COLOR THEORY AND APPLICATIONS



Melissa Delaney
Coalinga College

LibreTexts™

Colour Theory- Understanding and Working with Colour

This text is disseminated via the Open Education Resource (OER) LibreTexts Project (https://LibreTexts.org) and like the thousands of other texts available within this powerful platform, it is freely available for reading, printing, and "consuming."

The LibreTexts mission is to bring together students, faculty, and scholars in a collaborative effort to provide an accessible, and comprehensive platform that empowers our community to develop, curate, adapt, and adopt openly licensed resources and technologies; through these efforts we can reduce the financial burden borne from traditional educational resource costs, ensuring education is more accessible for students and communities worldwide.

Most, but not all, pages in the library have licenses that may allow individuals to make changes, save, and print this book. Carefully consult the applicable license(s) before pursuing such effects. Instructors can adopt existing LibreTexts texts or Remix them to quickly build course-specific resources to meet the needs of their students. Unlike traditional textbooks, LibreTexts' web based origins allow powerful integration of advanced features and new technologies to support learning.



LibreTexts is the adaptable, user-friendly non-profit open education resource platform that educators trust for creating, customizing, and sharing accessible, interactive textbooks, adaptive homework, and ancillary materials. We collaborate with individuals and organizations to champion open education initiatives, support institutional publishing programs, drive curriculum development projects, and more.

The LibreTexts libraries are Powered by NICE CXone Expert and were supported by the Department of Education Open Textbook Pilot Project, the California Education Learning Lab, the UC Davis Office of the Provost, the UC Davis Library, the California State University Affordable Learning Solutions Program, and Merlot. This material is based upon work supported by the National Science Foundation under Grant No. 1246120, 1525057, and 1413739.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation nor the US Department of Education.

Have questions or comments? For information about adoptions or adaptions contact info@LibreTexts.org or visit our main website at https://LibreTexts.org.

The LibreTexts name, logo, and book covers are trademarked by LibreTexts, Inc. (a 501(c)(3) not-for-profit organization) and protected against unauthorized use.

This text was compiled on 09/10/2026

TABLE OF CONTENTS

Licensing

Colour theory: understanding and working with colour

Acknowledgement of Country

About this book

Versioning history

Introduction: what is colour?

1: PART 1- A Brief History of Color

1.1: Introduction

1.2: History of Colour Theory

1.3: Cultural Interpretations

1.4: Colour Aesthetics

2: PART 2- The Visible Spectrum

2.1: Introduction

2.2: The Physics of Light and Colour

2.3: Colour in Chemistry

2.4: The Eye- How We See Colour

3: PART 3- Applications with Color

3.1: Introduction

3.2: Additive and Subtractive Colour

3.3: Colour Systems- Digital

3.4: Colour Systems- Printing

3.5: Colour Systems- Pigments and Dyes

3.6: Colour Wheels and Relationships

3.7: Color Terms

4: PART 4- Color in Modern and Contemporary Art

4.1: Impressionism

4.2: Post-Impressionism

4.3: Fauvism + Expressionism

4.4: Mark Rothko

4.4.1: No. 210/No. 211 (Orange), 1960

4.4.2: No. 3/No. 13

4.4.3: The Case for Mark Rothko

4.4.4: Mark Rothko (at MoMA)

4.4.5: Restoring Rothko

4.5: Color Field (1950s-1960s)

4.6: Barnett Newman
4.6.1: Onement, I
4.6.2: Barnett Newman at MoMA
4.6.3: The Painting Techniques of Barnett Newman
4.6.4: Representation and abstraction- looking at Millais and Newman
4.7: Op Art (1960s – 1970s)
4.8: Tessellations
4.8.1: Exercises
4.9: Kinetic Art (1950s – 1960s)
4.10: Global Concerns
4.10.1: Global cultures (1980 - now)
4.10.1.1: A beginner's guide
4.10.1.2: Appropriation and ideological critique
4.10.1.3: Identity and the body
4.10.1.4: Banality and Kitsch
4.10.1.5: Ritual, spirituality, and transcendence
4.10.1.6: Histories, real and imagined
4.11: Yayoi Kusama
4.11.1: Narcissus Garden
4.11.2: Yayoi Kusama (Tate)
5: Digital Technology and Art of the 21st Century
Index
Glossary
Detailed Licensing
Detailed Licensing

This page titled Color Theory and Applications is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

Licensing

A detailed breakdown of this resource's licensing can be found in ***Back Matter/Detailed Licensing***.

This page titled Licensing is shared under a license and was authored, remixed, and/or curated by Lisa Cianci.

Colour theory: understanding and working with colour

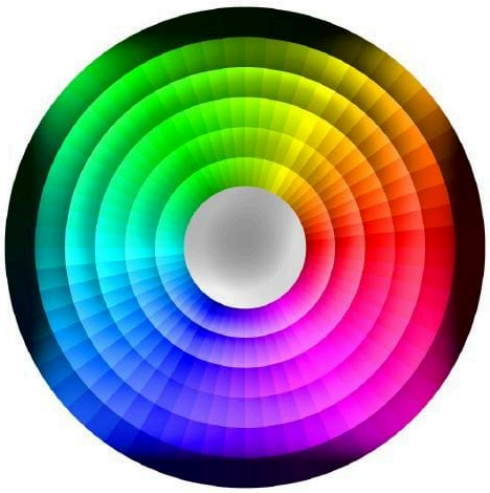
An open educational resource for learning about colour and it's applications

What is colour theory?

Colour theory covers a long history from antiquity to modern times. It includes academic and scientific investigations into how we see and understand colour. It also includes practical applications for using colour in creative work.

This learning resource explains the history of colour theory, how we see colour, and how to use colour systems to mix colour and create colour relationships.

Also included are quizzes and learning activities to guide users in applications of colour theory for art and design. This content is relevant for anyone working with colour in creative and scientific fields.



This page titled Colour theory: understanding and working with colour is shared under a license and was authored, remixed, and/or curated by LibreTexts.

Acknowledgement of Country

RMIT University acknowledges the people of the Woi wurrung and Boon wurrung language groups of the eastern Kulin Nation on whose unceded lands we conduct the business of the University. RMIT University respectfully acknowledges their Ancestors and Elders, past and present. RMIT also acknowledges the Traditional Custodians and their Ancestors of the lands and waters across Australia where we conduct our business.



Image attribution: ‘Luwaytini’ by Mark Cleaver, Palawa.

This page titled Acknowledgement of Country is shared under a license and was authored, remixed, and/or curated by LibreTexts.

About this book

Disclaimer

RMIT Library staff have compiled this textbook in good faith, exercising all due care and attention.

No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. The publisher assumes no responsibility for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained in the book. Readers should seek appropriate advice when applying the information to their specific needs.

Attributions

This textbook includes material adapted or reused from third party works under Creative Commons licences or Education licences. In the case of multiple downstream adaptations, links to original works are included within the attribution statement where possible.

Suggested citation

Cianci, L. (2023) *Colour Theory: Understanding and Working with Colour*. RMIT Open Press <https://rmit.pressbooks.pub/colourtheory1>

Reviewers

Riley Barber
Dr David J.C. Briggs
Dr Alina Lam
AJ Penrose

Suggested attribution

"Colour Theory: Understanding and Working with Colour" by Dr Lisa Cianci, RMIT University Library, is licensed under CC BY-NC-SA 4.0.

Copyright

This book is provided under an Attribution-NonCommercial-ShareAlike 4.0 International License except where otherwise noted. The RMIT University Logo and cover design are 'all rights reserved'.

We have made all reasonable efforts to:
- clearly label material where the copyright is owned by a third party
- ensure that the copyright owner has consented to this material being presented in this textbook.

External links

This textbook includes links to third-party websites that contain copyright protected material, your access to the sites will be covered by terms between you and the other operator/owner of the site. We are not responsible for any of the content, including links found on the site. Read and abide by the external websites' terms of use.

Published by

RMIT Open Press.

Credits

This open educational resource was created by staff of RMIT University Library, Digital Learning.

Cover design

By Dr. Lisa Cianci
Cover artwork image by Lisa Cianci, adapted from an engraving from *Meyers Conversations-Lexicon*, 1897

Illustrations

RMIT images and illustrations by AJ Penrose

This page titled About this book is shared under a license and was authored, remixed, and/or curated by LibreTexts.

Versioning history

This page provides a record of edits and changes made to this text from initial publication. Whenever edits or updates are made to the text, we provide a record and description of those changes here.

If you have a correction or recommendation you would like to suggest, please contact the Digital Learning Team within the RMIT University Library at: digital.learning.library@rmit.edu.au

Version	Date	Description
Initial Publication	23/02/2023	Book published with initial collection of objects available to all users.
Second edition	01/02/2025	Small corrections and additional interactive self-test quizzes

This page titled Versioning history is shared under a license and was authored, remixed, and/or curated by LibreTexts.

Introduction: what is colour?

Colour is how we describe the visible features of an object by its **hue**, **lightness**, and **saturation**. In physics, we identify colour by measuring a range of wavelengths known as the **visible spectrum** (See Figure 0.1). We also call this **light** or **electromagnetic radiation**. The human eye perceives these visible wavelengths as different colours.

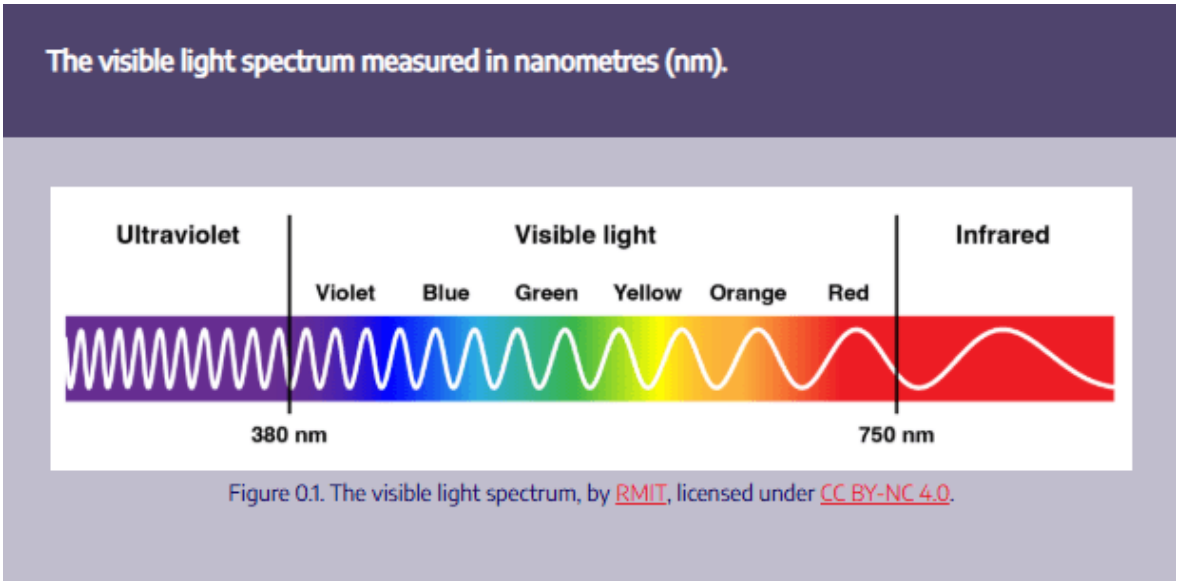


Figure 0.1. The visible light spectrum, by RMIT, licensed under CC BY-NC 4.0.

In this open educational resource, you can find information on colour theory divided into three chapters. This resource also includes quizzes to test your knowledge, and practical learning activities to guide users in applications of colour theory for art and design. The content is relevant for anyone working with colour in creative and scientific fields.

