest wooden architectural constructions, measuring approximately **150 meters long**, **70 meters wide**, and **26 meters high**. The design consists of six massive parasol-shaped forms that many visitors compare to giant mushrooms because of their curved organic appearance. The flowing

wooden forms create a futuristic structure that contrasts dramatically with the surrounding historic architecture of Seville while still functioning as a public gathering space integrated into the urban environment.

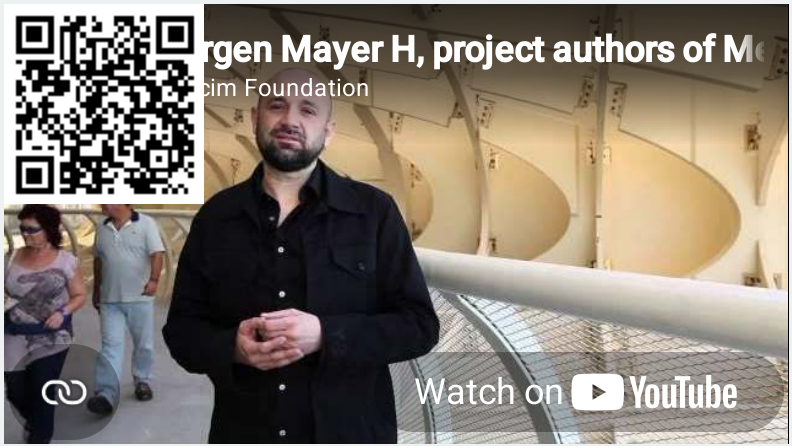
The Metropol Parasol contains four distinct levels serving multiple cultural and public purposes. Beneath the structure is the **Antiquarium**, an archaeological museum that preserves and displays ancient **Roman** and **Moorish** ruins uncovered during excavation of the site. This underground level connects the contemporary structure to the deep historical layers of the city. Level one functions as an open-air public plaza used for markets, performances, and community activities. Levels two and three contain elevated walkways and observation areas that provide panoramic views of Seville. Visitors can walk along the curved pathway (15.3.10) at the top of the structure, experiencing both the architectural form and the surrounding cityscape from above.

Figure \(\PageIndex{9}\): *Metropol Parasol* (CC BY 3.0)

Figure \(\PageIndex{10}\): *Metropol Parasol roof* (CC BY 3.0)

Jurgen Mayer H, project author of Metropol Parasol, Seville, Spain

Project author Jürgen Mayer H, principal of J Mayer H Architekten, Berlin explains the range of cultural, aesthetic, economic and ecological benefits of his Bronze winning Metropol Parasol project in central Seville, Spain.



The Guggenheim Museum Bilbao

Guggenheim Museum Bilbao (15.3.11) is located in **Bilbao, Spain**, and was designed by Frank Gehry to house modern and contemporary art. The museum is internationally recognized for its innovative contemporary design and its integration with the surrounding bridges, landscaping, riverfront, and nearby urban structures. The museum's sweeping exterior curves (15.3.12) appear almost random and organic, creating a sculptural structure that changes visually as sunlight reflects across its surfaces throughout the day. The flowing forms capture natural light while also framing views of the surrounding city and countryside. Gehry designed the building to create a sense of movement and fluidity, making the structure itself function like a monumental sculpture.

The museum is constructed from **stone**, **glass**, and **titanium**, materials that fold and curve together throughout the design. The titanium panels give the building its shimmering metallic appearance and allow the surfaces to reflect changing weather and light conditions. Certain sections of the museum are finished with stone, helping define specific gallery spaces, while other areas feature irregularly shaped forms covered with curving titanium siding. Inside the museum, the unusual shapes and flowing architectural spaces continue throughout the galleries and central atrium. The combination of curved lines, open spaces, and reflective materials creates an immersive environment where architecture and art become closely connected. The Guggenheim Museum Bilbao remains one of the most important examples of contemporary architecture and demonstrates how innovative design can transform both cultural spaces and entire cities.

Figure \(\PageIndex{11}\): *Guggenheim Museum Bilbao* (CC BY 3.0)

Figure \(\PageIndex{12}\): *Exterior curve* (CC BY 2.5)

Guggenheim Museum, Bilbao - Frank Gehry

The Guggenheim Museum Bilbao is a museum of modern and contemporary art designed by Canadian-American architect Frank Gehry, and located in Bilbao, Basque Country, Spain. The museum was inaugurated on 18 October 1997 by former King Juan Carlos I of Spain. Built alongside the Nervion River, which runs through the city of Bilbao to the Cantabrian Sea, it is one of several museums belonging to the Solomon R. Guggenheim Foundation and features permanent and visiting exhibits of works by Spanish and international artists. It is one of the largest museums in Spain.

Heydar Aliyev Center (15.3.13) is a landmark example of contemporary architecture located in **Baku, Azerbaijan**. Designed by Zaha Hadid, the cultural center is internationally recognized for its flowing, fluid design and futuristic appearance. The building contains exhibition halls, performance spaces, conference areas, and a museum, all integrated into a continuous sculptural form. The architecture of the center is characterized by sweeping curves and smooth surfaces that appear to rise organically from the landscape. Rather than using traditional sharp corners or rigid geometric shapes, Hadid designed the building as a continuous flowing structure where the exterior topography folds and merges into itself. The entrances are hidden within the folds of the surface, creating the impression that the building grows naturally from the ground.

As visitors enter the center, the architecture continues to flow inward, with walls, ceilings, and floors curving together seamlessly. The interior spaces (15.3.14) appear to fold and bend around the viewer, creating a dynamic environment where exterior and interior forms feel connected. The building's constantly shifting surfaces and fluid lines give the impression of movement and transformation.

Figure \(\PageIndex{13}\): *Heydar Aliyev Cultural Center* (Public Domain)

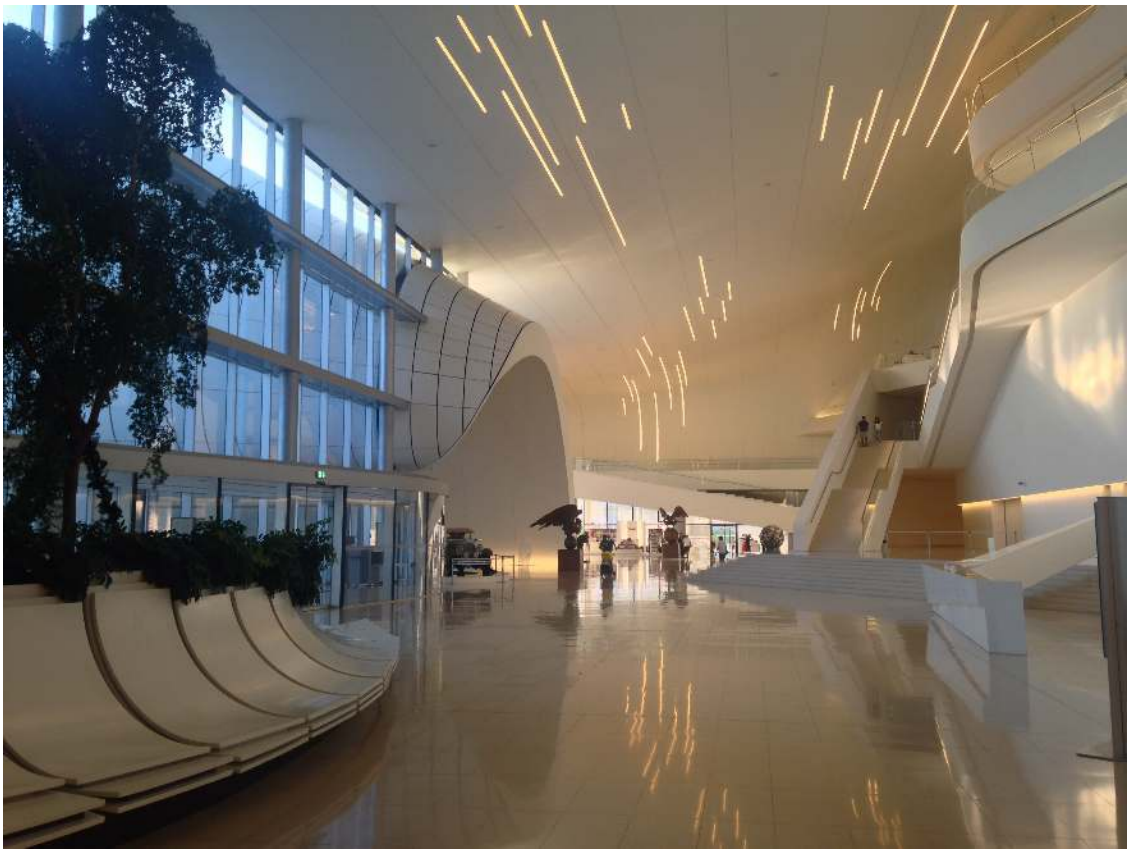
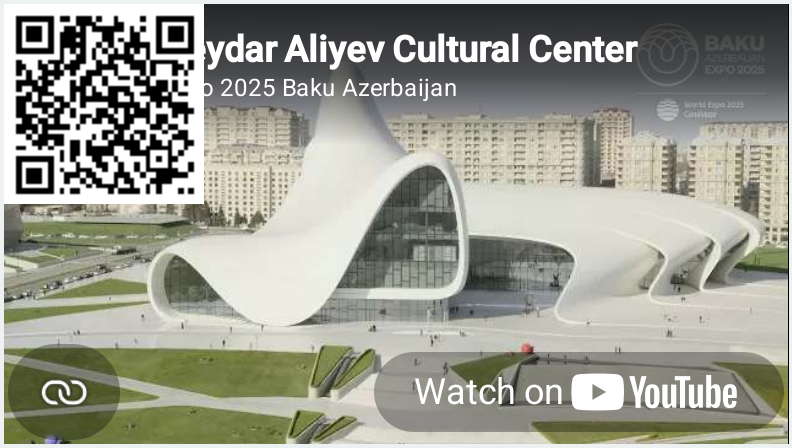


Figure \(\PageIndex{14}\): *Interior of center* (C BY 4.0)

Heydar Aliyev Cultural Center

Heydar Aliyev Cultural Center, designed by the legendary Zaha Hadid, has become a signature landmark of modern Baku



Apple Park

Apple Park in **Silicon Valley, California**, was designed by Foster + Partners and is often referred to as the “spaceship” because of its enormous circular form (15.3.15). The campus was envisioned by Steve Jobs as a workplace deeply connected to nature, sustainability, and innovation. Jobs imagined a campus centered on the landscape rather than traditional office buildings. The site includes extensive groves of trees, gardens, orchards, walking paths, and meadows designed to create a healthier and more environmentally supportive setting for employees. Despite the emphasis on nature, the massive circular building dominates the property and surrounds an interior courtyard spanning more than twenty acres.

The structure is known for its continuous curved glass exterior walls, creating a smooth and futuristic appearance. Advanced engineering techniques allowed the building to use some of the largest curved glass panels ever manufactured. Apple Park is also an important example of sustainable architecture because it operates primarily on **renewable energy**, including electricity generated by a vast **solar roof** covering much of the complex. Another notable feature of the campus is the unusual underground theater (15.3.16), often used for Apple product launches and presentations. The theater entrance consists of a circular glass structure with no visible supporting pillars, giving the impression that the roof floats above the transparent walls. The facility includes presentation spaces, meeting areas, and media rooms designed for global press events and corporate gatherings.

Figure \(\PageIndex{15}\): Apple Park (CC BY-SA 4.0)