Each chapter covers information on the following topics:

Chapter 1. Colour theory: history and culture

An introduction to colour theory history with a summary of selected key scientific developments. Also covered are short introductions to cultural interpretations of colour and colour aesthetics.

- Scientific discoveries relating to colour
- Cultural interpretations of colour and colour symbolism
- Colour aesthetics in art and design

Chapter 2. Colour theory: the visible spectrum

A scientific approach to the visible spectrum and how humans and other species perceive colour.

- Introduction to current scientific theory of the visible spectrum, physics, optics and chemistry
- Anatomy of the human eye: how we see and interpret colour information in the brain
- Colour blindness and other vision differences
- Colour vision in animals

Chapter 3. Colour theory: working with colour

Detailed explanations of different colour systems for the practical applications of colour in physical materials and digital media.

- Understanding additive and subtractive colour
- Understanding colour systems for working with:
  - digital media,
  - printing, and
  - colour pigments and dyes
- Using colour wheels and creating colour relationships

Glossary of Terms

A list of all the glossary terms used throughout this resource. You can view all glossary term definitions on a single page at the end of the resource, or select individual terms throughout the text as you are reading.

This page titled Introduction: what is colour? is shared under a license and was authored, remixed, and/or curated by LibreTexts.

1: PART 1- A BRIEF HISTORY OF COLOR



{

Introduction to Color Theory

Color is one of the most powerful and expressive elements of art and design. It shapes how we see, feel, interpret, and respond to the visual world. A single color can create mood, suggest meaning, guide attention, describe light, define form, or communicate emotion before a viewer reads a title or understands the subject matter. In art, color is never simply decorative. It is a visual language.

Color theory is the study of how colors relate to one another and how artists and designers use those relationships to create harmony, contrast, emphasis, depth, symbolism, and visual meaning. Through color theory, we learn how colors are organized, mixed, perceived, and applied. We also begin to understand why certain color combinations feel calm, energetic, dramatic, balanced, joyful, tense, or unsettling.

In this chapter, students will explore the foundations of color, including hue, value, intensity, temperature, and color relationships. The color wheel will serve as an important tool for understanding primary, secondary, and tertiary colors, as well as complementary, analogous, split-complementary, triadic, and monochromatic color schemes. Students will also examine how color changes depending on surrounding colors, lighting conditions, materials, and cultural or personal associations.

For artists, understanding color theory strengthens both technical skill and creative decision-making. A painter may use warm and cool colors to create the illusion of space. A designer may use contrast to make information clear and readable. A photographer may use color temperature to create atmosphere. A digital artist may use saturation and value to direct the viewer's eye. Across all visual disciplines, color helps transform an image from a collection of shapes into a meaningful visual experience.

Color theory also invites experimentation. While there are traditional systems and vocabulary that help us understand color, artists often bend, challenge, and reinvent these ideas. Learning color theory does not mean following rigid rules. Instead, it gives students a foundation for making intentional choices. Once students understand how color works, they can use it with greater confidence, sensitivity, and imagination.

As you move through this chapter, consider color not only as something you see, but as something you experience. Notice how color affects your emotions, your attention, your sense of space, and your interpretation of meaning. By developing a deeper awareness of color, you will strengthen your ability to observe, analyze, create, and communicate through visual art.

1.1: Introduction

1.2: History of Colour Theory

1.3: Cultural Interpretations

1.4: Colour Aesthetics

This page titled 1: PART 1- A Brief History of Color is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

1.1: Introduction

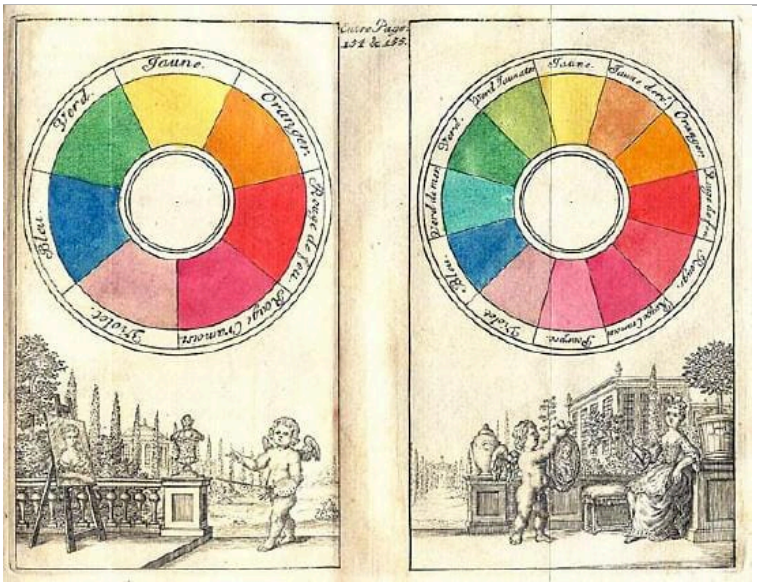


Figure 1.1. Boutet 1708 colour circles. Image attribution: C. B. (probably Claude Boutet or it's editor, Christophe Ballard), Boutet 1708 c circles, marked as public domain, on Wikimedia Commons.

Scientific and theoretical investigations into colour go back thousands of years. Some of the earliest recorded theories of colour come from the ancient Greek civilisation. You will find these in the writings of philosophers such as **Democritus**, **Plato** and **Aristotle**.

Other notable theories of colour developed through the centuries in the work of significant scholars, scientists and artists such as: **al-Kindi**; **Leonardo da Vinci**; **Robert Fludd**; **Isaac Newton**; **Johann Wolfgang von Goethe**; and many more.

This chapter will introduce colour theory history with a summary of selected key scientific developments. Also included are short introductions to cultural interpretations of colour and colour aesthetics.

***Note**: this chapter does not contain a complete listing of all scholars, scientists and artists that have contributed to scientific and artistic fields related to colour theory, rather, it is a condensed timeline with selected notable mentions. See subject guides and references for more information on these topics.*

This page titled 1.1: Introduction is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

1.2: History of Colour Theory

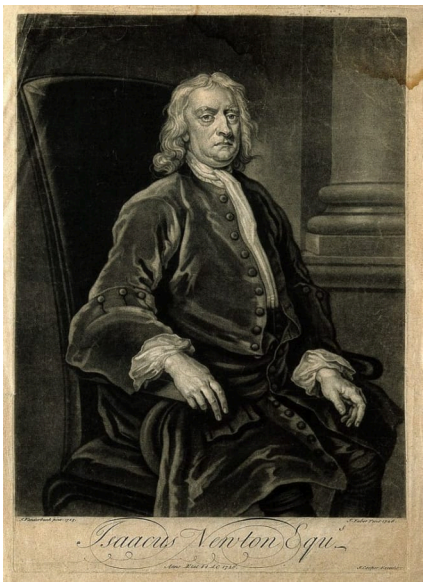


Figure 1.2. Sir Isaac Newton. Mezzotint by J. Faber, junior, 1726, after J. Vanderbank, 1725. Image by Wellcome Library, London via Wikimedia Commons, licensed under CC BY 4.0.

How do we know so much about what colour is? How do we see it and how can we use it?

A progression in our understanding of colour through many versions of practical colour systems, has developed over thousands of years of recorded history. Different ways of identifying and classifying colours have been theorised since ancient times. More recently, scientifically accurate means of measuring the visible light spectrum have been developed.

Today, many of us are still taught as children that red, yellow and blue are **primary colours,** and we learn to mix paints and crayons using this principle from a very early age**.** While this traditional colour system credited to Sir Isaac Newton (see Figure 1.2) is good for some practical colour mixing methods, it isn't scientifically accurate, based on what we now know about light and colour. It's useful to learn how colour theory has developed over time, beyond mixing paint pigments, if you are working with colour in any field, whether creative or scientific.

This part of Chapter 1 contains a brief history of colour theories from a selection of philosophers, scholars, scientists and artists who have made significant contributions to this field.

Timeline of discoveries:

- **Antiquity (c. 500 BCE to 300 CE)**
- **Middle Ages and Renaissance (c. 400 to 1600 CE)**
- **The Enlightenment (c. 1650 to 1800)**
- **Modern era (c. 1850 to 1980)**
- **Contemporary Colour Systems (c. 1930 – 2020+)**

Antiquity (c. 500 BCE to 300 CE)

Ancient philosophy and theories of colour vision



Figure 1.3. Depiction of Plato's Academy. Image attribution: Unknown author, Plato's Academy mosaic from Pompeii, marked as public domain, on Wikimedia Commons

Ancient Greek philosophers such as Democritus, Plato (See Figure 1.3) and Aristotle devised theories of colour based on the teachings of Pythagoras and theories of music, maths, astronomy, and universal harmony. The four colours of white, black, red and yellow were popular as the basic and elemental colours used in much of ancient Greek artwork – perhaps because of the plentiful earthy pigments (ochres) that were used at the time.

Democritus theorised about energy and the characteristics of atoms in an object which created visible colours. Plato thought that the eye transmitted rays of vision towards an object (fire rays placed in our eyes by the gods), which also self-radiated rays of colour.

Aristotle, however, rejected theories of the eye radiating rays of vision because if that were true, he argued, we would have the ability to see at night. Aristotle's colour system included seven primary colours: white, black, red (crimson), yellow, violet, green and blue.

Ptolemy (Claudius Ptolemaeus), an ancient astronomer, geographer, and mathematician, considered the Earth the centre of the universe (the "Ptolemaic system"). He experimented with **optics** and light refraction, and believed that the eye generates rays which send back information about colour, shape, size and distance.

Middle Ages and Renaissance (c. 400 to 1600 CE)

The Islamic Golden Age: optics and colour systems



Figure 1.4. Engraving from the title page of Opticae Thesaurus. Image attribution: Opticae Thesaurus, a latin edition of Ibn al-Haytham's Book of Optics. Among other things it shows how Archimedes allegedly set Roman ships on fire with parabolic mirrors during the Siege of Syracuse. Unknown illustrator, Thesaurus opticus Titelblatt, marked as public domain, more details on Wikimedia Commons

During the **Islamic Golden Age** (8th to 14th centuries), Arabic Islamic scholars moved away from the theories of Aristotle and Ptolemy to make their own discoveries in colour theory. Between the years 800 – 1200 CE, scholars such as **al-Kindi**, **Ibn al-Haythem** (Alhazen) and **Ibn Rushd** (Averroes), concluded that light was necessary for seeing colours – not rays from the eyes.

Ibn al-Haythem (known as the father of modern optics – Figure 1.4) experimented with light and glass spheres of water, observing a rainbow spectrum – the bending (refraction) of light rays into different colours. He noted that red light rays bent the least, and blue light rays bent the most. The scholar Nishaburi proposed the beginnings of a hue scale for describing colour in a system.
Ibn al-Haythem, *Book of Optics*, c. 1011 CE

The Middle Ages: Grosseteste's colour system



Figure 1.5. c, eyes crossed, seated with miter and crozier, his right hand raised in blessing. Image attribution: Unknown 14th century scribe, Grosseteste bishop, marked as public domain, on Wikimedia Commons

Around 1200 CE, the scholar **Robert Grosseteste** (Bishop of Lincoln and, it is speculated, the first chancellor of Oxford University – Figure 1.5) developed a colour system of seven colours. Although we don't know what those colours were, he may have been the first to separate chromatic colours (red, green, blue, yellow) from achromatic colours (black, grey, and white) in a colour system.