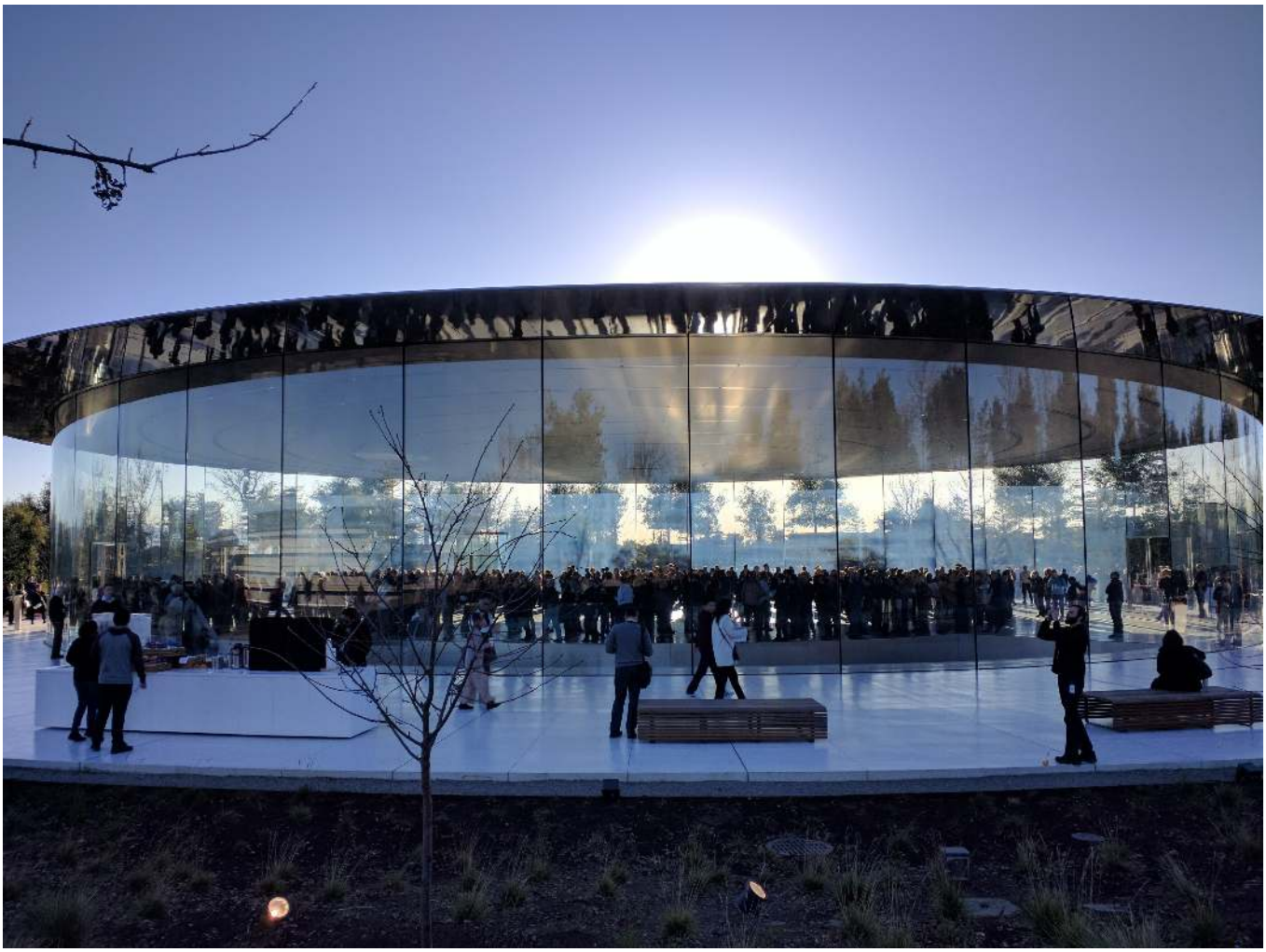
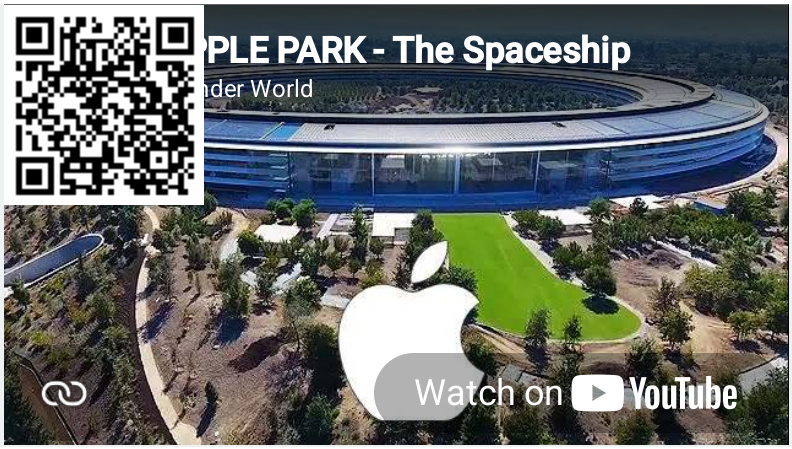


Figure \(\PageIndex{16}\): Apple Park Theatre (CC BY-SA 4.0)

Apple Park

In Early 2018, Apple partially finished construction on their new massive office building, called Apple Campus 2, Also known as Apple Park & the Spaceship. The Apple Park is the corporate headquarters of Apple Inc., located at One Apple Park Way in Cupertino, California, United States. The land cost an estimated $160 million dollars In 2011, the original planned budget for Apple Campus, was about $3 billion dollars, however in 2013 the total cost was estimated to be closer to $5 billion dollars. The company's new 175-acre campus, is one mile in circumference, with a diameter of 461 meters , and can house 12,000 employees. The main building was ready for employees to begin partial occupancy in January 2018, as the building was still not finished, the process of moving more than 12,000 people, was estimated to take over six months.



Guangzhou Opera House

Guangzhou Opera House in **Guangdong Province, China**, was designed by Zaha Hadid and is considered one of China's largest and most innovative performing arts centers (15.3.17). The opera house reflects Hadid's signature flowing architectural style and demonstrates the use of advanced engineering and contemporary materials in twenty-first-century architecture. Hadid designed the structure to resemble two massive stones or pebbles shaped by the movement of the nearby **Pearl River**. The fluid forms appear naturally sculpted by water and erosion, allowing the building to connect visually with the surrounding landscape and riverfront environment. The exterior surfaces feature sweeping curves and angular planes that create a dynamic sense of movement and organic form. The opera house was constructed using **concrete**, extensive areas of **glass**, and **granite blocks**, combining strength, transparency, and texture throughout the structure. Inside, the building contains two technologically advanced performance theaters (15.3.18) designed for opera, concerts, and theatrical productions. Sophisticated lighting systems illuminate both the interior and exterior spaces, enhancing the dramatic architectural forms and creating immersive visual experiences for visitors.

Figure \(\PageIndex{17}\): Guangzhou Opera House (CC BY-SA 3.0)

Figure \(\PageIndex{18}\): Interior view (CC BY-NC-SA 2.0)

Beijing National Stadium

Beijing National Stadium, commonly known as the **Bird's Nest** (15.3.19), was constructed for the **2008 Summer Olympics** in Beijing, China. The stadium was designed by Swiss architects from Herzog & de Meuron with Ai Weiwei serving as the lead artistic consultant. The structure became one of the most recognizable architectural symbols of the Olympic Games and contemporary Chinese architecture. The design was inspired in part by the graceful curves and flowing forms found in traditional **Chinese ceramics**. The exterior structure resembles a giant woven bird's nest created from interlacing steel beams. Thousands of curved steel sections were individually fabricated and assembled on-site to create the complex lattice framework surrounding the stadium.

At night, light shining through the steel framework creates the visual effect of a glowing stained-glass structure (15.3.20), emphasizing the intricate web-like design. The combination of engineering and artistic form gives the stadium both monumental strength and visual elegance. Inside the stadium (15.3.21), advanced environmental systems allow the playing field to be heated or

cooled depending on weather conditions and event requirements. The seating areas accommodate approximately **100,000 spectators** and are designed with sophisticated ventilation systems that regulate temperature and airflow throughout the structure to improve comfort for visitors.

Figure \(\PageIndex{19}\): Beijing National Stadium (CC BY-SA 3.0)

Figure \(\PageIndex{20}\): Stadium at night (CC BY 4.0)

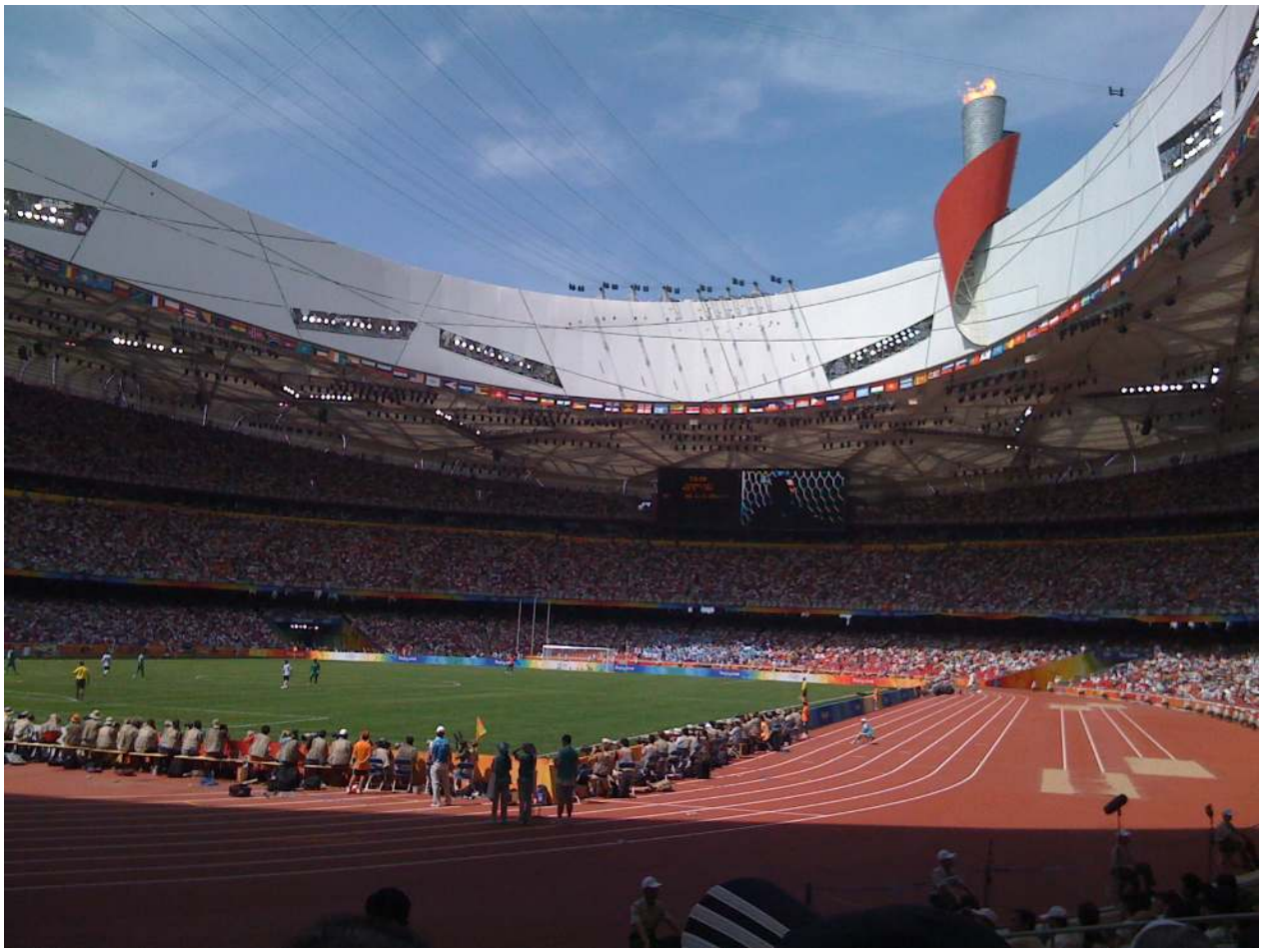


Figure \(\PageIndex{21}\): Field inside the stadium (CC BY 2.0)

Tower Architecture

Tower Architecture has become one of the most important developments in twenty-first-century urban design and engineering. Around the world, architects and engineers continue constructing towers at unprecedented heights, with new skyscrapers frequently setting records for height, technological innovation, and sustainability. These massive structures reflect the growing needs of expanding urban populations, limited land availability, and the desire to create efficient mixed-use environments within densely populated cities. Modern tower designs often combine multiple functions within a single structure, including residential apartments, offices, hotels, shopping centers, restaurants, entertainment facilities, and public gathering spaces. By integrating many activities into compact vertical environments, contemporary towers help reduce urban sprawl while supporting cities connected by extensive public transportation systems.

Although many skyscrapers continue to feature extensive glass exteriors, architects now face increasing pressure to improve energy efficiency and environmental sustainability. Contemporary towers incorporate advanced technologies such as high-performance insulated glass, solar panels, energy-efficient ventilation systems, water recycling, wind-resistant engineering, and smart environmental controls to reduce energy consumption and environmental impact. The rise of immense tower structures also changes how people live and interact with cities. Vertical urban living influences transportation systems, work environments, housing patterns, and public infrastructure needs. Cities must adapt by improving public transit, utilities, emergency systems, pedestrian access, and environmental planning to support growing populations living and working in dense vertical communities. As architecture continues advancing in the twenty-first century, tower design increasingly combines engineering innovation, sustainability, technology, and urban planning to create structures that respond to the changing demands of modern global society.

Absolute World

Absolute World (15.3.22) is a striking example of contemporary residential tower architecture located in **Mississauga, Ontario, Canada**. Designed by Ma Yansong with assistance from Qun Dang, the condominium complex is internationally recognized for its dramatic twisting forms and innovative engineering. The towers are often nicknamed the “Marilyn Monroe Towers” because of

their curving, sculptural appearance. Unlike traditional rectilinear skyscrapers with rigid straight lines, Absolute World was designed with softer organic forms and continuously rotating floor levels. The two towers rise approximately **50 and 56 stories** high, with the taller tower twisting an extraordinary **209 degrees** from its base to its top.

One of the project's greatest architectural and engineering challenges was that every floor required a slightly different rotation to create the twisting effect. Although the floor plates themselves remained generally consistent in shape, each level had to be positioned at a different angle during construction. As a result, structural elements such as columns and walls had to be continually adjusted — shortened, lengthened, widened, or narrowed — throughout the building process. Because of the constant rotation and shifting geometry, no two condominium units are exactly alike. The twisting design creates constantly changing views, interior layouts, and exterior appearances as the building rises upward. The simplified architectural plans reveal the gradual rotational movement of each floor, demonstrating the complex mathematical and engineering precision required to construct the towers.

Figure \(\PageIndex{22}\): Absolute World (CC BY-SA 4.0)

Petronas Towers

Petronas Towers (15.3.22) are iconic twin skyscrapers located in **Kuala Lumpur, Malaysia**, and were designed by Cesar Pelli. The towers became internationally famous for their height, engineering innovation, and incorporation of Islamic-inspired design elements. When completed, they were the tallest buildings in the world until 2004 and still remain the tallest twin towers ever

constructed. Building the towers required overcoming major engineering challenges because the stable bedrock beneath the site was located far below the surface. Construction crews excavated to depths of approximately **30 meters**, removing nearly **500 truckloads of soil each night** during the excavation process. Massive reinforced concrete foundations were then poured to support the enormous weight and unusual design of the skyscrapers.