The Renaissance: colour primaries and colour wheels

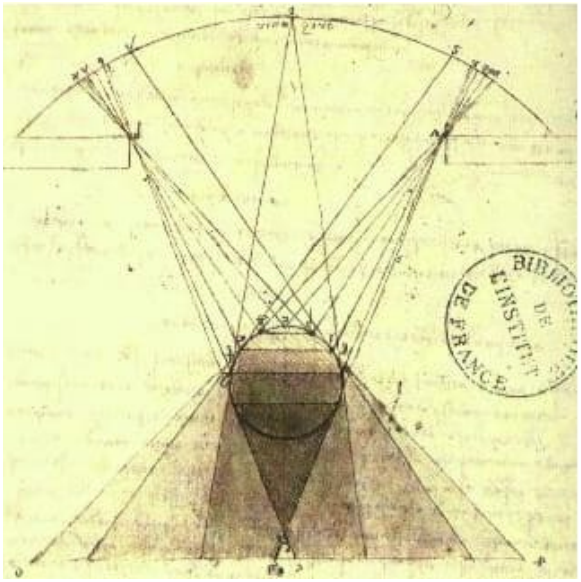


Figure 1.6 Da Vinci's study of the gradation of shadows on spheres. Image attribution: Leonardo da Vinci, Study of the Graduations of Shadows on Spheres, marked as public domain, on Wikimedia Commons

Leon Battista Alberti and **Leonardo da Vinci** were Italian Renaissance artists and **polymaths** who both had an interest in colour theory from a practical perspective (circa 1450 to 1500 CE). They wanted to understand colour to better mix pigments for painting artworks. Alberti recognised four colours (yellow, green, blue, red) – although he found yellow to be a problematic colour and sometimes replaced it with grey in his four-colour square. Da Vinci investigated the complexities of colour, light and physical materials such as pigments (Figure 1.6). He listed six colours as his basic primaries (white, yellow, green, blue, red, black).

He included green in his primaries although he recognised that green could be mixed from yellow and blue making it also a secondary colour.

Aron Sigfrid Forsius – a Finnish astronomer, documented his theory on the colour values Hue, Saturation and Value in 1611.

The physician and mystic **Robert Fludd** is credited with developing the first colour wheel based on Aristotle's theories of colour around 1629 to 1631.

The Enlightenment (c. 1650 to 1800)

Newton: the rainbow spectrum and optics

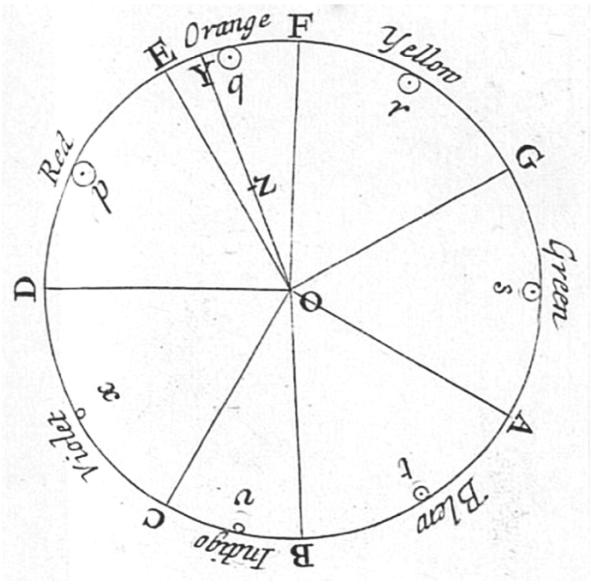


Figure 1.7. Newton's colour circle from his publication Opticks. Image attribution: Isaac Newton, Newton's color circle, from Opticks. 1704, from Book I, Part II, Proposition VI, Problem 2. Marked as public domain, on Wikimedia Commons

Sir Isaac Newton is credited with developing the first colour wheel in 1672 (Figure 1.7) based on colour hue relationships. He identified the **rainbow spectrum** through his experiments with light and prisms. His work led to many breakthroughs in optics, physics and chemistry. Newton's publication ***Opticks*** (Figure 1.8) is recognised as one of the great works of science. It documents Newton's discoveries in identifying the visible spectrum and the colours ROYGBIV (Red, Orange, Yellow, Green, Blue, Indigo, Violet). See Chapter 2 – Colour theory: the visible spectrum for details about this theory.
Link to the Gutenberg Ebook of Opticks

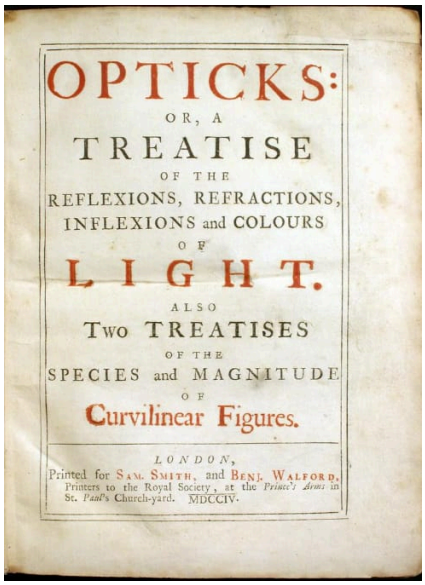


Figure 1.8. Image attribution: Isaac Newton, Opticks, marked as public domain, on Wikimedia Commons

Goethe and Schopenhauer: perceptual colour and colour aesthetics

Johann Wolfgang von Goethe (poet and artist), published his ***Theory of Colors*** in 1810 (Figure 1.9). He was dismissed by many, perhaps because he refuted Newton's theories of colour by suggesting that colour was subjectively experienced. He thought that darkness was an important part of the colour spectrum. His explorations of the psychological impact of colour on mood is considered the earliest systematic study of this kind.

His work influenced artists like J.M.W. Turner (Painting *Light and Colour (Goethe's Theory)- the Morning after the Deluge. Moses writing the Book of Genesis* 1943). View this painting on The Tate gallery website: [The Tate: Joseph Mallord William Turner, Light and Colour (Goethe's Theory) – the Morning after the Deluge – Moses Writing the Book of Genesis]

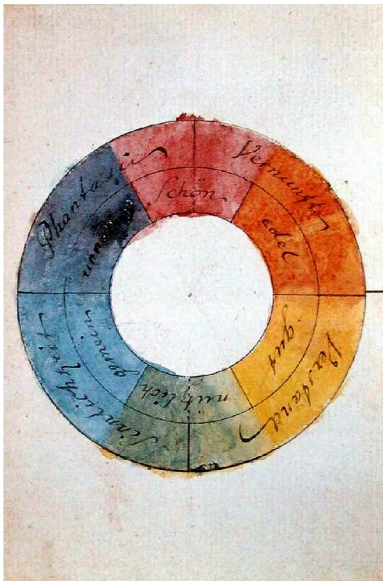


Figure 1.9. Goethe's colour wheel. Image attribution: The original uploader was Luestling at German Wikipedia, Goethe, Farbenkreis zur Symbolisierung des menschlichen Geistes- und Seelenlebens, 1809, marked as public domain, on Wikimedia Commons

The German philosopher **Arthur Schopenhauer** wrote his book ***On Vision and Colours,*** which was heavily influenced by his discussions with Goethe. Despite theoretical differences, they were both interested in physiological perception of colour.

Johannes Itten based his work with colour on these theories (see 1.3 Colour Aesthetics for more about Itten).

Learn more here:

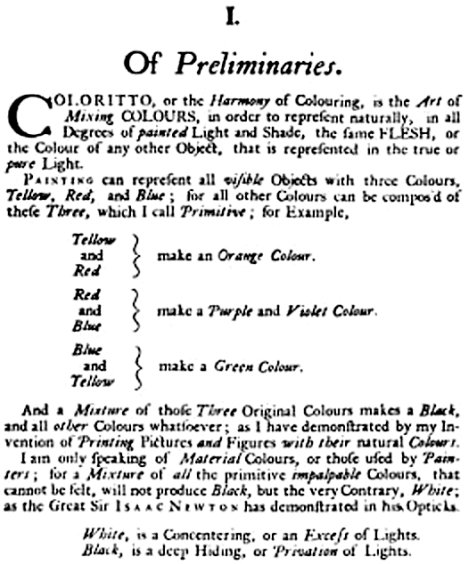
- The Marginalia – Goethe: Theory of Colour
- Smithsonian Libraries: The Science of Colour

Le Blon: the first three-colour printing method

Jacob Christoph Le Blon (a.k.a. Jakob Christoffel Le Blon) was the first to devise a three-colour printing method in 1710, using the traditional primary colours Red, Yellow and Blue (Figure 1.10). This formed the basis for our CMYK colour printing system today. He used the printing method of *Mezzotint* to create three or four engraved plates, each with a different colour, which allowed for making prints with a wide range of colours.

See his book on Archive.org: *Coloritto, or, The harmony of colouring in painting : reduced to mechanical practice, under easy precepts and infallible rules, together with some colour'd figures, in order to render the said precepts and rules intelligible not only to painters, but even to all lovers of painting:*

Archive.org: Coloritto



I.

Of *Preliminaries.*

COLORITTO, or the *Harmony* of Colouring, is the *Art* of *Mixing* COLOURS, in order to repreſent naturally, in all Degrees of *painted* Light and Shade, the ſame FLESH, or the Colour of any other Object, that is repreſented in the true or *pure* Light.

PAINTING can repreſent all *viſible* Objects with three Colours, *Yellow*, *Red*, and *Blue*; for all other Colours can be compos'd of theſe *Three*, which I call *Primitive*; for Example,

Yellow and *Red* } make an *Orange Colour.*

Red and *Blue* } make a *Purple* and *Violet Colour.*

Blue and *Yellow* } make a *Green Colour.*

And a *Mixture* of thoſe *Three* Original Colours makes a *Black*, and all *other* Colours whatſoever; as I have demonſtrated by my Invention of *Printing* Pictures *and* Figures *with their* natural *Colours*.

I am only ſpeaking of *Material* Colours, or thoſe uſed by *Painters*; for a *Mixture* of *all* the primitive *impalpable* Colours, that cannot be felt, will not produce *Black*, but the very Contrary, *White*; as the Great Sir ISAAC NEWTON has demonſtrated in his Opticks.

White, is a Concentering, or an *Exceſs* of Lights.
Black, is a deep Hiding, or *Privation* of Lights.

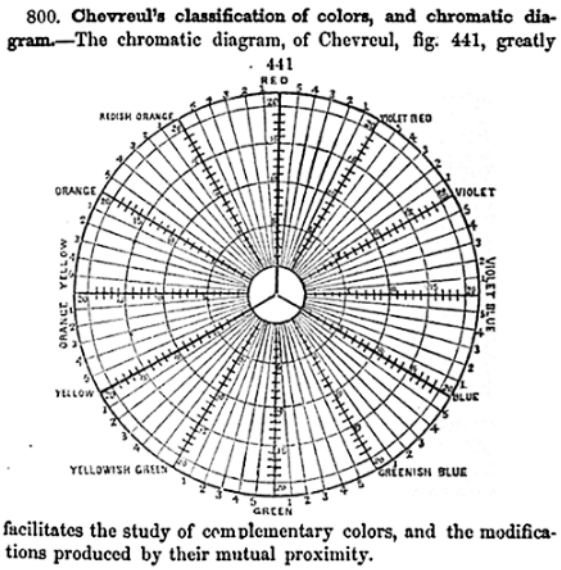
Figure 1.10. Three-colour printing by Le Blon. Image attribution: Jacob Christoph Le Blon, Le Blon three-color printing, marked as public domain, on Wikimedia Commons

Modern era (c. 1850 to 1980)



Figure 1.11. Chevrel's chromatic circle. Image attribution: Michel Chevreul, Cercle chromatique Chevreul 3, image marked as public domain, on Wikimedia Commons. Select images to enlarge.

Chevreul: 72-colour wheel and perceptual colour


800. **Chevreul's classification of colors, and chromatic diagram.**—The chromatic diagram, of Chevreul, fig. 441, greatly

441

facilitates the study of complementary colors, and the modifications produced by their mutual proximity.

Figure 1.12. Chevrel's RYB chromatic diagram. Image attribution: Benjamin Stillman after Chevreul, Chevreul's RYB chromatic diagram, image marked as public domain, on Wikimedia Commons. Select images to enlarge

The chemist **Michel Eugène Chevreul** devised a **72-colour wheel** in 1839 (Figures 1.11 and 1.12) which not only showed primary colours, but also showed secondary and tertiary colours, and different brightness levels. He experimented with dyes for carpet manufacture, and through this work, identified the relationships of colours when placed next to each other, and how our perception of colour is relational. His work in the field of optics and the way the human brain interprets colour had an important influence on many art movements, including **Impressionism** and **Orphic Cubism**.

Maxwell: RGB primaries and the first colour photograph

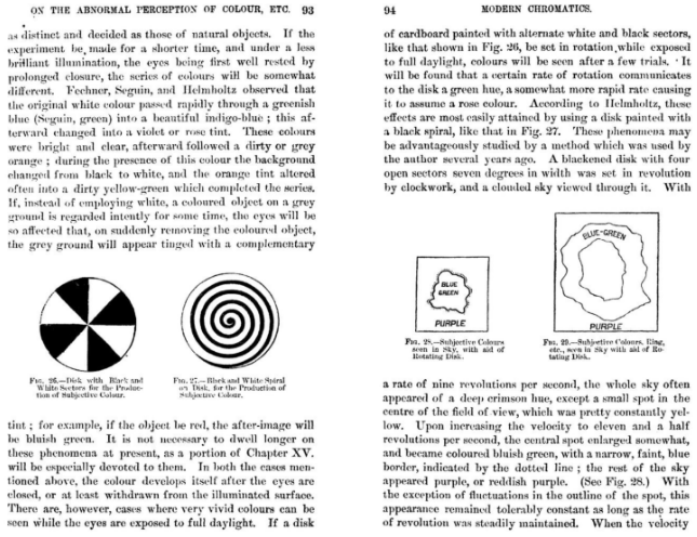


Figure 1.13. Maxwell's three-colour photograph – possibly the first colour photograph. Image attribution: The first color photograph made by the three-color method suggested by James Clerk Maxwell in 1855, taken in 1861 by Thomas Sutton. The subject is a colored ribbon, usually described as a tartan ribbon, on Wikimedia Commons

Physicist **James Clerk Maxwell** was the first to suggest that red, green and blue make better primary colours than red, yellow and blue (based on Newton's theory of the visible spectrum and that red, green and blue light can be used to make all other colours). He also explored colour blindness in his research.

His paper **"**On the theory of compound colours, and the relations of the colors of the spectrum"[1] in 1860, is recognised as an important contribution to colour theory. He may have also been the first person to take a colour photograph of an object in 1861 (Figure 1.13) by projecting three negatives with red, green and blue coloured lights – as shown in Figure 13.

Rood: perceptual colour blending and the Impressionists



ON THE ABNORMAL PERCEPTION OF COLOUR, ETC. 93

as distinct and decided as those of natural objects. If the experiment be made for a shorter time, and under a less brilliant illumination, the eyes being first well rested by prolonged closure, the series of colours will be somewhat different. Fechner, Seguin, and Helmholtz observed that the original white colour passed rapidly through a greenish blue (Seguin, green) into a beautiful indigo-blue; this afterward changed into a violet or rose tint. These colours were bright and clear, afterward followed a dirty or grey orange; during the presence of this colour the background changed from black to white, and the orange tint altered often into a dirty yellow-green which completed the series. If, instead of employing white, a coloured object on a grey ground is regarded intently for some time, the eyes will be so affected that, on suddenly removing the coloured object, the grey ground will appear tinged with a complementary

FIG. 26.—Disk with Black and White Sectors for the Production of Subjective Colour.

FIG. 27.—Black and White Spiral on Disk, for the Production of Subjective Colour.

tint; for example, if the object be red, the after-image will be bluish green. It is not necessary to dwell longer on these phenomena at present, as a portion of Chapter XV. will be especially devoted to them. In both the cases mentioned above, the colour develops itself after the eyes are closed, or at least withdrawn from the illuminated surface. There are, however, cases where very vivid colours can be seen while the eyes are exposed to full daylight. If a disk

94 MODERN CHROMATICS.

of cardboard painted with alternate white and black sectors, like that shown in Fig. 26, be set in rotation while exposed to full daylight, colours will be seen after a few trials. It will be found that a certain rate of rotation communicates to the disk a green hue, a somewhat more rapid rate causing it to assume a rose colour. According to Helmholtz, these effects are most easily attained by using a disk painted with a black spiral, like that in Fig. 27. These phenomena may be advantageously studied by a method which was used by the author several years ago. A blackened disk with four open sectors seven degrees in width was set in revolution by clockwork, and a clouded sky viewed through it. With

FIG. 28.—Subjective Colours seen in Sky, with aid of Rotating Disk.

FIG. 29.—Subjective Colours, Ring, etc., seen in Sky with aid of Rotating Disk.

a rate of nine revolutions per second, the whole sky often appeared of a deep crimson hue, except a small spot in the centre of the field of view, which was pretty constantly yellow. Upon increasing the velocity to eleven and a half revolutions per second, the central spot enlarged somewhat, and became coloured bluish green, with a narrow, faint, blue border, indicated by the dotted line; the rest of the sky appeared purple, or reddish purple. (See Fig. 28.) With the exception of fluctuations in the outline of the spot, this appearance remained tolerably constant as long as the rate of revolution was steadily maintained. When the velocity

Figure 1.14. Pages from Rood's publication Modern Chromatics With Applications to Art and Industry. Image attribution: Image capture from Modern Chromatics With Applications to Art And Industry by Ogden N. Rood on Archive.org

Ogden Nicholas Rood, a physicist, divided colour into three constants: purity, luminosity and hue – similar to Maxwell's properties of colour. He also developed a theory of contrasting and complementary colours – suggesting that small lines or dots of different colours, when viewed from a distance, blend into a new colour. This work had a great influence on the Impressionist pointillist painters like **Georges-Pierre Seurat**. Rood published ***Modern Chromatics, with Applications to Art and Industry***[2], in 1879 (Figure 1.14).

The Munsell colour system

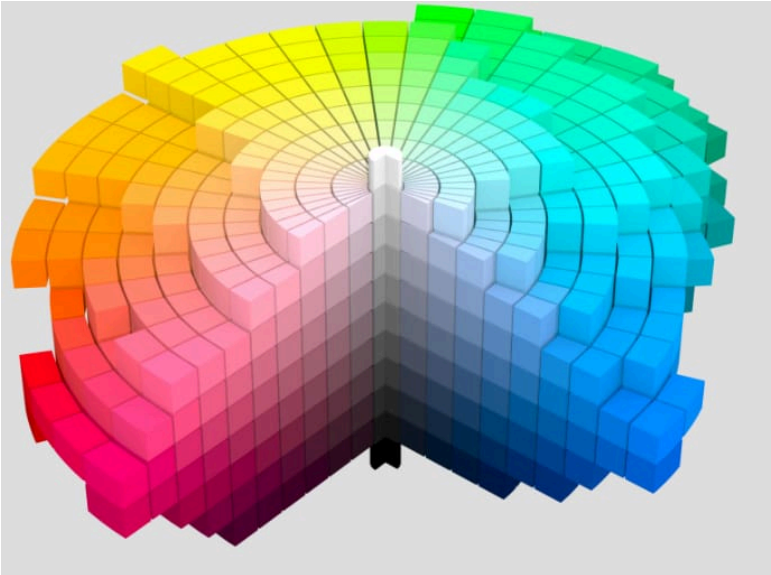


Figure 1.15. Munsell's Colour solid cylindrical coordinates – grey. Image attribution: Munsell 1943 color solid cylindrical coordinates.png: SharkD derivative work: Datumizer, Munsell 1943 color solid cylindrical coordinates gray, CC BY-SA 3.0, on Wikimedia Commons

Albert Henry Munsell (an artist and art teacher) developed the **Munsell color system** in 1915. It is still one of the most-used colour systems – especially in design. His colour system is said to span art and science due to the numbering system he developed to classify colour, which is rigorous enough for scientific use, but also simple enough for artists or those with no scientific background to understand. His system is associated with the word "chroma", which is the saturation or intensity of hue.

Learn more about the *Munsell Color System* and *Munsell Color* company in this publication on Project Gutenberg: *A Color Notation* by A.H. Munsell, 1905

Ostwald: colour aesthetics, the Bauhaus and De Stijl



Figure 1.16. Oswald's colour system – photograph of physical model. Image attribution: Photograph of Ostwald's colour system, licenced under GNU Free Documentation License, on Wikimedia Commons

Wilhelm Ostwald (a Nobel prize winner in Chemistry), explored colour harmonies and why some colours look pleasant when placed together and others look unpleasant. He attempted to find a scientific theory for colour harmony – ***The Colour Primer*** 1916/1917 was the most notable publication he produced. His perceptual colour system (Figure 1.16) was different to Munsell's in that he identified *Colour-content*, *White-content* and *Black-content*. Ostwald was associated with the **Bauhaus** and while his theories did not gain the same popularity or acceptance as Munsell's, his work influenced many artists such as **Piet Mondrian**, and other artists of the **de Stijl** group[3].

Contemporary Colour Systems (c. 1930 – 2020+)

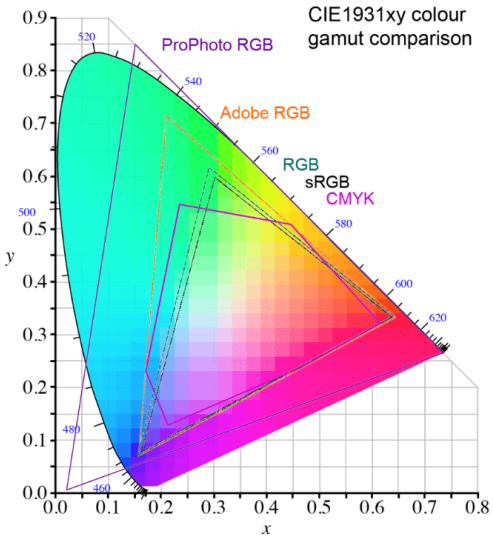


Figure 1.17. CIE1931xy gamut comparison diagram. Image attribution: BenRG and cmglee, CIE1931xy gamut comparison, text label modifications by Lisa Cianci, 2022, CC BY-SA 3.0, on Wikimedia Commons

CIE 1931 colour spaces

CIE stands for "*Commission Internationale de l'Eclairage*" in French, which in English is the "*International Commission on Illumination*". This organisation, founded in 1931, is the international authority on light, illumination, colour, and colour spaces.

The CIE 1931 colour spaces made the first clearly defined links between wavelengths in the visible spectrum and colour vision in humans. The development of this colour space became the standard tool for colour management in printing, digital displays and cameras. The two colour spaces – **CIE 1931 RGB** and **CIE 1931 XYZ** – were developed from a series of experiments in the late 1920s by William David Wright and John Guild.

These colour spaces and others, such as the CIELUV 1976 colour space, are still widely used. Figure 17 shows the CIE 1931 xy colour space and other colour space gamuts within CIE. As you can see in Figure 1.17, CMYK has a smaller gamut than the various RGB colour spaces – which can affect colour conversion for printing. See 3.3 Colour systems: printing in this resource for more information on colour spaces and conversion to CMYK.

CIELAB colour space

CIELAB colour space – also referred to as **CIE L*a*b** – is a colour space defined by the **International Commission on Illumination** (CIE) in 1976. Its three colour values are **L** – perceptual lightness, and **a/b** for what was thought to be at the time, the four unique colours of human vision: red, green, blue and yellow.