Each tower rises **88 stories** and is constructed primarily from steel and reinforced concrete with an exterior glass façade. The façade design incorporates geometric motifs commonly found in **Islamic art**, reflecting Malaysia's Islamic cultural heritage and emphasizing symmetry and repeating patterns. The towers' floor plan is also based on geometric forms associated with Islamic design traditions. The exterior includes polished stainless-steel extrusions and reflective glass surfaces that shimmer in the tropical sunlight and enhance the towers' sleek modern appearance. The combination of advanced engineering, cultural symbolism, and contemporary materials made the Petronas Towers an important symbol of Malaysia's modernization and global identity.

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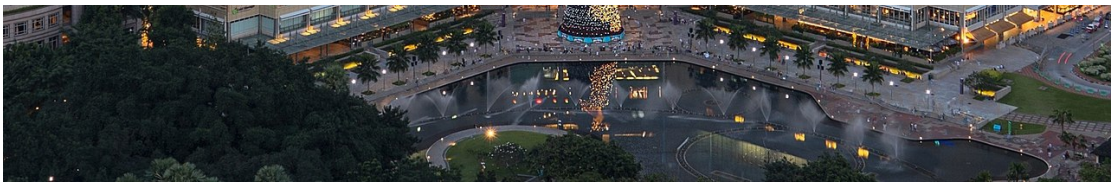
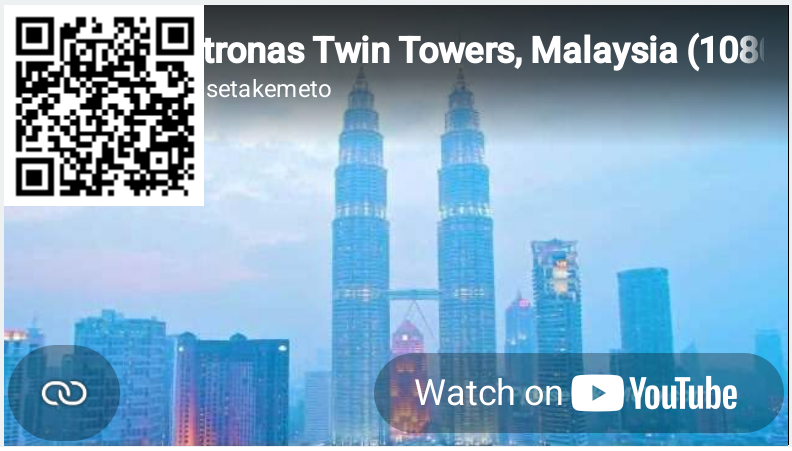


Figure \(\PageIndex{23}\): Petronas Towers (CC BY 2.0)

Petronas Twin Towers, Malaysia

Petronas Twin Towers, Malaysia



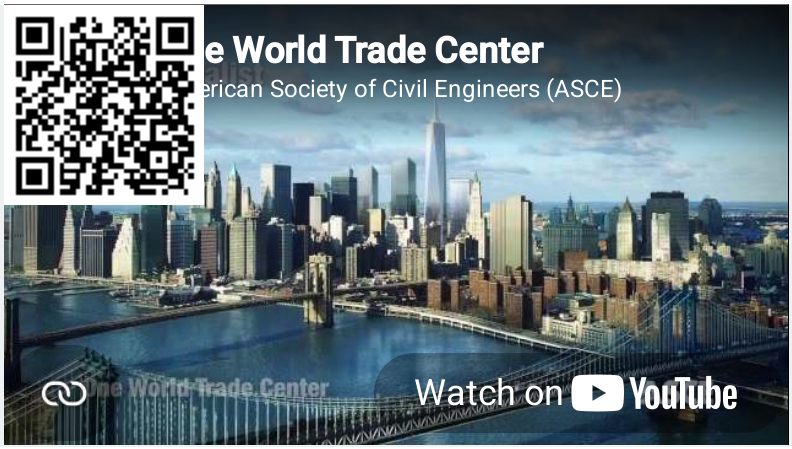
One World Trade Center

One World Trade Center (15.3.24) is the main building of the rebuilt **World Trade Center** complex in **New York City** and is currently the tallest skyscraper in the United States. Constructed as a symbol of resilience and renewal following the destruction of the original World Trade Center towers during the September 11, 2001 attacks, the building serves as both a commercial office tower and a memorial symbol. Although the structure is described as having **104 floors**, only **94 floors** are occupiable interior levels. The tower reaches a symbolic height of **541 meters (1,776 feet)** when measured to the top of its spire. The number 1,776 was intentionally chosen to commemorate the year the **United States Declaration of Independence** was signed, giving the building national symbolic significance in addition to its architectural importance. The tower features a modern glass façade and advanced engineering systems designed for sustainability, safety, and structural strength. Its design gradually tapers upward into an eight-sided form before culminating in the tall spire at the top. The reflective glass surfaces allow the building to interact dynamically with sunlight and the surrounding skyline.

Figure \(\PageIndex{24}\): One World Trade Center (CC BY-SA 4.0)

One World Trade Center

One World Trade Center is the tallest building in the Western Hemisphere. Its ground-to-top-spire height of 1,776 feet is a nod to the Declaration of Independence, and its main roof is the same height as the original twin towers: 1,368 feet. The project is a 2017 ASCE Outstanding Civil Engineering Achievement Award finalist.



Pearl River Tower

Pearl River Tower (15.3.25), located in **Guangzhou, China**, is an important example of sustainable skyscraper design and environmentally conscious contemporary architecture. The tower rises **71 stories** and reaches a height of approximately **309.7 meters**, incorporating advanced energy-saving technologies and aerodynamic engineering principles to reduce environmental impact. The building was specifically designed to conserve energy through the integration of **wind turbines**, **solar collectors**, and **photovoltaic cells**, making it one of the world's most environmentally friendly high-rise towers. Rather than resisting environmental forces such as wind and sunlight, the architects studied local wind and solar patterns and designed the structure to work with natural conditions as part of the building's energy systems.

To improve efficiency, the tower was given an **aerodynamic form** that channels wind through openings in the structure where wind turbines can generate energy. This design reduces wind resistance while simultaneously producing renewable electricity for the building. The tower also maximizes the use of natural sunlight through carefully positioned **solar panels** and a system known as **daylight harvesting**. Daylight harvesting uses natural light to reduce dependence on artificial lighting systems, lowering overall energy consumption. Additional sustainable features help regulate heating, cooling, and ventilation to further improve efficiency.

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Figure \(\PageIndex{25}\): Pearl River Tower (CC BY-SA 3.0)

Burj Khalifa

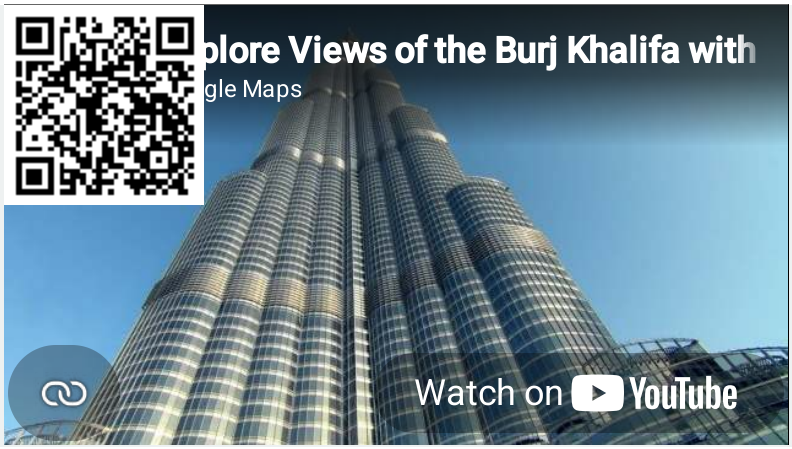
Burj Khalifa (15.3.26) in **Dubai** is currently the tallest artificial structure in the world, rising approximately **829.8 meters** high. Designed as a mixed-use skyscraper, the tower contains luxury hotels, offices, apartments, restaurants, observation decks, shopping areas, parks, and surrounding water features, making it one of the most ambitious urban architectural projects of the twenty-first century. The design of the Burj Khalifa was inspired by elements of **Islamic architecture**, particularly the form of a spiraling **minaret**. The tower's shape gradually narrows as it rises upward through a series of setbacks arranged in a spiraling pattern. These setbacks reduce wind pressure on the structure and help create the elegant tapering silhouette that defines the building.

Because of the tower's extraordinary height, engineers developed a new structural support system strengthened by **three buttresses** extending outward from the central core. This system helps stabilize the building and prevents excessive twisting or movement caused by strong winds. Even with this advanced engineering, the tower is designed to sway approximately **1.5 meters** in high winds to safely absorb environmental forces. The Burj Khalifa includes numerous sustainable and climate-responsive design features to address the extreme heat of Dubai's desert environment. The exterior is covered with reflective glazed glass panels, aluminum, and textured stainless-steel panels that help reduce solar heat gain and improve energy efficiency. These materials also create the shimmering reflective appearance of the façade. The development surrounding the tower includes **nine hotels**, a large shopping mall, approximately **30,000 residences**, landscaped parks, and an artificial lake, demonstrating the modern trend toward integrated mixed-use urban environments. Burj Khalifa represents a major achievement in engineering, contemporary architecture, and skyscraper design, symbolizing technological innovation and global urban development in the twenty-first century.

Figure \(\PageIndex{26}\): Burj Khalifa (CC BY-SA 3.0)

Explore Views of the Burj Khalifa

Get a behind-the-scenes look at how the new Trekker technology is able to capture Street View imagery of the Burj Khalifa, the world's tallest building at 828 meters (2,717 feet).



Al Hamra Tower

Al Hamra Tower (15.3.27), located in **Kuwait City**, is a striking example of contemporary tower architecture and environmentally responsive skyscraper design. Rising nearly **412 meters** high, the tower is constructed primarily of carved concrete and is recognized for its dramatic asymmetrical form and sculptural appearance. The design of the building was inspired by the flowing forms of traditional Kuwaiti robes, reflecting regional culture through modern architectural expression. Rather than using a conventional symmetrical skyscraper shape, the tower gradually twists and shifts as it rises upward. Approximately one-quarter of each floor plate is positioned on the south side of the building, and this section gradually moves from west to east throughout the height of the tower, creating the appearance of a twisting vertical ribbon.

One of the tower's most distinctive features is the sweeping **ribbon-like concrete wall** running along the southern façade. The twisting wall not only creates a dramatic visual effect but also serves an important environmental function by helping shield the building from the intense sunlight and heat of Kuwait's desert climate. Each of the tower's four façades uses different materials and treatments depending on its orientation to the sun. These variations help reduce solar heat gain and improve energy efficiency during Kuwait's extremely hot summers. The combination of shading systems, concrete mass, and façade engineering demonstrates how contemporary architecture increasingly integrates sustainability and climate-responsive design into skyscraper construction.

Figure \(\PageIndex{27}\): Al Hamra Tower (CC BY 2.0)

15.4: Digital Art

Definition: Term

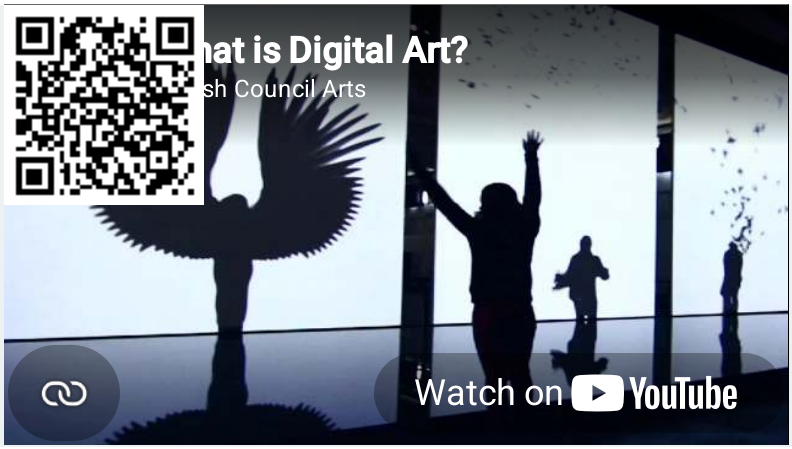
- **Digital Art** – Artwork created or presented using digital technology as part of the artistic process.
- **New Media Art** – Contemporary art that uses digital technology, electronic media, or interactive systems.
- **Digital Installation** – A large-scale artwork using digital technology, projections, sound, or interactive media within a space.
- **Virtual Reality (VR)** – A computer-generated immersive environment experienced through special headsets or digital devices.
- **Net Art** – Artwork created specifically for display or interaction through the internet.
- **Computer-Generated Art** – Art created entirely by a computer program or digital software.
- **Computer-Manipulated Art** – Existing images or artworks altered or edited using digital technology.
- **Digital Painting** – Artwork created electronically using digital software and drawing tools instead of traditional paint.
- **Raster Graphics** – Digital images made from tiny colored squares called pixels arranged in a grid.
- **Pixels** – Small individual units of color that form a digital image on a screen.
- **Stylus** – A pen-like tool used to draw or write on a digital tablet or touchscreen.
- **Digital Tablet** – An electronic device artists use to create digital drawings and paintings.
- **Graphic Software** – Computer programs used to create, edit, or manipulate digital images and artwork.
- **Interactive Media** – Digital artwork or technology that responds to viewer participation or input.
- **Multimedia Art** – Art combining multiple forms such as video, sound, animation, text, and images.
- **Video Art** – Artistic works created using moving video images and sound.
- **Scanning** – The process of converting physical artwork or images into digital form.
- **Digital Reproduction** – Creating copies of artwork using digital technology and printing methods.
- **Input Devices** – Tools such as a mouse, stylus, keyboard, or touchscreen used to control a computer.
- **Two-Dimensional Digital Art** – Digital artwork created on a flat surface with height and width but no physical depth.