- a = red/green scale
- b = blue/yellow scale

CIELAB is intended to represent a perceptual colour space – what the human eye can see – i.e. a *human colour gamut*. LAB colour is a device-independent colour space that doesn't relate to any particular technology like a computer, television or printer. This differs from colour systems like RGB or CMYK, which are dependent on specific devices or applications. Because CIELAB has a wider gamut than other colour spaces, it is a useful system for detecting small variations in colour, although depending on the limitations of your device to display or print colour, not all LAB colours may be accurately visually represented.

We often see CIELAB colour space represented as a 2-dimensional graph as in Figure 1.17, however, the best representation is in 3-dimensions, as shown in Figure 1.18.

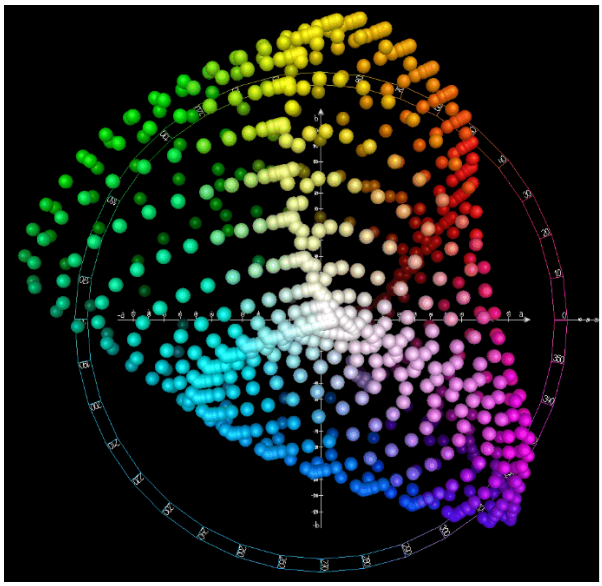


Figure 1.18. CIELAB colour space – 3-dimensional model. Image attribution: Holger kkk Everding, CIELAB color space top view, CC BY-SA 4.0, on Wikimedia Commons

Test yourself: history of colour theories

A multiple choice quiz to test your understanding of the history of colour theories

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again.

References and resources: history of colour theories

Here are some useful links to library subject guide resources and other online resources to further your research.

- RMIT Library: Interior design subject guide
- For more detailed history of colour theory and systems, visit this informative guide to *Colour order systems in art and science* by Prof. Narciso Silvestrini and Prof. Ernst Peter Fischer.
- Also see the *Routledge handbook of Philosophy of Colour* for a more academic approach to colour theory.

This page titled 1.2: History of Colour Theory is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

1.3: Cultural Interpretations



Figure 1.19. Coloured powders used in the Indian Holi festival.
Image by Rahulrk07 via Wikimedia Commons, licensed under CC BY-SA 4.0.

Scientific theories of colour cross geographic borders and are described as 'universal', but meanings and symbolism attached to colour can be very specific to different cultural groups around the world, such as the Indian Holi festival of colour[1] (Figure 1.19), and at different times throughout human history.

Despite these culturally specific meanings and symbolism, studies investigating emotional links to colour have found some links to be shared around the world.

If you are an artist or designer of products, packaging, fashion, interior/exterior environments, digital media, games, etc., understanding how colour can affect your audience is useful.

Topics covered

This chapter will include a brief introduction to cultural interpretations of colour and where colour has been linked to human emotion, psychology and physiology.

- Colour psychology and physiology
- Colour symbolism in different cultures
- Colour and language

Colour psychology and physiology

It is generally accepted that colour can affect our emotions and mood. Different colours have been identified as triggering certain emotional or physical reactions. Colours can have both positive and negative associations and these can vary for each person.

Are emotional links to colour universal?

Recent studies investigating emotional links to colour have found that although our perceptions and uses of colour can be specific to different cultural groups, some links are shared universally">[1].

This page provides some background into theories of colour and its effect on human psychology and physiology. Topics covered:

- Colour associations
- Colour in advertising and logo design
- Colour, psychology and art therapy
- Colour and medical therapy

Colour associations

You might have your own colour associations like these listed in Table 1.1 – can you think of any more emotions or states to add to these colours that have meaning for you?

Colour associations

Colour	Meaning
Red	heat, activity, anger, danger, passion, energy
Purple	wisdom, power, imagination, spirituality, royalty, sophistication, mystery
Pink	love, affection, romance, softness, kindness, sweetness
White	purity, cleanliness, innocence, perfection, spirituality
Yellow	happiness, warmth, positivity, cheerfulness, compassion
Orange	warning, warmth, fun, youth, optimism, excitement
Gold	wealth, fortune, luxury, triumph, royalty, abundance, glamour
Black	elegance, drama, power, death, evil
Blue	cold/coolness, stability, loyalty, seriousness, envy, trust, peace
Green	calm, serenity, relaxation, renewal, envy, wealth, abundance
Brown	practicality, honesty, simplicity, dependability, trustworthiness
Grey	stability, authority, maturity, modernity, the mundane, sadness, boredo

View this infographic on the *Information is Beautiful* website for more colour associations.

Colour in advertising and logo design

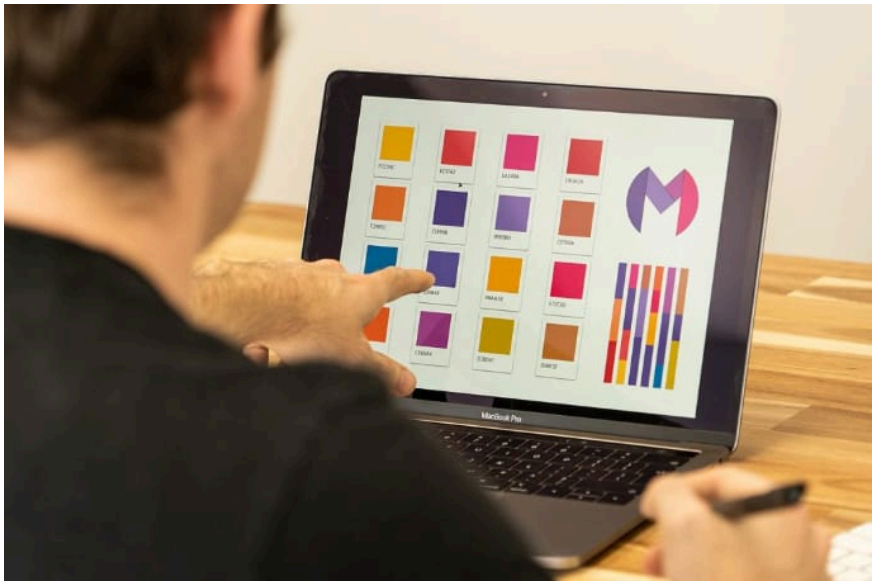


Figure 1.20. Logo Design. Image attribution: Claireneon, Colour palette selection for logo design, CC BY-SA 4.0

Many studies and articles you will find online about how colours affect our emotions and mood are ***anecdotal*** – that means they are not based on reliable research or factual evidence. However, there is significant evidence in marketing research that colour plays an important role in what we buy and how we are attracted to different products.

For example, it's no coincidence that popular fast-food companies like McDonald's or Hungry Jack's have red and yellow logos and packaging designs – these colours are said to stimulate appetite.

Other well-known colours in advertising include Coca-Cola red, Facebook blue, Cadbury purple, Fanta orange, Android green, and Barbie pink. These colours have become iconic in contemporary culture, and it is easy to associate the colour with the product. See Figure 1.20 for some examples of well-known logo designs arranged by colour. Do you notice any patterns? Do certain types of businesses prefer certain colours?

Learn more about the psychology of colour in marketing.

Logo design

Colour in logo design can be used to communicate meaning about a particular brand or product and what an organisation/individual represents or how they want their customers to perceive them. Some logos may have different colour versions depending on usage, many iconic logos use consistent colour and have strict rules about usage. For example, have you ever seen a green Coca-Cola can with pink text? Probably not!

If you are designing a logo for yourself or a client, you may need to create a ***style guide*** or ***brand guide*** which is a way of controlling and communicating how your logo and other graphics must be used. Colour information is very important in a style guide. You should include information about the colours that can be used in the logo and background, how much space should be around the logo, the relative size and scale of the logo, and where it can be positioned on printed or screen media.

For example, Google's Material Design colour system (Figures 1.21 and 1.22) give very clear instructions for the correct ways to develop colour schemes and palettes that work with branding to create well-designed and accessible interfaces for screen devices.

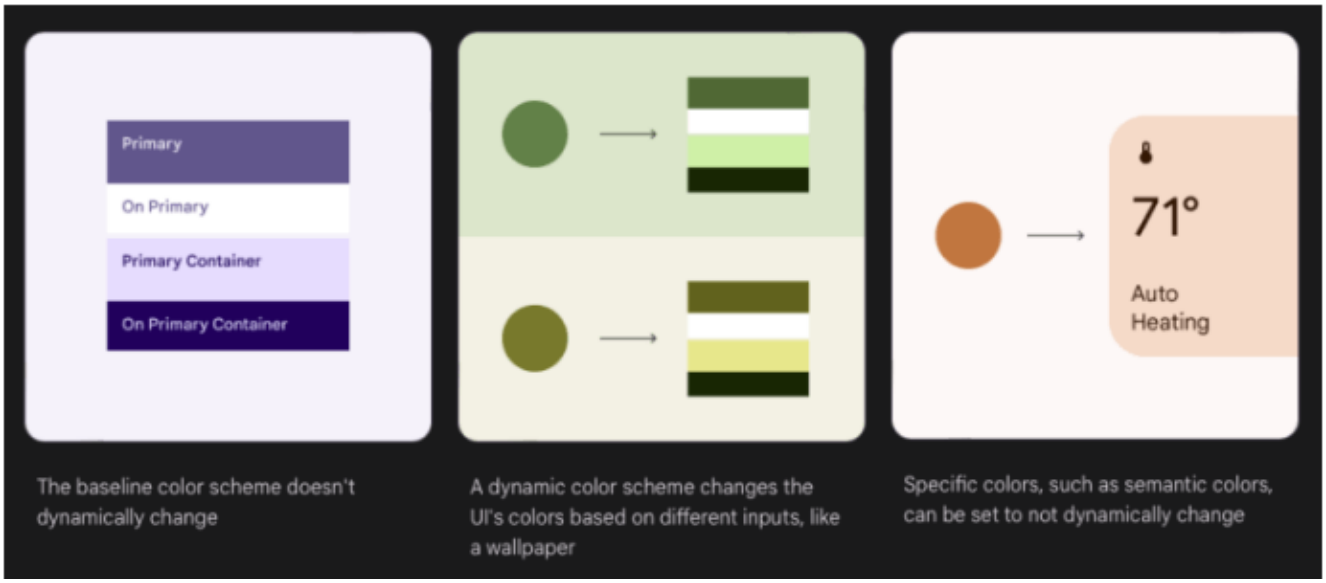


Figure 1.21 Google Material Design – examples of colour usage. Image attribution Google Material Design, Apache licence 2.0. Select images to enlarge

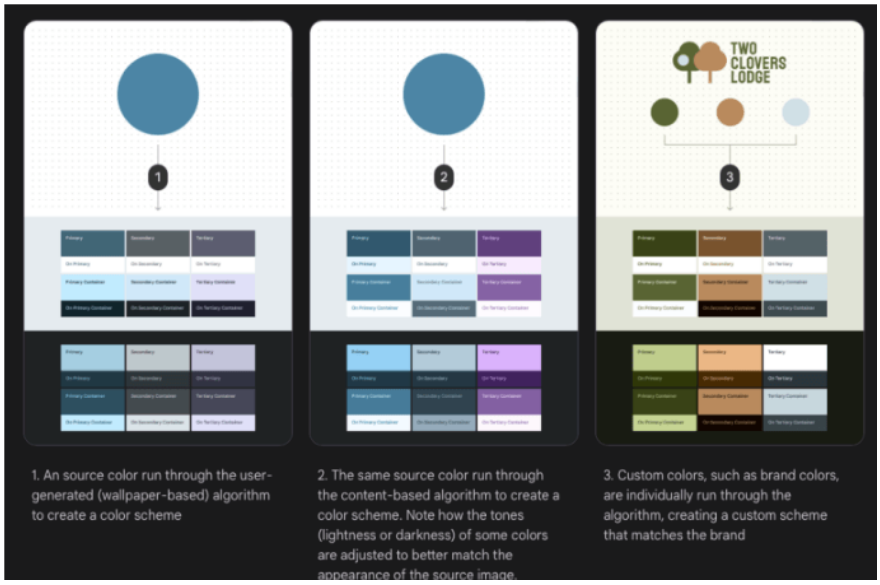


Figure 1.22. Google Material Design – examples of colour usage. Image attribution Google Material Design , Apache licence 2.0 . Select images to enlarge.

Learn more about colour and logos from these online resources:

- Color psychology: the logo color tricks used by top companies
- Exciting red and competent blue – the importance of color in marketing
- The colour emotion guide
- Psychology of colour in logo design

Colour, psychology and art therapy

Colour, personality and pseudoscience

Colour has also historically been linked to human psychological traits and personality types, although these theories are now outdated and have no basis in current psychology. One of the better-known examples of this is from the work of **Carl Jung** who was a Swiss psychiatrist and psychoanalyst in the early 20th century. He is quoted as saying "colours are the mother tongue of the subconscious" and "colours express the main psychic functions of man".

Although greatly influenced by Sigmund Freud (the founder of Psychoanalysis), Jung did not agree with all of Freud's theories. He founded **Analytical Psychology** in 1913 after breaking with Freud. One of Jung's theories was the classification of psychological personality types linked to four colours: red, blue, green and yellow. These colours were placed in a grid with **X** and **Y** axes.

- **X** represents the line between *Introversion* and *Extroversion*,
- **Y** represents the line between *Thinking* and *Feeling*.

This theoretical way of determining a person's psychological type is now dismissed by today's psychologists as it's not based on any proven evidence of how our brains work. Personality is far more complex than Jung's limited classification system can describe – which Jung also acknowledged himself.

However, Jung's book ***Psychological Types (1921)*** was further developed in the 1940s by **Katherine Cook Briggs** and her daughter **Isabel Briggs Myer** (neither had formal training in psychology) into the **Myers-Briggs 16 personality types,** which also has colour associations and is a popular personality test that is still used today. It is important to note that there is no evidence that the Myers-Briggs personality test is an accurate or useful tool for determining a person's personality, or success in career or life choices.

Art Therapy

Where Jung's theories about colour and creativity have found greater practical use is in the emergence of **art therapy** as a field of practice that helps people deal with trauma and illness through creative work. Colour can be used effectively in art therapy as part of a process of expressing troublesome thoughts and feelings in a visual way.

Learn more from these online resources:

- What color psychology really means
- What is Art Therapy?
- Hogan, Susan. *Healing arts : the history of art therapy,* London: Jessica Kingsley, 2001.
- Hogan, Susan ed. *Feminist Approaches to Art Therapy, Routledge 1997*
- More publications by Susan Hogan on Art Therapy
- Why the Myers-Briggs test is totally meaningless

Colour and medical therapy

Chromotherapy – therapy or quackery?

> It is important to note that chromotherapy (colour therapy) has been scientifically rejected due to a lack of evidence. It is regarded by the medical field as fraudulent and not having any measurable value. It is mentioned here from a historic perspective only.

Light and colour have been used in many attempts at healing therapy since ancient times. There is evidence from Ancient Egypt, Greece and India of sunlight, coloured light and coloured materials claimed to be used for healing. The Persian scholar and philosopher Ib Sina (Avicenna)(c. 970–1037 CE) also promoted the idea of using colour for healing.

These practices formed the basis for later theories of chromotherapy by practitioners such as American physician Edwin D.

Babbitt who developed a range of light therapies including a *thermolume* – a cabinet that was able to project coloured light onto various parts of the body. He also 'irradiated' water with sunlight filtered through coloured lenses. Dinshah Ghadiali was another inventor who claimed that colour therapy was the key to health. He invented a box with a 1000-watt light and coloured filters called a *Spectro-Chrome* which he claimed was able to produce twelve different colours to be used for different therapeutic purposes. He was labelled a fraud by the medical establishment of the day.



Figure 1.23. Image attribution Skin58, Blue Light acne phototherapy iClear, on Wikimedia Commons, CC BY-SA 4.0

Phototherapy today

Despite the debunking of these claimed 'alternative' therapies, there has been a recent rise in light therapy with the use of coloured LED lights for treatment of skin conditions such as acne or aging skin (Figure 1.23). The theory is that certain wavelengths of colour can promote healing and skin regeneration. Research in this area is recent and largely inconclusive. There are also concerns that incorrect use of these devices which have strong LED lights, may cause eye damage.

There is a type of evidence-based light therapy (phototherapy) for babies that may have **Newborn Jaundice** (*Hyperbilirubinemia*). These newborns are placed under a blue light (420–470 nm wavelengths) to treat the condition (Figure 1.24). The blue light helps to remove bilirubin from the blood. This kind of phototherapy has been used for many decades.



Figure 1.24. Newborn Jaundice treatment with a “Bili-lite”. Image attribution: User Jeremykemp on Wikipedia, Bili light with newborn, marked as public domain, on Wikimedia Commons

Learn more from these online publications:

- Edwin D Babbitt, *The Principals of Light and Colour* 1878, Babbitt and Co.
- Quackwatch.org “Colourful Nonsense: Dinshah Gladioli and his Spectro-Chrome Device”
- *Harvard Health Publishing*, Harvard Medical School, 2019, “LED lights: are they a cure for your skin woes?”

1. Mohr, C., & Jonauskaite, D. (2022, February 8). Why links between colors and emotions may be universal … And the enduring debate over the meaning of red [Journal]. Psychology Today. < psychologytoday.com [www.psychologytoday.com] >

Colour symbolism in different cultures

Symbolic colour meanings have been associated in art and *anthropology* with different cultural, spiritual or religious groups throughout our recorded history. In many ancient cultures, colour symbolism was related to the natural elements – earth, water, fire, air, etc.

For example, traditional Chinese colour symbolism associates the elements and primary colours shown in Table 1.2.

Colour symbolism in different cultures

Colour sample	Definition
	Red (Zhusha Hong) = fire
	Yellow (Ming Huang) = earth
	White (Chun Bai) = metal
	Black (Xuan Se) = water
	Blue (Qing Se) = wood

In other cultures, certain colours that were made from rare pigments were highly prized and thus came to have symbolic meaning. Here are two examples:

Tyrian purpl

In ancient Roman culture, purple (Tyrian purple or Phoenecian red/purple) was a special colour reserved for the clothing of emperors and senators. This was because the vibrant purple dye was made from a particular species of sea snail (Murex or Muricidae) and it was expensive and very difficult to create.



Figure 1.25. Minerva as the goddess Roma. Image attribution: Dennis Jarvis from Halifax, Canada, Italy-0540 – Dress is not painted.... (5168496402), on Wikimedia Commons, CC BY-SA 2.0

Deep red porphyry from Egypt (Imperial Porphyry) is an igneous rock that was also valued by the Romans because it was very close to Tyrian purple in colour. Figure 1.25, shows a statue of Minerva (as Goddess Roma) from Capitol Square in Rome (c 300 CE). Her dress is made from red porphyry to represent the Tyrian purple dye of imperial Roman clothing. (Read more about dyes in 3.4 Colour systems: pigments and dyes)

Ultramarine (lapis lazuli)

Blue was used symbolically in Christian religious imagery during the Renaissance – partly because the blue pigment was very rare. The cloak of the Virgin Mary was often coloured with ultramarine blue (Figure 1.26). The colour blue also represented the heavens and the celestial, so it had more than one symbolic meaning in this context.



Figure 1.26. Madonna del Cardellino by Raffaello Sanzio shows the Madonna with a blue cloak painted with ultramarine pigment. Image attribution: Raphael artist QS:P170,Q5597, Raffaello Sanzio – Madonna del Cardellino – Google Art Project, marked as public domain, on Wikimedia Commons

Ultramarine pigment was made from a deep blue precious stone –lapis lazuli, said to be worth more than gold at the time. It has been claimed that Michelangelo couldn't afford enough ultramarine blue for the Virgin's cloak, and so never completed his painting *The Entombment*.

Johannes Vermeer put his family in debt to acquire the pigment for his paintings such as *The Milk Maid* (Figure 1.27).



Figure 1.27. The Milk Maid by Johannes Vermeer. Image attribution: Johannes Vermeer artist QS:P170,Q41264, Johannes Vermeer – Het melkmeisje – Google Art Project, marked as public domain, on Wikimedia Commons

Flags of the world

In contemporary international culture, we see symbolic colour all around us in fashion, products and media. Flags of the world are also an obvious example of symbolic colour (Figure 1.28). Colours used in national flags have symbolic meanings related to a country's culture and history.



Figure 1.28. Flag-map of the world. Image attribution: Transparent 6lue, Flag-map of the world, marked as public domain, on Wikimedia Commons. Select image to enlarge.

Australian First Nation flags

Our Australian Aboriginal flag (Figure 1.29) has three colours in a design that represents:

- the earth (red),
- the people (black), and
- the sun (yellow)



Figure 1.29. Australian Aboriginal Flag Image attribution: Aboriginal artist Harold Thomas (Vector graphics image by Trisreed), Australian Aboriginal Flag, marked as public domain, on Wikimedia Common

The **Torres Strait flag** has the following colour symbolism:

- **Green** – the mainlands (Papua New Guinea and Australia)
- **Black** – the people of the Torres Strait Islands
- **Blue** – the waters surrounding the islands

- **White** Dhari – the Dhari is a traditional headdress made and worn by men. The white colour symbolises peace.
- **White** Five-Pointed Star – the five major island groups and their ties to navigation by sea

View the Torres Strait Flag here (copyright permission to reproduce the flag must be obtained from the TSIRC).

Pride flags

Pride flags of the LGBTIQA+ community use colours symbolically to represent various groups. There is one overarching rainbow flag for the whole community (Figure 1.30) (and a Progress Pride flag – Figure 1.31), but each subgroup also has their own flag with symbolic use of colour.