Digital art is artwork created or presented using digital technology as an essential part of the artistic process. Over time, digital art has been called by several names, but today it is commonly referred to as **new media art**. The development of computers, software, and electronic technologies has transformed traditional artistic practices such as painting, drawing, sculpture, photography, and installation art. Digital technology allows artists to create works in many different forms, including **digital installations**, **virtual reality environments**, **interactive media**, **video art**, and **net art** designed for the internet. Some digital artworks exist only in electronic form, while others can be reproduced physically as printed images, sculptures, projections, or multimedia installations.

Digital art may be entirely **computer-generated**, digitally manipulated from existing images, scanned from traditional artworks, or created directly on a computer using specialized software. Artists often use tools such as a **stylus**, **digital tablet**, **mouse**, or touchscreen device to draw and paint electronically. Digital paintings can be viewed on screens or printed onto paper, canvas, or other materials. Many digital artworks rely on **raster graphics**, a system that represents images through tiny units called pixels. Raster graphics allow artists to create highly detailed images with color, texture, shading, and blending similar to traditional painting techniques. Specialized software programs provide artists with digital brushes, layers, filters, and editing tools that expand creative possibilities beyond traditional media. Digital art reflects the growing relationship between technology and artistic expression in the twenty-first century. As computers, virtual environments, and interactive technologies continue to evolve, artists increasingly use digital tools to explore new forms of creativity, communication, and visual experience.

What is Digital Art?

Digital art is a term and a practice that has been prevalent in the museums and contemporary art sectors since the 1960s. As technological advances mean that digital innovations are now pervading many more areas of our lives, the arts industry is starting to take the work of artists working in the digital realm increasingly seriously. In the wake of the growing debate and critical examination of digital art, the British Council commissioned this short film, produced by Dezeen, to ask: What is Digital Art? And why should we pay attention to it?



Early Digital Art Pioneers

Three-dimensional digital art uses computers and digital technology to create artworks that appear to have depth, form, and space. In this process, the computer screen functions as a virtual window into a three-dimensional environment. Artists use **vector graphics** and specialized software programs to construct geometric forms, curves, textures, lighting, and realistic objects within digital space. Three-dimensional graphics are widely used in television, film, animation, video games, architecture, scientific visualization, and special effects. Advanced software programs allow artists to model and manipulate complex forms, simulate movement, and create highly immersive virtual environments. Artists can design everything from simple geometric shapes to realistic human figures, landscapes, and architectural structures.

The development of **virtual reality (VR)** further expanded the possibilities of three-dimensional digital art by allowing viewers to enter and interact with digitally created environments. These immersive experiences combine sound, movement, space, and visual imagery to create interactive artistic experiences that blur the boundaries between art, technology, and participation. Modern technology also allows artists to produce physical versions of digital works through **3D printing**. Specialized printers can transform computer-generated designs into tangible three-dimensional objects using materials such as plastic, resin, metal, or other substances. This process connects digital creativity with physical sculpture and design. Many contemporary digital art projects are collaborative, enabling multiple users or viewers to contribute ideas, alter environments, or interact directly with the artwork. The development of these technologies was made possible by early digital art pioneers who created the foundational methods and experimental systems that evolved into today's advanced computer graphics and immersive software programs.

Lillian Schwartz (born 1927) is an American artist and filmmaker widely recognized as one of the pioneers of **computer art** and digital imaging. Working primarily during the 1960s and 1970s, Schwartz experimented with computer technology long before personal desktop computers became widely available. Her innovative work helped establish the foundations for digital art, computer animation, and image manipulation used by contemporary artists today. At a time when computer systems were large, expensive, and highly technical, Schwartz learned to use early digital processes to scan, manipulate, and transform images electronically. She collaborated with scientists and engineers and explored how computers could become creative artistic tools rather than simply machines for calculation.

Schwartz was especially interested in the works of Leonardo da Vinci and often used his paintings and drawings in her digital experiments. One of her most famous projects involved comparing the portrait of the Mona Lisa with a self-portrait believed to depict Leonardo himself. Using computer imaging technology, Schwartz superimposed one image over the other (15.4.1) to analyze similarities in facial proportions, features, and structural alignment. Through this digital comparison, she proposed the controversial theory that the *Mona Lisa* may actually be a disguised self-portrait of Leonardo da Vinci. Her work demonstrated how computer technology could be used not only for artistic creation but also for art historical research, visual analysis, and scientific investigation.

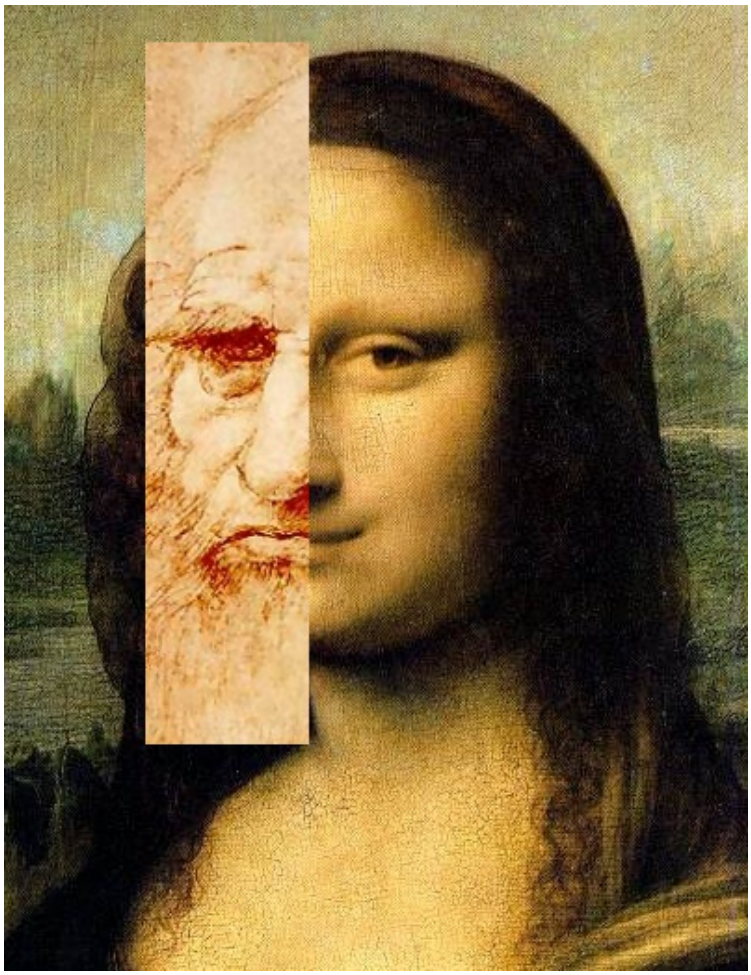


Figure \(\PageIndex{1}\): Altered Mona Lisa (Public Domain)

Another method of creating digital artwork involves writing or coding computer programs that generate images, animations, or environments that could not exist without computer technology. This form of artistic creation is often called **real-time generative art**, where the computer actively produces or alters the artwork through programmed instructions, algorithms, or mathematical systems. Generative art can exist in both **two-dimensional** and **three-dimensional** forms and is commonly used in digital media, films, animation, video games, virtual environments, and interactive installations. Instead of manually drawing every detail, artists design systems, rules, or code that allow the computer to create patterns, movement, textures, or entire visual worlds automatically.

One important method used in generative art is **data-moshing**, a digital process that intentionally manipulates video compression data to create distorted, fragmented, or glitch-like visual effects. Another major form is **algorithmic art**, where artists use mathematical formulas, coded instructions, and programmed systems to generate visual compositions based on specific rules or behaviors. **Fractal art** is another type of computer-generated imagery based on mathematical fractals. Fractals are complex repeating patterns generated through mathematical equations and geometric transformations. Starting from basic geometric forms such as lines, cubes, or triangles, computer programs repeatedly transform and replicate the shapes to create intricate patterns, landscapes, or animations. Fractal imagery often appears highly detailed and organic, even though it is generated mathematically. Artists working with generative systems may define specific lines, colors, shapes, movement patterns, or algorithms (15.4.2, 15.4.3), allowing the computer to produce endless visual variations. These techniques are widely used in contemporary cinema and gaming to create highly realistic environments, textures, and special effects that would be impossible to create manually.

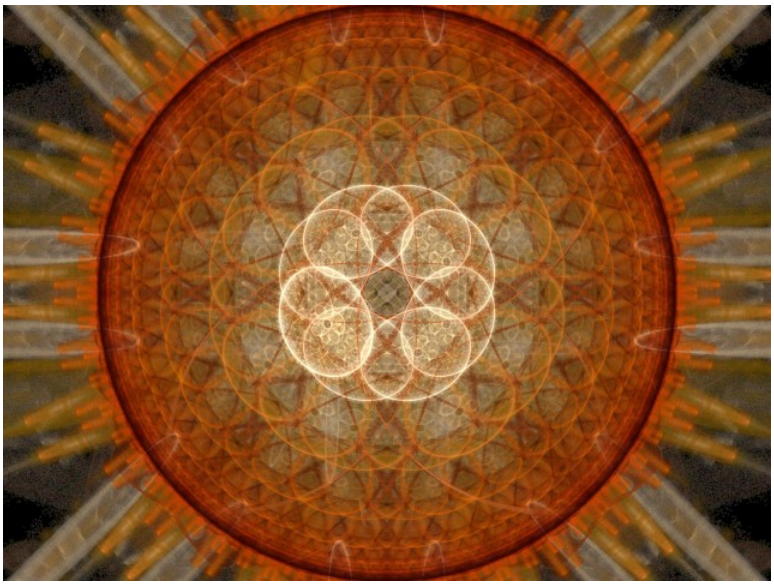


Figure \(\PageIndex{2}\): Fractal Frame 1 (CC BY 2.5)

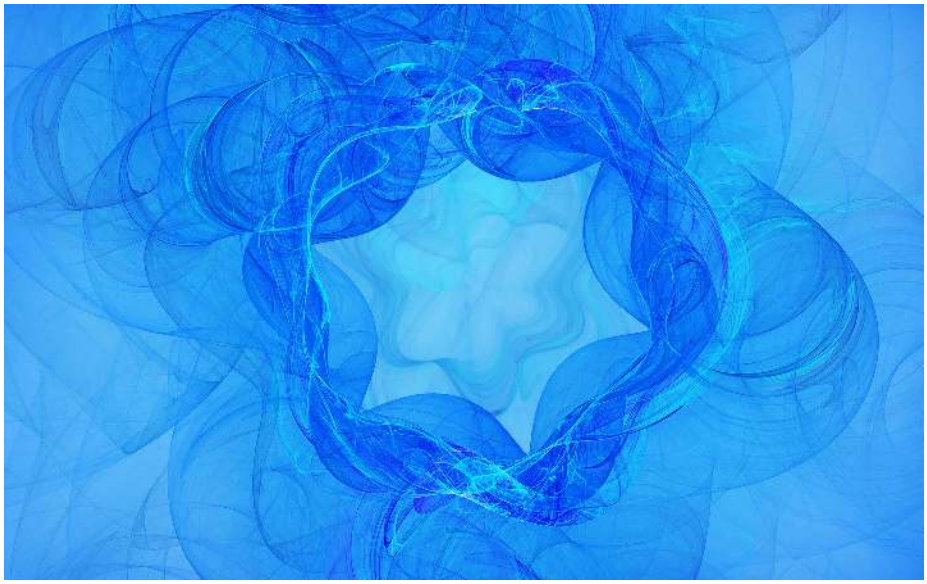


Figure \(\PageIndex{3}\): *Fractal Frame 2* (CC BY-SA 3.0)

Pascal Dombis

Pascal Dombis (born 1965) is a French digital artist known for creating large-scale installations using **algorithms**, repetition, and computer-generated systems. His work explores the relationship between order and chaos by using simple mathematical rules that generate highly complex and unpredictable visual results. In *Irrational Geometrics* (15.4.4), Dombis created a digital installation based on **algorithmic rules** programmed into computer software. Starting with simple instructions such as drawing lines or repeating geometric actions, the computer continually processed and transformed the forms through multiple iterations. Although the system follows structured rules, the resulting shapes and patterns become increasingly chaotic and unpredictable, giving the artwork a dynamic and almost **Surrealist** appearance.

Dombis is interested in how computers can create complexity from very basic instructions. By allowing algorithms to repeat actions thousands of times, he produces intricate visual environments that appear organic, unstable, and constantly evolving. His work demonstrates how digital systems can move beyond strict control and generate unexpected artistic outcomes. In *Test(e)~Fil(e)* (15.4.5), Dombis created a massive installation approximately **252 meters long** using thousands of lines of text written by different authors. Through digital processing and algorithmic transformation, the text was converted into a flowing visual environment that viewers could physically walk through. Visitors moving through the installation could read fragments of words, letters, and text while experiencing the artwork spatially as both language and visual pattern.