Figure 1.30. Pride flag. Image attribution: Philadelphia City Council and Tierney, Philadelphia Pride Flag, marked as public domain, more details on Wikimedia Commons

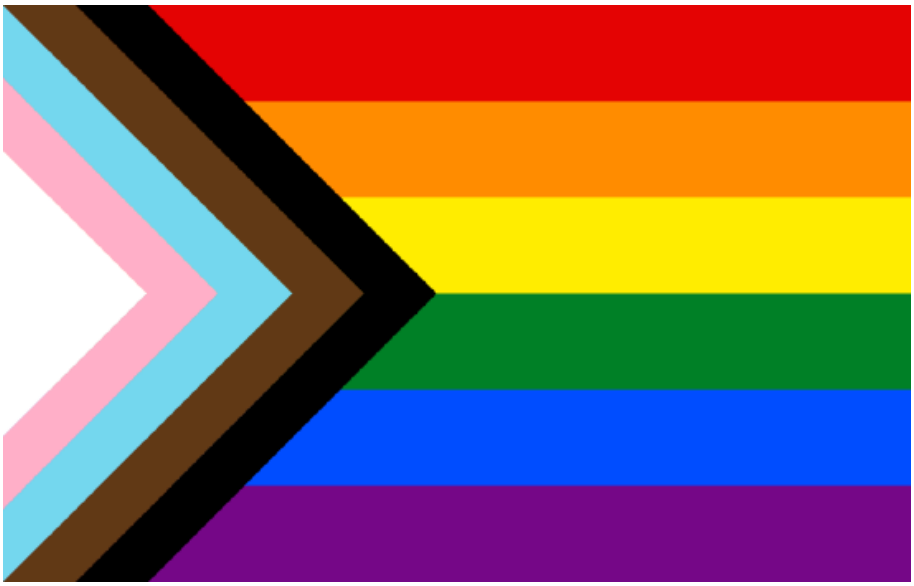


Figure 1.31. Progress pride flag. Image attribution: Paul2520, LGBTQ+ rainbow flag Quasar "Progress" variant, marked as public domain, on Wikimedia Commons

Learn more about Pride flags and colour symbolism from these online resources:

- Pride flag on Wikipedia

- Understanding color psychology though culture, symbolism, and emotion
- Color symbolism on Wikipedia
- Cross-cultural color and emotion

Colour symbolism in Australian Indigenous culture

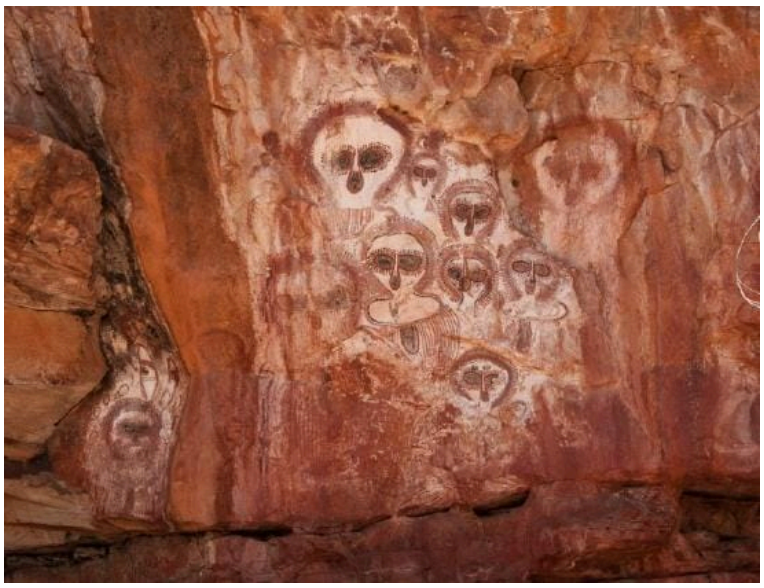


Figure 1.32. Image attribution: Aboriginal rock art in ochre colours, Graeme Churchard from Bristol (51.4414, -2.5242), UK, Aboriginal rock art on the Barnett River, Mount Elizabeth Station, on Wikimedia Commons, CC BY 2.0

Traditional Australian Aboriginal artists used the materials at hand – ochres from the ground (Figure 1.32), plants and other substances used to make dyes. Different language groups across the continent developed their own symbolic uses for colour to represent the earth, sky, animals, people, waters etc. There isn't one set of meanings that covers the whole country, and some meanings and colour making methods may be protected knowledge of certain groups.



Figure 1.33. Image attribution: Esther 1721 pixabay.com [pixabay.com], Aboriginal-art-5033444 960 720, CC0 1.0

Since European colonisation, many Indigenous artists have embraced a wider range of colours in their work – partly due to the availability of ready-made paints, or the use of digital media. In particular, since the 1970s and the beginnings of painting movements by groups in central and western Australia, materials like acrylic paints have become popular because they are

available in a variety of colours, are easy to use and quick to dry. Brighter colours have been incorporated into many Indigenous artists' practices (Figure 1.33). These colours are symbolically used to represent the intensely coloured and vibrant features of diverse landscapes across the country. Learn more about pigments and dyes in Chapter 3 – Colour systems: paint pigments and dyes

Learn more about colour in indigenous culture from these resources:

- Aboriginal Art Australia: The story of Aboriginal art
- Japingka Aboriginal Art: How Aboriginal colours and group art styles develop
- Kate Owen Gallery: Aboriginal-colours-in-art
- RMIT News: Louisa Bloomer tree artwork
- RMIT News: Mark Cleaver, Indigenous artwork Luwaytini

Colour and language

Naming colours



Figure 1.34. Image attribution: Homer, Odyssey manuscript. Date: 3rd quarter of the 15th century. Odyssey-crop, marked as public domain, on Wikimedia Commons

Research in the field of ***cognitive science*** over the last 150 years has included investigations into how language might influence thought and conversely, how thought might influence language. Many of the studies undertaken with different language groups around the world have analysed descriptions of colour as a way of testing these theories.

Some of this research has noted that many language groups have more descriptions for warmer colours (red, orange, purple) and less for cooler colours (blue, green, yellow).

> Some language groups like those from Papua New Guinea don't have separate words for blue and green, while others like Russian speakers have two words for blue (*siniy* [синий] – dark blue and *goluboy* [голубой] – light blue).

Studies also show that learning a new language alters your perception of colour.

It was speculated that in the past people couldn't see the colour blue because there weren't examples of words representing "blue" in ancient texts (Figure 1.34). An example of this proposition was made by politician and historian William Gladstone in his 1858 publication *Studies on Homer and the Homeric Age*[1] with regard to Homer's texts *The Iliad* and*The Odyssey*.

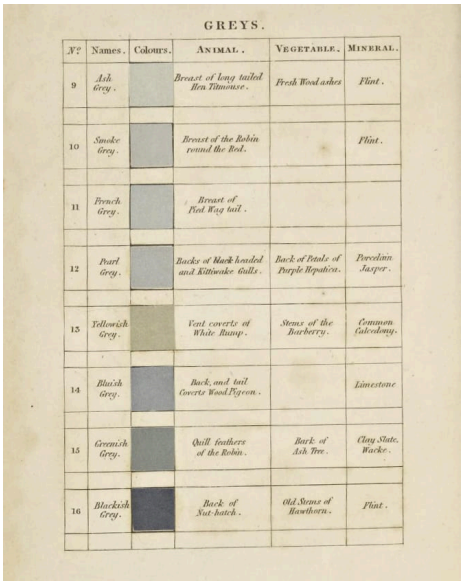
Gladstone noticed that Homer never described the sky or sea with a word that could mean “blue”, so he speculated that people from ancient times couldn’t see the same colours.

However, scientists have concluded that people from ancient times did see blue – they saw the same spectrum of colours that we can see now, but perhaps they didn’t differentiate between blue and green, or used different relational and descriptive words to describe colours like Homer’s “wine-looking sea”. It was an issue of linguistics, not optics[2].

Colour Atlases

Around the time of **Charles Darwin**, descriptive language standards – also called ***taxonomies*** **–** for colour used by naturalists were published as ‘colour-atlases’[3] which described colours by hue and value based on natural objects such as plants, animals, and landscape features, not ‘spectral colours’ (colours such as red, blue, yellow, violet, green or orange).

Darwin was said to have a copy of such an atlas – *Werner’s Nomenclature of Colours Adapted to Zoology, Botany, Chemistry, Minerology, Anatomy and the Arts* by Patrick Syme, 1821)(Figure 1.35), during his voyage on the ***Beagle***[4] (1831-1836). This colour atlas book is still in print today.


GREYS.

N?	Names.	Colours.	ANIMAL.	VEGETABLE.	MINERAL.
9	Ash Grey.		Breast of long tailed Ben Titmouse.	Fresh Wood ashes	Flint.
10	Smoke Grey.		Breast of the Robin round the Red.		Flint.
11	French Grey.		Breast of Red Wag tail.		
12	Pearl Grey.		Backs of Black headed and Kittiwake Gulls.	Back of Petals of Purple Hepatica.	Porcelain Jasper.
13	Yellowish Grey.		Vent coverts of White Rump.	Stems of the Barberry.	Common Calcedony.
14	Bluish Grey.		Back, and tail Coverts Wood Pigeon.		Limestone
15	Greenish Grey.		Quill feathers of the Robin.	Bark of Ash Tree.	Clay Slate, Wacke.
16	Blackish Grey.		Back of Nut-hatch.	Old Stems of Hawthorn.	Flint.

Figure 1.35. A page from Werner’s Nomenclature of Colours: Greys. Image attribution: Werner, Abraham Gottlob, 1749-1817; Syme, Patrick, 1774-1845, editor; Blackwood, William, 1776-1834, bookseller; Cadell, Thomas, 1773-1836, bookseller; James Ballantyne and Co., printer, Werner’s nomenclature of colours: greys, marked as public domain, on Wikimedia Commons

This method of colour classification using language standards came about because of the problem of making *spectral* colours with pigments and dyes at that time. See Chapter 3.4 Colour systems: paints and pigments for more information on pigments and dyes.

The way you think about colour may depend on your language even if we see the same spectrum of colours. Naming conventions in our language for colours may also influence how we think about colour.

If you’re an artist who uses common art materials, you might associate colour with the names of paint pigments like ‘Prussian Blue’, ‘Burnt Sienna’, ‘Alizarin Crimson’, or ‘Cadmium Yellow’. If you’re a fashion designer, you might think about colour according to popular colours used in textiles such as denim or navy blue, khaki, charcoal grey, beige or fuschia.

Today, we have seemingly endless and non-standard ways of naming colours – some of them are strange or even humorous like

these AI-generated colour names. Paint colour charts are good examples of this and they are easy to find online or in hardware stores. Descriptive language is used to classify, differentiate and market thousands of colours that have very slight variations between them.

> What colour is “Elephant’s breath”? Or “Velvet dream”?
> What’s the difference between “Natural white” and ‘Antique white”?

Learn more from these resources:

- SBS Culture: The way you see colour depends on what language you speak
- MIT NEWS: Analyzing the language of color
- Wikipedia: Linguistic_relativity

Colour idioms in English

What is an **idiom**? How do we use colour expressively in the English language?

> An **idiom** is a phrase that uses *figurative* language to express an idea or concept. The meaning of an idiom is more than the words mean: it’s an *extended* meaning.

> **Seeing Red**
>
> The idiom **“seeing red”** is a good example: we don’t actually mean that we see the colour red, but we understand it to mean **“being angry”** because that’s how the phrase has developed meaning over time through common use.

The phrase “seeing red” now has its own meaning in the English language. It might not have the same meaning in other languages (although some colour idioms can be similar across languages).

English has lots of colour-related idioms. Some relate to emotions and moods, but others are more descriptive.

> **Green fingers**
>
> Saying someone has **“green fingers”** or **“a green thumb”**, means they are **good at gardening and growing plants**.

Read this article for some common examples of colour idioms in English.

---

1. Gladstone, W. 1858, Studies on Homer and the Homeric Age, gutenberg.org [www.gutenberg.org]
2. Bellos, Alex, 2010, "Through the Language Glass: How Words Colour Your World by Guy Deutscher", The Guardian, 12/06/2010, theguardian.com [www.theguardian.com]
3. (Gage, J. *Colour and Meaning*, Thames and Hudson, 2002, p.26
4. Darwin, Voyages of the Adventure and Beagle, 1839, darwin-online.org [darwin-online.org.uk]

Interactive Content

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this Interactive Content online

Here are some useful links to library subject guide resources and other online resources to further your research.

- RMIT Library – Interior design subject guide

Books held at RMIT Library

- John Gage, *Color and Meaning: Art, Science, and Symbolism* University of California Press – 1st edition, 2000
- John Gage, *Color and Culture: Practice and Meaning from Antiquity to Abstraction* University of California Press – 1st edition, 1999
- *Color – Messages & Meanings: A PANTONE Color Resource,* Paperback – November 29, 2006, by Leatrice Eiseman (Author)
- *Pantone Guide to Communicating With Color,* Paperback – October 16, 2000 by Leatrice Eiseman (Author)

This page titled 1.3: Cultural Interpretations is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

1.4: Colour Aesthetics



Colour aesthetics can be simply described as how colour affects people. It's a mixture of the scientific, cultural and psychological aspe
colour theory.