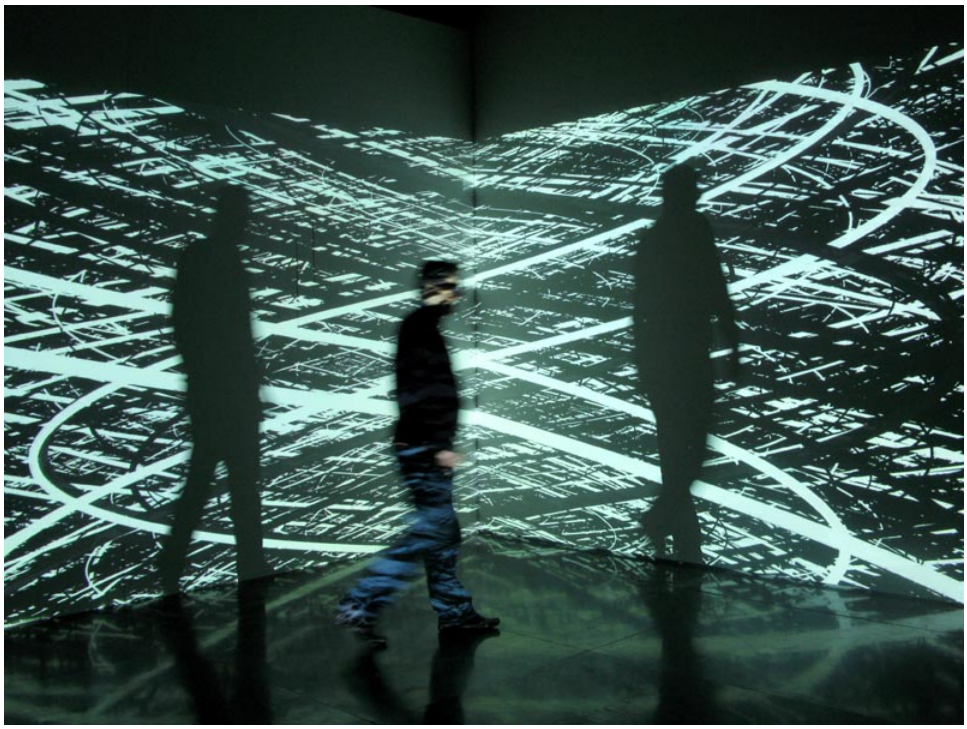


Figure \(\PageIndex{4}\): *Irrational Geometrics* (public domain)

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Figure \(\PageIndex{5}\): *In Test(e)-File(e)* (public domain)

Scott Draves

Scott Draves (born 1968) is a video artist, programmer, and digital art pioneer best known for inventing **Fractal Flames**, a method of generating complex fractal imagery through mathematical and computational processes. His work combines mathematics, computer programming, color theory, and animation to create visually intricate digital artworks. Fractal Flames are created using **iterative functions**, mathematical operations repeatedly applied to generate evolving fractal patterns. Draves developed software systems that map tones, colors, and geometric transformations to create highly detailed images with glowing, fluid, and organic appearances. Unlike traditional geometric fractals, Fractal Flames emphasize smooth color transitions and flame-like visual effects.

The fractals are typically first created as two-dimensional digital images on a computer and then transformed through processes such as **iteration**, **overlapping**, **copying**, and **transmutation**. As the computer repeatedly applies the mathematical rules, increasingly complex patterns emerge from relatively simple starting forms. Because fractal systems are generated algorithmically, the images can continually evolve and change over time. Some fractal works become animated screen savers or moving visual environments, while others are printed as static digital artworks (15.4.6, 15.4.7). The constantly shifting forms often resemble natural phenomena such as flames, clouds, plants, galaxies, or flowing water.

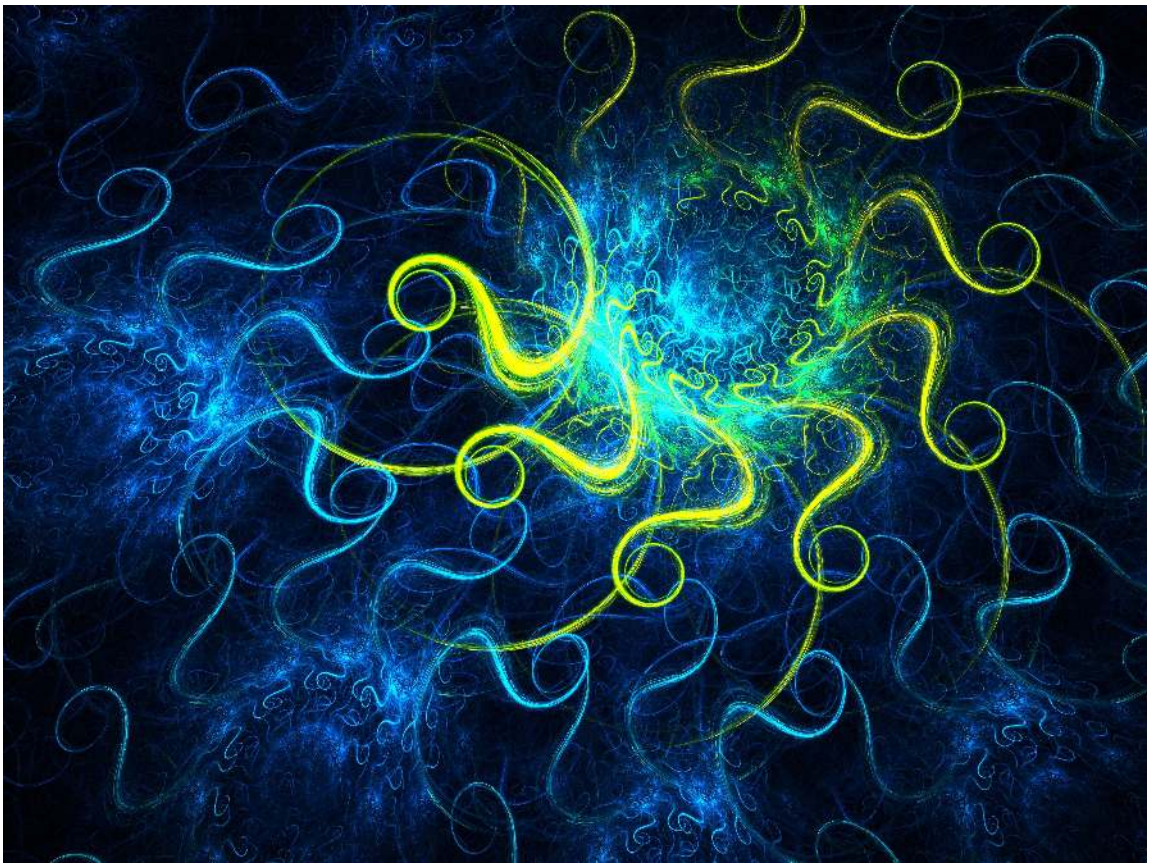


Figure \(\PageIndex{6}\): Electric Sheep fractal image (CC BY-SA 2.5)

Figure \(\PageIndex{7}\): *Fractal image* (CC BY-SA 2.0)

Hamid Naderi Yeganeh

Hamid Naderi Yeganeh (born 1990) is an Iranian artist and mathematician known for creating digital artworks through mathematical formulas and computer programming. His work combines mathematics, geometry, and algorithmic design to generate intricate **tessellations**, **fractals**, and recognizable images of real-world objects (15.4.8). Yeganeh writes highly complex mathematical programs that use equations and geometric relationships to generate lines, curves, and shapes on a computer screen.

By carefully adjusting formulas and numerical values, he can transform simple line patterns into detailed figures and visual compositions. Small changes in the equations often produce dramatically different results, allowing him to create a wide variety of forms from similar mathematical structures.

His artwork demonstrates how mathematical systems can create images that resemble recognizable objects such as animals, plants, vehicles, or landscapes while still remaining grounded in geometric precision and computational processes. Yeganeh often explores the connection between mathematics and visual beauty, showing how formulas can function as artistic tools. One of his works includes the image of a boat (15.4.9), which Yeganeh stated emerged unexpectedly while he experimented with changing mathematical formulas. The accidental discovery reflects the unpredictable and exploratory nature of generative digital art, where small modifications to algorithms can produce surprising visual outcomes.

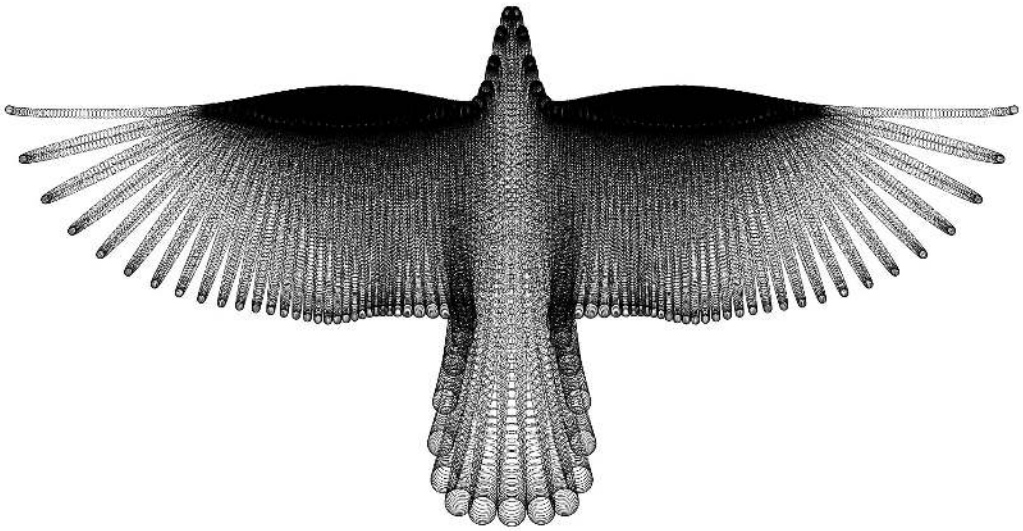


Figure \(\PageIndex{8}\): *A Bird in Flight* (CC BY-SA 4.0)

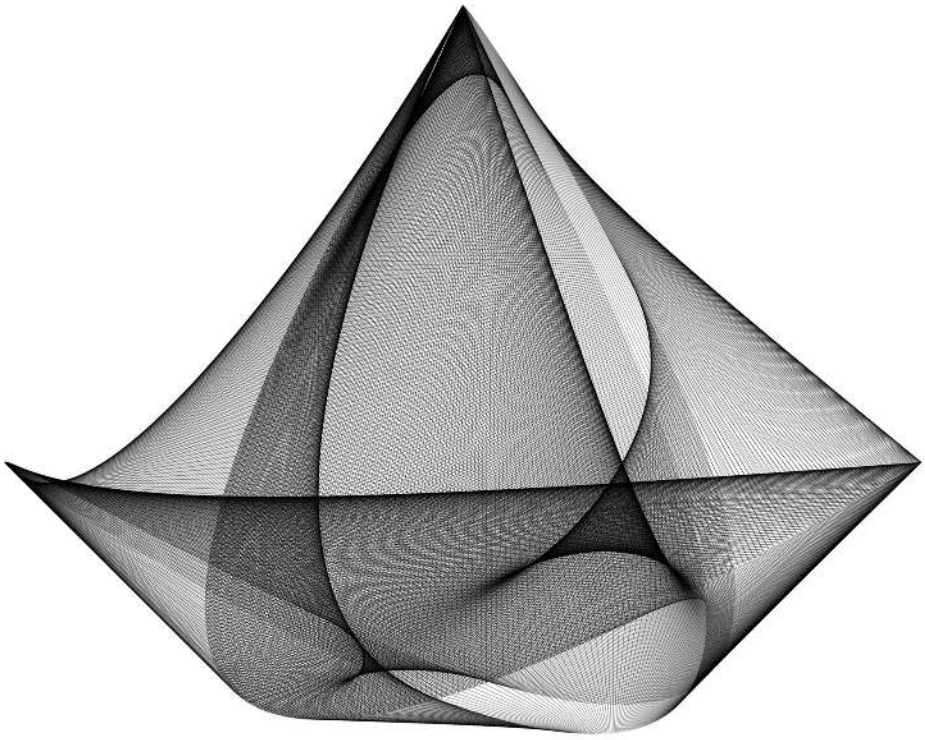


Figure \(\PageIndex{9}\): *Boat* (CC BY-SA 4.0)

Immersive Art

Digital installations are large-scale artworks created using digital technology, projections, sound, animation, sensors, or virtual environments instead of traditional sculptural materials alone. Unlike sculptural installations, which are generally fixed within one physical location, digital installations can be adapted and reconfigured to fit different architectural spaces and viewing environments. These installations often use projection systems, screens, interactive technologies, motion sensors, or virtual reality systems to create immersive artistic experiences. Some digital installations are designed simply for viewers to observe, while others invite active participation, allowing viewers to interact with and influence the artwork itself.

The primary goal of many digital installations is to heighten the viewer's sensory experience and create a feeling of immersion. Through light, sound, movement, and virtual imagery, viewers may feel surrounded by the artwork or transported into a digitally constructed environment. In some virtual spaces, participants can navigate through digital worlds and even alter or manipulate images and projections themselves (15.4.10). One major advantage of digital installations is their flexibility. Because the artwork is often projection-based or software-driven, it can be customized to fit different exhibition spaces, walls, floors, ceilings, or multiple connected rooms (15.4.11). The same installation may appear differently depending on the environment in which it is displayed. In contrast, sculptural installations are generally designed specifically for one physical space and are less adaptable. Digital installations may focus on a wide range of themes and subjects, including technological innovation, nature, abstract imagery, animation, data visualization, social issues, or virtual storytelling. Many installations combine multiple forms of media such as sound, moving images, interactivity, and architecture to create fully immersive environments that engage viewers physically and emotionally.

Figure \(\PageIndex{10}\): *The Birth of the Universe – ZeroSpace* (CC BY-NC 2.0)

Figure \(\PageIndex{11}\): *Arcadia Earth* (CC BY 2.0)

The Birth of the Universe - Digital Art Installation

"The Birth of the Universe" by HYBYCOZO, a digital art installation at ZeroSpace in New York City.

e birth of the Universe - Digital Art
ros NY
Watch on YouTube

15.5: Contemporary Figurative

Definition: Term

- **Figurative Art** – Art that represents recognizable subjects, especially the human figure, animals, or objects from the real world.
- **Representation** – The depiction or portrayal of people, objects, or ideas in artwork.
- **Human Figure** – The form and structure of the human body represented in art.
- **Realism** – An artistic style that aims to depict subjects accurately and naturally as they appear in life.
- **Abstraction** – Art that simplifies, distorts, or moves away from realistic representation.
- **Cubism** – A modern art movement that breaks subjects into geometric shapes and presents multiple viewpoints simultaneously.
- **Minimalism** – An art movement emphasizing simplicity and reducing artwork to basic forms, colors, or shapes.
- **Contemporary Art** – Art created during the present time that reflects current ideas, issues, and technologies.
- **Expressionism** – An artistic style emphasizing emotional expression over realistic representation.
- **Distortion** – The intentional alteration or exaggeration of shapes, forms, or proportions in art.
- **Anatomy** – The structure and arrangement of the human body, often studied by artists to improve figurative drawing.
- **Nonrepresentational Art** – Art that does not depict recognizable subjects or objects from the real world.
- **Conceptual Art** – Art in which the idea or concept is more important than the physical appearance of the artwork.
- **Portraiture** – The creation of artistic representations of a person.
- **Visual Expression** – The communication of ideas, emotions, or experiences through visual art.
- **Modern Art** – Art created primarily from the late nineteenth century through the twentieth century that experimented with new styles and ideas.
- **Identity** – The qualities, culture, background, or characteristics that define a person or group.
- **Cultural Representation** – The portrayal of cultural traditions, beliefs, identities, or experiences in art.
- **Symbolism** – The use of symbols or images to represent deeper meanings or ideas.
- **Mixed Media** – Artwork created using more than one artistic material or technique.

During much of the twentieth century, **figurative art** was often overshadowed by the rapid development of abstract movements such as **Cubism**, **Abstract Expressionism**, **Minimalism**, and other forms of nonrepresentational art. Many artists focused on experimentation with color, shape, geometry, and conceptual ideas rather than realistic depictions of people or recognizable subjects. As modern art evolved, abstraction became one of the dominant directions in the art world. At the beginning of the twenty-first century, however, figurative art experienced a significant resurgence. Contemporary artists renewed their interest in portraying the human figure while also expanding figurative work into many new styles, techniques, and forms of expression. Rather than simply returning to traditional realism, artists combined influences from historical art traditions with ideas developed through modern and contemporary abstraction.

Although the techniques and standards established by the “Old Masters” continue to influence figurative artists, contemporary artists reinterpret the figure through personal, cultural, political, and experimental approaches. Many artists blend realistic anatomy with abstract forms, distorted proportions, expressive color, digital technology, or conceptual themes to create new and highly individual representations of the human body. Contemporary figurative art reflects the diversity of modern society and often addresses issues such as identity, race, gender, memory, politics, psychology, and cultural experience. By drawing upon both historical traditions and twentieth-century abstract innovations, today’s figurative artists continue expanding the possibilities of how the human figure can be represented in art.

Njideka Akunyili Crosby

Njideka Akunyili Crosby (born 1983) is a Nigerian-born contemporary artist known for her richly layered figurative paintings that combine personal memory, family history, and cultural identity. After moving from Nigeria to the United States, Crosby initially planned to study medicine, following the professional path of her parents. However, she later changed direction and pursued a career in art, eventually becoming internationally recognized for her multimedia paintings and installations. Crosby’s work blends a wide range of materials and techniques, including paint, photographs, fabric, collage, transfers, drawing, and pencil. Her paintings frequently depict intimate scenes of everyday domestic life, such as kitchens, dining rooms, living spaces, and family gatherings.

These interiors are filled with personal objects, photographs, patterned surfaces, and small details that create narratives about memory, migration, identity, and family relationships.

Many of the patterns found in the clothing, wallpaper, furniture, and decorative objects reflect the colors, textures, and visual traditions of her native **Nigeria**. By combining Nigerian imagery with American domestic settings, Crosby explores the experience of living between cultures and navigating both African and Western identities. Her paintings often feel autobiographical, with each room and object contributing to a larger story about home, heritage, and belonging. In one painting from the *Portals* series (15.5.1), Crosby portrays a young woman seated thoughtfully within a richly patterned interior space. The woman's simple yellow dress visually centers the composition while decorative wallpaper and patterned flooring surround her. Crosby carefully extends patterns beneath the furniture and across the room to create depth and unify the space while drawing the viewer into the private atmosphere of the scene.

In *Before Now After (Mama, Mummy, and Mamma)* (15.5.2), Crosby explores her relationships with female members of her family, including her mother, grandmother, and sister. The painting contains family photographs, familiar household objects, and layered decorative patterns across the walls, carpet, and table. The central figure, with brown skin and a bright pink shirt, stands prominently within the composition, emphasizing themes of identity, ancestry, and family connection.

Figure \(\PageIndex{1}\): *From series Portal* (CC BY-NC-ND 2.0)

Figure \(\PageIndex{2}\): *Before Now After (Mama, Mummy, and Mamma)* (C BY-NC 2.0)

Marlene Dumas

Marlene Dumas (born 1953) was born in **Cape Town, South Africa**, where she first studied art before later moving to the **Netherlands** to study psychology. Her background in psychology strongly influenced her artistic approach, leading her to explore complex emotional and psychological themes through figurative painting. Dumas is known for portraying figures connected to themes of **love**, **death**, **sexuality**, vulnerability, and emotional tension. Her paintings are often intimate, unsettling, and sometimes controversial because they confront difficult aspects of human experience and emotion. Rather than focusing on realistic representation, Dumas emphasizes psychological atmosphere and emotional intensity.

Her painting style is characterized by broad, loose brushstrokes and the use of dark, moody colors. In works such as *Intimate Relations* (15.5.3), Dumas intentionally distorts the human figure and avoids naturalistic skin tones. Instead, she uses blacks, grays, yellows, reds, and other unexpected colors to create emotionally charged figures that appear psychologically unstable or deeply troubled. The distorted forms and expressive color choices contribute to a feeling of tension, unease, and emotional vulnerability. In *Stern* (15.5.4), Dumas presents a female figure lying on her back with her mouth slightly open. The image remains intentionally ambiguous, allowing viewers to question whether the woman is peacefully sleeping or possibly deceased. The unnatural coloration of the skin and the suggestion of a cord around the neck create a disturbing uncertainty and psychological discomfort within the painting. Similarly, in *Losing* (15.5.5), the figure's body position appears unnatural, leaving viewers uncertain whether the person is swimming or floating lifelessly in water. Dumas uses dark grays, greens, and muted tones rather than bright or natural colors, reinforcing feelings of sadness, isolation, and emotional distress.

Figure \(\PageIndex{3}\): *Intimate Relations* (CC BY-NC-SA 2.0)

Figure \(\PageIndex{4}\): *Stern* (C BY 2.0)

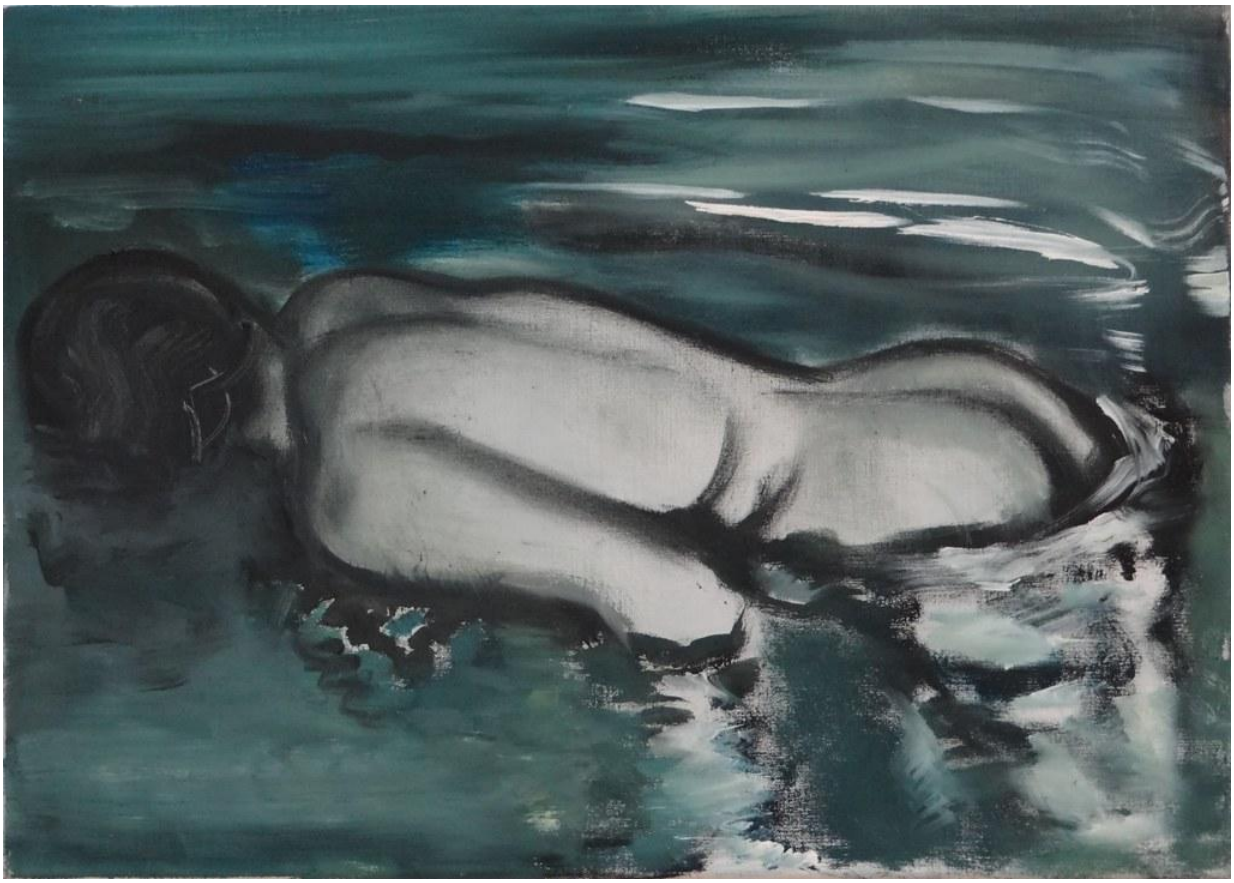


Figure \(\PageIndex{5}\): *Losing (Her Meaning)* (CC BY-NC-SA 2.0)

Zhang Xiaogang

Zhang Xiaogang (born 1958) is a contemporary Chinese painter known for his emotionally restrained portraits and psychologically charged figurative works that reflect memory, family history, and the lasting effects of political control in China. Born during a period of major political upheaval, Zhang's childhood and family experiences during the **Cultural Revolution** strongly shaped his artistic vision. Zhang explained that his parents encouraged him to draw as a child to keep him occupied and out of trouble, and drawing eventually became a lifelong pursuit. During the Cultural Revolution, his parents were removed from their home and sent to a government **re-education camp**, experiences that deeply influenced his understanding of conformity, authority, and personal identity. Later, although he was able to attend university and study art, Zhang struggled with alcohol use disorder, another difficult experience that affected both his life and artwork.

In the 1980s, Zhang became associated with a group of Chinese **avant-garde artists** experimenting with new artistic ideas and forms of expression. These artists organized independent exhibitions that challenged traditional cultural restrictions. However, the political events surrounding **Tiananmen Square** in 1989 ended much of the period's artistic liberalization and reinforced state control over cultural expression. Much of Zhang Xiaogang's later work focuses on themes of family, memory, collective identity, and the psychological effects of political systems. His paintings often depict stoic, emotionless figures with smooth flat surfaces and carefully controlled expressions. The characters appear compliant and detached, reflecting the suppression of individuality and emotional expression under authoritarian systems. Zhang frequently contrasts the muted gray tones of his paintings with small unexpected patches of color, creating visual tension and symbolic emphasis.

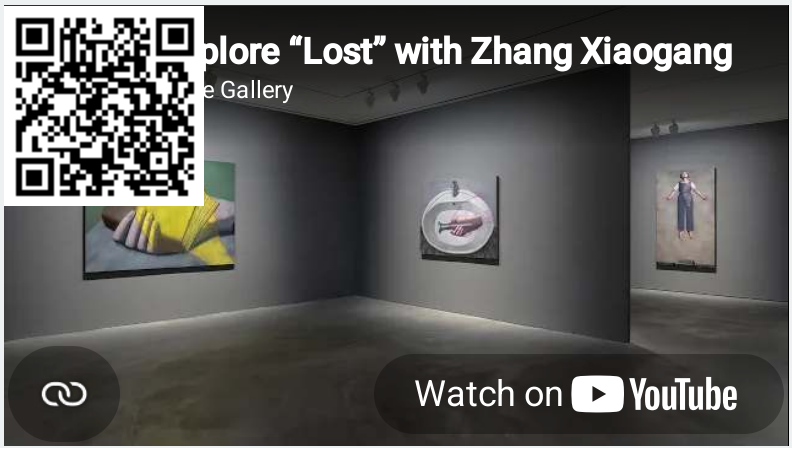
In *My Ideal* (15.5.6), Zhang portrays a family controlled by military authority. The oversized heads and elongated noses create an unsettling distortion, while the soldier standing in the center dominates the composition with his vivid red face and military uniform. The passive expressions of the seated family members reinforce themes of obedience, emotional suppression, and political control. In *Untitled* (15.5.7), Zhang created a close-up portrait using shadowy gray and black tones that partially obscure the figure. The oversized eyes stare outward blankly while small areas of yellow provide the only strong color contrast. The figure's expression remains emotionally restrained, reflecting Zhang's exploration of how personal identity and feeling can become muted under systems that prioritize conformity and obedience over individuality.

Figure \(\PageIndex{6}\): *My Ideal* (CC BY 2.0)

Figure \(\PageIndex{7}\): *Untitled* (CC BY-SA 2.0)

Explore "Lost" with Zhang Xiagang

In our new film, Zhang Xiaogang discusses his unique approach to representing light in his paintings, as seen in his solo exhibition, “Lost,” on view at our Hong Kong gallery through May 18. The artist has been refining his expressive depictions of light for some 30 years, since the 1980s and 1990s. As such, light has become a key subject in its own right in Zhang's practice.



Kerry James Marshall

Kerry James Marshall (born 1955) is an American painter and educator whose work focuses on African American history, identity, representation, and cultural experience. Born in **Alabama** and raised in **Los Angeles**, Marshall grew up during a period of major social and political change in the United States. Events such as the **Civil Rights Movement**, the **Watts riots**, and the influence of the **Black Panther Party** deeply shaped his understanding of race, history, and representation in American culture. Marshall earned his **Bachelor of Fine Arts** degree from the **Otis Art Institute** and later became a professor of art at the University of Illinois. Throughout his career, he has examined how African Americans have historically been excluded or underrepresented within traditional Western art history. In response, Marshall intentionally centers Black figures within his paintings and often exaggerates the richness and darkness of skin tones to challenge historical artistic conventions that marginalized darker skin.

His figures are frequently painted with deep black or dark brown tones, bringing Black identity visually and symbolically to the forefront of the composition. Through this approach, Marshall addresses issues of visibility, representation, dignity, and historical recognition. In *Untitled* (15.5.8), Marshall depicts a female artist standing before the viewer with her own painting behind her, creating a playful reinterpretation of paint-by-number imagery. The woman’s face is painted in deep dark tones that partially conceal her emotions and inner thoughts. In contrast, her brightly patterned blouse echoes the vibrant colors found within the artwork behind her, suggesting creativity, individuality, and emotional complexity beneath the calm exterior.

In *The Actor Hezekiah Washington as Julian Carlton Taliesen, Murderer of Frank Lloyd Wright’s Family* (15.5.9), Marshall portrays an actor performing the role of a historical figure connected to a violent crime. The figure gazes directly outward while much of the composition blends together through similar tones in the background, clothing, and face, creating a sense of anonymity and psychological distance. Small red and green circles and the irregular jacket buttons interrupt the otherwise muted composition, adding tension and drawing attention to the constructed nature of identity and performance.

Figure \(\PageIndex{8}\): *Untitled* (CC BY-SA 2.0)

Figure \(\PageIndex{9}\): *The Actor Hezekiah Washington as Julian Carlton Taliesen, Murderer of Frank Lloyd Wright Family* (CC BY 2.0)

Kerry James Marshall: Mastry

This video featuring Kerry James Marshall talking about his practice and the ideas driving it accompanied the exhibition Kerry James Marshall: Mastry, organized by the Museum of Contemporary Art Chicago, The Metropolitan Museum of Art, New York, and The Museum of Contemporary Art, Los Angeles.

Jylian Gustlin

Jylian Gustlin (born 1960) is a contemporary American artist from California who lives and works in the **San Francisco Bay Area**. She studied both **art** and **mathematics** before earning her Bachelor of Fine Arts degree, and her work often reflects the relationship

between mathematical structure and emotional expression. Although she incorporates mathematical concepts such as the **Fibonacci sequence** into some of her art, Gustlin's primary focus is the human figure and the emotional energy conveyed through gesture, posture, and movement. Gustlin's paintings are known for their layered mixed-media surfaces, textured backgrounds, and partially defined figures. Rather than fully detailing the body, she often leaves portions of the figures incomplete or obscured, allowing viewers to imagine missing elements and emotionally interpret the scene. The outlines and gestures of the figures remain visible while faces and details fade into atmospheric backgrounds.

In *Sirens 3* (15.5.10), Gustlin presents three women positioned against a richly layered mixed-media background. Each figure faces in a different direction, creating emotional separation and tension within the composition. One figure appears to be crying or grieving, while the others remain emotionally distant. The painting intentionally leaves the narrative unresolved, encouraging viewers to speculate about the relationships, emotions, or events that occurred before the moment depicted. Similarly, *Icarus* (15.5.11) and *Aphrodite 3* (15.5.12) focus on emotional ambiguity and psychological interpretation. In both works, the figures' faces are turned away or obscured within hazy layered backgrounds, preventing direct emotional identification. This lack of visible facial expression allows viewers to project their own interpretations onto the paintings. In *Icarus*, viewers may wonder whether the figure represents realization, regret, or downfall associated with the mythological story of flying too close to the sun. In *Aphrodite 3*, the obscured figure may suggest themes of love, loss, longing, or emotional isolation. Through her combination of figurative imagery, abstraction, mathematical concepts, and layered mixed media, Jylian Gustlin creates emotionally evocative works that encourage viewers to engage with memory, ambiguity, and human emotion through personal interpretation.

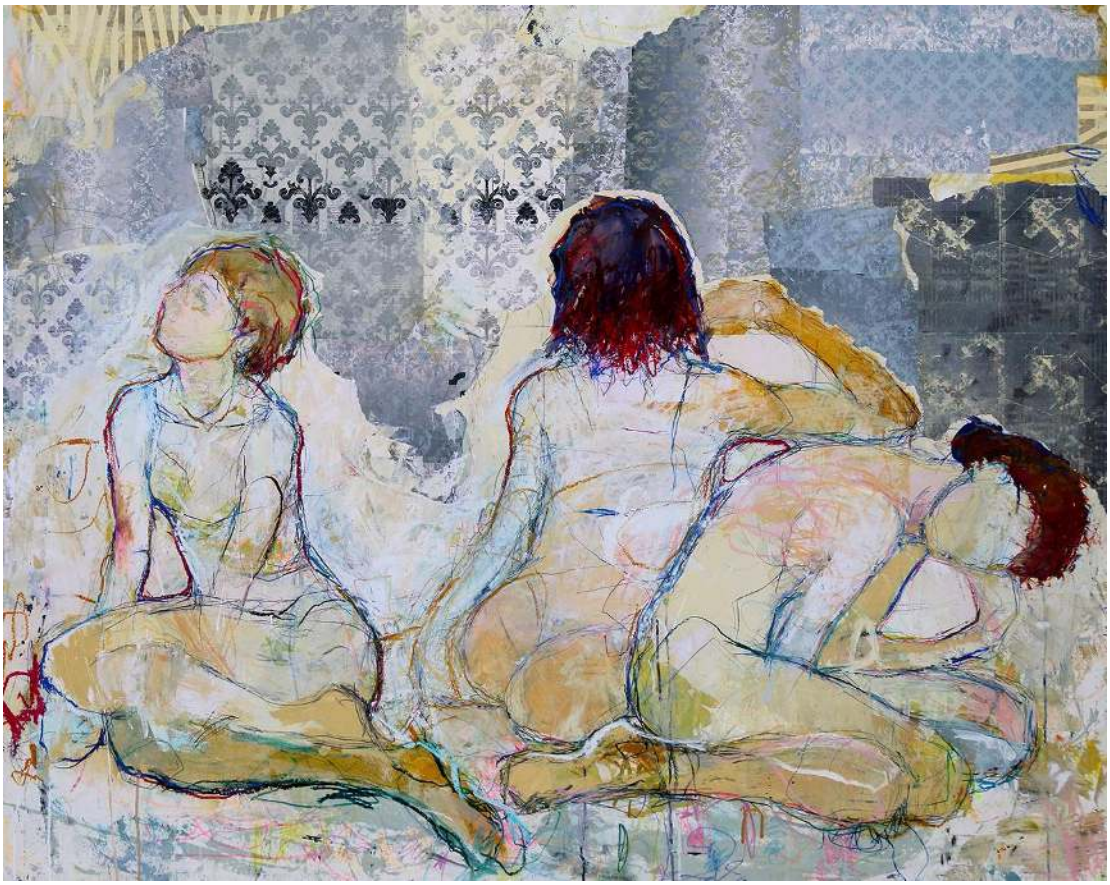


Figure \(\PageIndex{10}\): Courtesy of the Artist, ã Jylian Gustlin, *Sirens 3*

Figure \(\PageIndex{11}\): Courtesy of the Artist, ã Jylian Gustlin, *Icarus*

Figure \(\PageIndex{12}\): Courtesy of the Artist, ã Jylian Gustlin, *Aphrodite 3*

Jenny Saville

Jenny Saville (born 1970) is a British painter associated with the group known as the **Young British Artists (YBAs)**. She studied at the **Glasgow School of Art** and later spent time in the United States, where she became increasingly interested in the physical diversity of the human body, particularly the forms and proportions of women outside traditional beauty standards. Saville's work challenges conventional representations of the female body often promoted by fashion, advertising, and popular culture. Rather than idealizing thin runway models, she focuses on the realism, weight, flesh, and physical presence of actual bodies. Her paintings explore themes such as beauty, identity, surgery, aging, disease, deformity, and bodily transformation.

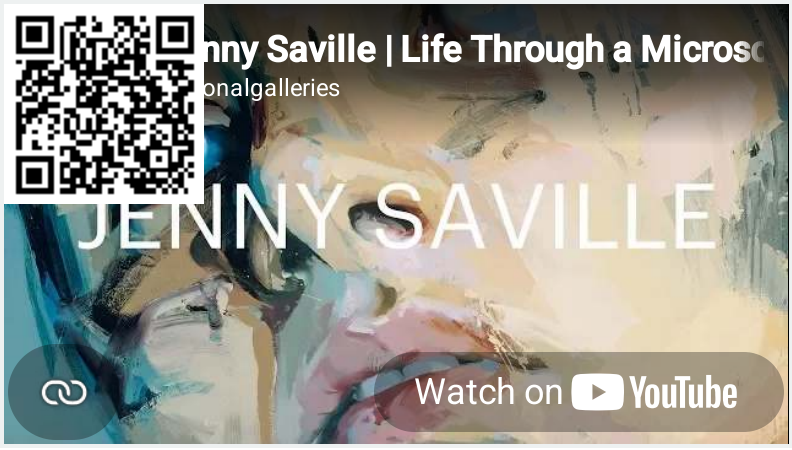
Interested in medical procedures and anatomy, Saville studied subjects such as **liposuction**, reconstructive surgery, and the effects of illness or physical alteration on the body. These investigations influenced the exaggerated proportions and distorted perspectives

found in many of her paintings. She often works on monumental canvases, using expressive brushstrokes and layered patches of color to create richly textured surfaces that resemble living flesh and skin. In *Strategy* (15.5.13), Saville presents large female figures viewed from a low upward angle, emphasizing their physical mass, folds, veins, and natural body forms. The painting confronts viewers with bodies that appear powerful, vulnerable, and undeniably real. By portraying the body without idealization, Saville challenges traditional standards of feminine beauty and questions how women's bodies are viewed and judged in contemporary culture.

Figure \(\PageIndex{13}\): *Strategy* (CC BY-NC-ND 2.0)

Jenny Saville - Life Through a Microscope

Jenny Saville is a hugely successful international artist best known for her monumental depictions of the naked female form. Saville draws upon a wide range of sources in her work, including medical and forensic textbooks, children's drawings, graffiti and online images, as well as celebrated paintings and drawings of the past.



Eric Fischl

Eric Fischl (born 1948) is an American painter known for his psychologically charged figurative paintings that explore the hidden tensions and contradictions of suburban American life. After graduating from college, Fischl lived in different parts of the United States and worked for a time as an art teacher before becoming widely recognized as a contemporary figurative artist. Fischl's

paintings frequently depict seemingly ordinary suburban scenes that contain underlying emotional discomfort, vulnerability, voyeurism, or psychological tension. Many of his works focus on themes such as adolescence, sexuality, family relationships, alcoholism, and the emotional isolation often hidden beneath upper-middle-class suburban lifestyles. His paintings invite viewers to question what is truly happening beneath the surface of everyday situations.

In *Haircut* (15.5.14), Fischl portrays a young woman sitting provocatively on her bed while cutting her hair. The scene appears intimate and private, as though the viewer is observing the moment through a window. The striped appearance of the walls and bed may represent sunlight filtering through window blinds, adding to the voyeuristic atmosphere of the painting. Fischl uses dominant yellow tones throughout the composition, creating a warm but unsettling mood that heightens the psychological ambiguity of the scene. In *Saigon, Minnesota* (15.5.15), Fischl created a large four-panel painting showing several figures gathered in a suburban backyard near a swimming pool. Some people wear swimsuits while others appear nude, reclining or sitting in ambiguous poses that leave viewers uncertain about the relationships and activities taking place. Although the human figures appear strangely static and emotionally disconnected, the dog moving actively through the yard introduces a sense of motion and energy into the composition. Fischl again uses yellow as a dominant color, contrasted with areas of green and orange that punctuate the scene and draw attention to specific objects and spaces.

Figure \(\PageIndex{14}\): *Haircut* (CC BY 2.0)

Figure \(\PageIndex{15}\): *Saigon, Minnesota* (CC BY 2.0)

Pablita Velarde

Pablita Velarde (1918–2006) was a Native American artist from the Santa Clara Pueblo and is recognized as one of the most important female artists of the American Southwest. As a child, Velarde and her sisters were sent to boarding school, part of a broader government effort to assimilate Native American children into mainstream American culture. Despite these difficult experiences, she pursued art at a young age and became one of the few female students admitted to formal art training programs during her time. Velarde learned to paint using a flat, stylized approach often associated with Pueblo painting traditions. She dedicated much of her artistic career to documenting and preserving the cultural history, traditions, and daily life of her people. Her paintings frequently portray activities such as pottery making, weaving, ceremonies, storytelling, and community life, helping preserve cultural knowledge through visual art.

Initially, Velarde worked primarily with watercolors, but she later developed a unique technique known as **earth painting**. She gathered natural pigments from the land around her, grinding minerals, stones, and earth materials into powders and mixing them to create paint. This process connected her artwork directly to the landscape and traditions of her culture. In *Basketmaking* (15.5.16), Velarde depicts several individuals engaged in the traditional process of basket weaving. In the foreground, a man carefully weaves a basket from yucca leaves while another man works on a twilled basket in the background. A seated woman prepares the weaving materials gathered by the men nearby. The scene emphasizes cooperation, craftsmanship, and the importance of traditional cultural practices.

Figure \(\PageIndex{16}\): *Basketmaking* (public domain)

Kehinde Wiley (born 1977) is an American contemporary painter known for combining the visual traditions of classical European portraiture with representations of contemporary Black identity and culture. Born in **Los Angeles**, Wiley and his twin brother were raised primarily by their mother after their father returned to **Nigeria** early in their childhood. Wiley showed an interest in art from a young age and later earned a BFA from the Academy of Art University and an MFA from Yale University. Wiley was strongly influenced by the paintings of the European "Old Masters," particularly grand portraits of kings, military leaders, saints, and aristocrats. He reinterprets these historical compositions by replacing the original European figures with contemporary Black subjects, often ordinary people he encounters in neighborhoods or on city streets. Wiley photographs his models and places them within elaborate decorative settings inspired by African textiles, Islamic patterns, Renaissance ornamentation, and Baroque painting traditions.

In *Coming to Richmond* (15.5.17), Wiley portrays a contemporary Black rider on a rearing horse holding a sword, directly referencing heroic equestrian portraits such as depictions of Napoleon Bonaparte crossing the Alps. By substituting an ordinary modern individual for a traditional European hero, Wiley challenges historical ideas about power, status, race, and representation in Western art history. In *Mary Comforter of the Afflicted* (15.5.18), Wiley created a contemporary reinterpretation of religious imagery found in Renaissance painting. He places a young Black male figure into a pose traditionally associated with saints or holy figures while surrounding him with ornate decorative backgrounds, halos, stained-glass motifs, and symbolic imagery. Through these paintings, Wiley reclaims visual spaces historically reserved for white religious and aristocratic subjects. Wiley gained international recognition when he was selected to paint the official presidential portrait of Barack Obama (15.5.19), the first African American president of the United States. Rather than using a traditional formal presidential pose, Wiley depicted Obama seated in an ordinary chair surrounded by dense flowering plants. Each flower held symbolic meaning connected to Obama's life: chrysanthemums represented Chicago, jasmine symbolized Hawaii, and blue lilies honored his Kenyan heritage through his father.

Figure \(\PageIndex{17}\): *Coming to Richmond* (CC BY-NC-ND 2.0)

Figure \(\PageIndex{18}\): *Mary Comforter of the Afflicted* (CC BY-NC-ND 2.0)

Figure \(\PageIndex{19}\): *Barack Obama* (2018, oil on canvas, 213.7 x 147 cm) (CC BY-NC-ND 2.0)

Kehinde Wiley: A New Republic

The works presented in Kehinde Wiley: A New Republic raise questions about race, gender, and the politics of representation by portraying contemporary African American men and women using the conventions of traditional European portraiture. The exhibition includes an overview of the artist's prolific fourteen-year career and features sixty paintings and sculptures.

Faith Ringgold (born 1930) is an American artist, writer, educator, and activist best known for her narrative quilt paintings, sculptures, masks, and politically engaged artwork. Born in **Harlem, New York City**, Ringgold grew up surrounded by a vibrant cultural environment filled with artists, musicians, writers, and poets during the period of the Harlem Renaissance and its continuing influence. Her mother, a fashion designer, taught her sewing and fabric techniques that later became central to her artistic practice. After earning her master's degree, Ringgold traveled extensively in Europe, especially in **Paris**, where she became inspired by art history and storytelling traditions. These experiences contributed to the development of her quilt-based works

known as the **French Collection**, a narrative series that combines painting, fabric, and written text. She also traveled to **West Africa**, where she studied African artistic traditions that influenced her later sculptures and masks.

The social and political struggles of the 1960s, including the Civil Rights Movement and racial unrest in the United States, deeply shaped Ringgold's early artwork. She created powerful paintings and series addressing racism, violence, inequality, and the experiences of African Americans in American society. One of the most significant works from her *American People Series* is *Die* (15.5.20). The painting portrays elegantly dressed Black and white figures engaged in scenes of violence, fear, and chaos. Blood splatters across the composition, symbolizing how racism and hatred affect everyone within society regardless of race or social class. The carefully arranged figures and emotional intensity recall historical paintings such as *Guernica* while addressing contemporary racial tensions in America.

Figure \(\PageIndex{20}\): *American People Series #20: Die* (CC BY-NC-ND 2.0)

Fang Lijun

Fang Lijun (born 1963) is a contemporary Chinese painter associated with the movement known as **Cynical Realism**, a group of artists who responded to political repression, social uncertainty, and the emotional atmosphere in China following the events surrounding **Tiananmen Square**. Born in China, Fang grew up in a family with relatively comfortable social standing due to important political and social connections. From an early age, he was trained in art and later graduated from the prestigious Central Academy of Fine Arts. Fang Lijun became known for his emotionally expressive paintings featuring bald-headed figures, a recurring symbol throughout his work. These figures often appear isolated, anxious, passive, or emotionally overwhelmed, reflecting feelings of helplessness, alienation, and uncertainty within modern society. By focusing closely on facial expressions and body language, Fang creates psychological tension while leaving the meaning of the scenes open to interpretation.

As a member of the Cynical Realism movement, Fang addressed themes related to political suppression, conformity, individual identity, and human rights. His paintings often combine humor, ambiguity, discomfort, and emotional vulnerability, encouraging viewers to question the emotional realities hidden beneath outward appearances. In both of the paintings referenced (15.5.21, 15.5.22), water becomes an important symbolic element connected to emotional instability and uncertainty. In one image, a central figure appears distressed or anguished while two figures behind him observe or interact with him, leaving viewers uncertain about

the cause of his emotional state. In the other painting, the figure appears to be drowning, struggling, or reacting unexpectedly to something beneath the surface. The ambiguity of the scenes allows viewers to create their own interpretations about fear, suffering, confusion, or emotional conflict.

Figure \(\PageIndex{21}\): *Series 1, No. 3* (CC BY-NC 2.0)

Figure \(\PageIndex{22}\): *Water* (CC BY-NC 2.0)

Amy Sherald

Amy Sherald (born 1973) is an American painter known for her contemporary figurative portraits that explore the everyday experiences, dignity, and individuality of African Americans. Based in **Maryland**, Sherald earned her MFA in painting and became widely recognized for her distinctive portrait style that combines realism with symbolic color choices and simplified backgrounds. One of Sherald's most recognizable artistic techniques is her use of **grayscale**, or **grisaille**, to paint skin tones. Rather than using realistic flesh colors, she intentionally paints her figures in shades of gray to challenge traditional assumptions linking skin color directly to racial identity. By removing naturalistic skin tones, Sherald encourages viewers to focus on the individuality, personality, posture, and humanity of her subjects rather than stereotypes connected to race.

Her paintings often portray ordinary individuals with quiet dignity and emotional presence. The figures are typically shown against simplified or muted backgrounds while wearing brightly colored clothing that becomes visually prominent within the composition. In *Grand Dame Queenie* (15.5.23), Sherald depicts a woman holding a cup and saucer while calmly gazing outward at the viewer. The figure's grayscale skin contrasts sharply with the vivid colors of her clothing, including striped pants, a bright red shirt, and a yellow bow. The use of bold color emphasizes Sherald's vibrant palette while reinforcing the individuality and importance of the subject.

Similarly, *The Boy with No Past* (15.5.24) portrays a young man standing formally against a subdued background. His colorful clothing contrasts with the quiet setting, drawing attention to his presence and identity. Sherald's portraits elevate ordinary people,

presenting them with the same seriousness and importance historically reserved for aristocrats and political leaders in traditional portraiture. Sherald gained international attention when she was selected to paint the official portrait of Michelle Obama (15.5.25). In the portrait, Michelle Obama sits against a plain blue background while Sherald uses her signature grayscale technique for Obama's skin tones. Obama's striking white dress becomes the focal point of the composition, decorated with geometric patches of color that resemble the quilt traditions of the Gee's Bend Quilters. Each patterned section appears unique, symbolizing individuality, cultural heritage, and artistic tradition.

Figure \(\PageIndex{23}\): *Grand Dame Queenie* (CC BY-NC 2.0)

Figure \(\PageIndex{24}\): *The Boy with no Past* (CC BY-NC-ND 2.0)

Figure \(\PageIndex{25}\): *Michelle Obama* (CC BY 2.0)

15.6: Conclusion and Contrast

Contemporary installation and sculptural artists use a wide variety of materials to create immersive environments that engage viewers physically and emotionally. Yayoi Kusama uses mirrors, lights, painted surfaces, and found objects covered in her signature polka dots to transform ordinary spaces into endless visual experiences. Dale Chihuly creates large glass sculptures supported by metal frameworks and enhanced by carefully designed lighting systems. Andy Goldsworthy works directly with natural materials such as leaves, rocks, ice, branches, and flowers gathered from the environment. Nam June Paik used televisions, electronics, neon lights, and video technology to create groundbreaking multimedia installations. El Anatsui transforms recycled bottle caps, wire, and scrap metal into monumental hanging sculptures, while Christo and Jeanne-Claude used fabric, steel structures, and landscapes themselves as materials for their large-scale environmental projects.

Natural resources often become essential elements within contemporary installations. Goldsworthy allows nature itself to shape and eventually destroy his sculptures as ice melts, leaves decay, or rocks shift over time. Chihuly places colorful glass works in botanical gardens and waterways so that light, plants, and reflections become part of the artwork. El Anatsui uses discarded recycled materials to address environmental concerns and demonstrate how waste can be transformed into beauty. Christo and Jeanne-Claude integrated rivers, parks, and valleys into their projects, turning landscapes into temporary works of art. These artists show how installation art can connect directly to environmental awareness and humanity's relationship with nature.

Color is one of the most powerful elements in installation art because it shapes the emotional atmosphere and sensory experience of the viewer. Kusama's bright reds, yellows, blacks, and polka dots create energetic and immersive environments. Chihuly's glowing glass sculptures become even more dramatic as sunlight passes through them or reflects off water surfaces. Goldsworthy often uses the natural colors of leaves, stones, flowers, and snow to blend harmoniously with the environment. El Anatsui's metallic recycled materials shimmer with changing colors under gallery lighting, while Christo and Jeanne-Claude used bold saffron-colored gates to transform the appearance of Central Park. In many cases, color enhances the emotional and visual impact of the installation, making the environment feel immersive, dynamic, and memorable.

Computerized technology has dramatically changed modern architectural design in the twenty-first century. Architects now use Computer-Aided Design (CAD) software and three-dimensional modeling programs to create highly complex forms and structures that would have been impossible to calculate manually. Buildings such as Guggenheim Museum Bilbao, Beijing National Stadium, and Burj Khalifa rely heavily on advanced digital engineering systems to design their curved surfaces, twisting forms, and massive structural supports. Digital technology allows architects to test structural stability, environmental conditions, lighting, airflow, and energy efficiency before construction even begins.

Contemporary buildings also use innovative materials that expand architectural possibilities. Titanium panels on the Guggenheim Museum Bilbao reflect changing sunlight and weather conditions, while the Bird's Nest stadium in Beijing uses interwoven steel structures to create its woven appearance. Apple Park features enormous curved glass walls and renewable energy systems, while Burj Khalifa incorporates reflective glass and stainless steel panels to reduce heat absorption in the desert climate. These advanced materials allow architects to create organic, flowing forms while improving structural strength and environmental efficiency.

Many twenty-first-century structures are designed with sustainability and environmental responsibility in mind. One Central Park uses recycled water systems, rooftop heliostats, and vertical gardens integrated directly into the building. Apple Park operates largely on renewable solar energy and incorporates extensive landscaping and natural ventilation systems. Pearl River Tower in China uses wind turbines, solar panels, and aerodynamic engineering to conserve energy. Contemporary architects increasingly design buildings that reduce environmental impact through energy efficiency, renewable resources, water conservation, and sustainable materials.

Contemporary figurative art has also evolved significantly in the twenty-first century. Unlike earlier figurative traditions that focused mainly on realistic representation, today's artists combine realism, abstraction, symbolism, and emotional expression to address contemporary social and cultural issues. Njideka Akunyili Crosby uses layered patterns and collage to explore family identity and migration between Nigeria and America. Marlene Dumas uses distorted forms and dark colors to explore psychological tension and emotional vulnerability. Zhang Xiaogang portrays emotionally restrained figures that reflect political conformity and suppression in China.

Other contemporary figurative artists focus on race, identity, and representation. Kerry James Marshall emphasizes deep black skin tones to center African American identity within art history, challenging historical exclusions of Black figures. Jenny Saville paints monumental figures that challenge traditional beauty standards and idealized images of the body. These artists demonstrate how

contemporary figurative art has become a powerful platform for discussing race, gender, politics, identity, and human experience while expanding the possibilities of figurative representation in modern art.

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