Figure 1.36. Bauhaus fabric samples by Otti Berger. Image attribution: Otti Berger artist QS:P170,Q2037742 Creator:Bauhaus, Book M
DP368775, on Wikimedia Commons,CC0 1.0.

Colour aesthetics explores how certain colours, or combinations of colours, are perceived by humans and how we react to them. What colours do we find attractive or ugly? Why do some colours look pleasing together and others clash? How does colour enhance our surroundings and living spaces?

It's useful to research and learn about colour aesthetics and selected artists and designers that played a significant role in this field over the last 100 years. This can help you to develop your own creative practice, and your personal approach to working with colour.

This section covers the following topics:

- Colour aesthetics in art and design:
  how colour aesthetics influenced the creative practices of some of the key figures in 20th century art and design and its relevance today
- Colour grading in photography and film: an introduction to colour grading and correction in photography and film – why it is used and cultural implications of standard colour-tests
- Contemporary colour trends and palettes used in design

Colour aesthetics in art and design

Early Modern Art



Figure 1.37. Wheat field with crows, Vincent van Gogh, 1890. Image attribution: Vincent van Gogh artist QS:P170,Q5582 Google Art Projectでのアーティストの詳細, Vincent van Gogh – Wheatfield with crows – Google Art Project, marked as public domain, on Wikimedia Commons

Goethe, **Chevreul** and **Ostwald** (See 1.1 History of colour theories for more details) did not have an ongoing influence on colour theory from a scientific perspective. However, they did have a lasting influence through the works of artists who were concerned with colour aesthetics, psychological colour and subjective colour from the time of the **Impressionist** movement, through to the **Abstract Expressionist** and **Colour Field** painters of the 20th century.

Research and reflection activity:

It's easy to find resources about early modern artists and their work with colour in art books and online publications.

Here is a small selection of artists from the **Impressionist**, **Expressionist**, **Fauvist**, **Orphic Cubist**, and **Futurist** movements who made significant contributions to the development of modern theories of colour in visual art.

Research three of the artists listed here – select artists' names to open a Google search in a new browser tab, and learn more about them and their work with colour:

- **Claude Monet**
- **George Seurat**
- **Vincent van Gogh** (Figure 1.37)
- **Paul Cezanne**
- **Henri Matisse** PDF file" data-quail-id="64">[1]
- **Andre Derrain**
- **Sonia Delaunay**
- **Robert Delaunay**
- **Giacomo Balla**
- **Umberto Boccioni**

Do you have a favourite artist from this time?

How does colour play a role in their work?

> Does understanding other artists' creative practices help you to develop your own practice?

The Bauhaus influence

The German **Bauhaus** school (1919-1933) was an important site for experimentation and exploration of the aesthetics of colour and form, and how colour is subjectively perceived in different contexts. The work done by key designers and artists associated with the Bauhaus school is still influential.

Practitioners listed below all taught colour curricula at the Bauhaus school. They all had their own ideas and theories about colour aesthetics. Select artists' names to open a Google search in a new browser tab, and learn more about them and their work with colour:

- **Josef Albers**
- **Anni Albers**
- **Johannes Itten**
- **Wassily Kandinsky**
- **Paul Klee**

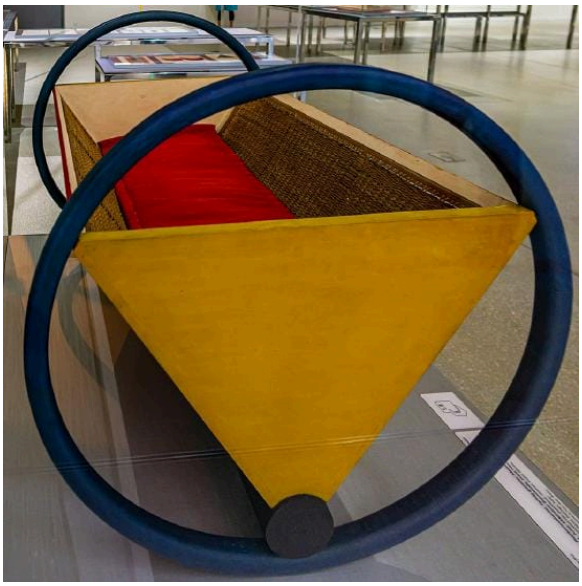


Figure 1.38.Bauhaus cradle by Peter Kelley. Image attribution: Peter Keler artist QS:P170,Q2076225 (Ausführung) Wassily Kandinsky creator QS:P170,Q61064, Bauhauswiege DSC9004, on Wikimedia Commons, CC0 1.0

The traditional primary colours: Red, Yellow and Blue, and the associated secondary and tertiary colours on the traditional colour wheel, formed the colour model used by Johannes Itten, Josef AlbersRMalexanderstreet.com [video.alexanderstreet.com] and others (Figure 1.38) as a basis for the Bauhaus colour curriculum, and for other schools influenced by the Bauhaus.

Albers and Itten both had a keen interest in colour relationships and how colours appear when placed side-by-side.

> Color is changing continually: with changing light, with changing shape and placement, and with quantity which denotes either amount (a real extension) or number (recurrence). And just as influential are changes in perception depending on changes of mood, and consequently of receptiveness.[3]

Publications by Albers nd Itten are still referred to in art schools today. You may find copies of these books in art and design school libraries:

Josef Albers, *Interaction of Colour*, *Homage to the Square*

Johannes Itten, *The Art of Colour*

Mid-century Modern: into the colour field

In the mid-20th century, artists associated with **Abstract Expressionism**, **Colour Field** painting and **Post-painterly Abstraction** were working without figurative elements, using colour as the main feature of their paintings. Select artists' names to open a Google search in a new browser tab, and learn more about them and their work with colour:

- **Mark Rothko**
- **Barnett Newman**(Figure 1.39)
- **Kenneth Noland**
- **Clyfford Still**
- **Helen Frankenthaler**
- **Frank Stella**

These artists, and many others from the modern period, created significant artworks that have influenced creative practitioners of all kinds since that time. In the 21st Century, we continue to research and study these artists' works because of their impact. Students of art and design can learn much from exploring their use of colour.

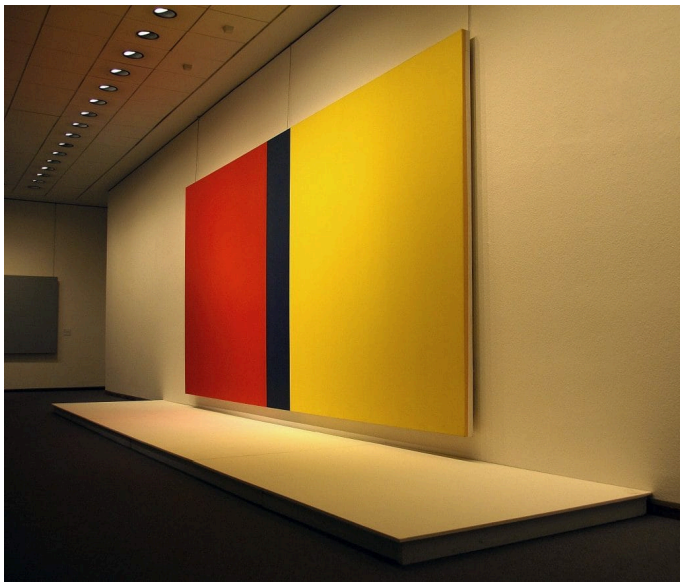


Figure 1.39. Who's Afraid of Red, Yellow and Blue IV (1969/70) by Barnett Newman. Image attribution: Rino Porrovecchio from Palermo, Italy, Barnett Newman at Neue Nationalgalerie (2369586886), on Wikimedia Commons, CC BY-SA 2.0

In Australia, there was a significant shift to abstract and colour field painting in the 1960s. The National Gallery of Victoria held an important and controversial exhibition titled "The Field" in 1968 which coincided with the launch of the new modernist gallery space in St Kilda Road (the current NGV International gallery).

This was a landmark exhibition which showcased the new work of young and emerging local Australian abstract artists. In 2018, this exhibition was re-staged at the NGV International space titled "The Field Revisited". Read about it here in this ABC News article, and visit the NGV website page to see examples of the abstract artworks and the artists that created them.

Research and reflection activity:

Research two of the artists working with abstraction listed in this section, and see if you can find two more artists from the NGV "The Field" exhibition.

- Do you have a favourite abstract artist?
- How does colour play a role in abstract painting?
- How does understanding these artists' creative practices help you to develop your own practice?

Note: the artists and designers listed on this page were not the only ones working with colour in new and experimental ways: this is an introduction to selected key figures in art and design. See linked resources and subject guides for more information on this topic.

Further resources:

Ball, V. K. (1965). The Aesthetics of Color: A Review of Fifty Years of Experimentation. *The Journal of Aesthetics and Art Criticism*, *23*(4), 441–452. https://doi.org/10.2307/427666

David Briggs' website ***The Dimensions of Colour*** contains extensive academic and scientific information about colour theory. These two sections are particularly relevant to this page as they discuss modern colour theory:

- 11.2 Traditional and modern colour theory part 1: Modern colour theory
- 11.3 Traditional and modern colour theory part 2: traditional colour theory strikes back!

1. also see Matisse's publication *Notes d'un peintre,* 1908 (English version)(opens as a PDF file
2. RMIT students can access this video on Albers: RM, A. (Producer), & Moritz, R. (Director). (2012). Josef Albers - Homage to the Square: Against Deep Blue. [Video/DVD] ArtHaus Musik. Retrieved from https://video.alexanderstreet.com/watch/josef-albers-homage-to-the-square-against-deep-blue
3. quote by Josef Albers (Written ca. 1954 and published in numerous catalogues and articles and in various languages)

Colour grading in photography and film



Figure 1.40. Image attribution: Metropolitan Print Company; Copyright 1896 by Raff & Gammon, Edison's Greatest Marvel-The Vitascope – Restoration, marked as public domain, more details on Wikimedia Commons

Since the beginnings of colour technologies in photography and film in the late 19th Century, attempts have been made to create realistic and accurate colour representation in photography and film.

Colour grading is the manipulation of colour to emphasise or **de-saturate** certain colours and adjust contrast, shadows and highlights. It is used to enhance the mood, emotion, or visual style of an image or film.

The practices of colour grading and colour correction began with traditional photography and film and continue to this day with digital media production.

> For an overview of colour technologies in non-digital photography and film, Barbara Flueckiger's website *Timeline of Historical Film Colors* is an extensive resource of over 250 individual film colour processes, from tinting and hand-colouring to contemporary colour film processes.

This page covers a selection of important developments in the production of colour photography and film

> **Topics:**
>
> - Technicolor
> - The history of photographic test cards and racial bias
> - Colour grading film for skin tones
> - Colour grading techniques in digital photography and film

Technicolor

You may have seen old movies that list Technicolor in their credits, such as *The Wizard of Oz* (1939, Victor Fleming, Metro-Goldwyn-Mayor) or *The Red Shoes* (1948, Michael Powell & Emeric Pressburger, The Archers).

Technicolor is a trademarked process for colour motion-picture that dates from 1932. The original process captured three black and white films at once using a very large and cumbersome camera with a light-splitting cube to capture red, green and blue light on each film. It then used a dye process to produce an opposite colour print – the red film becomes a cyan print, the green becomes a magenta print, and the blue becomes a yellow print. When the three colour films were laminated together, they reproduced something close to natural colour.

Watch this video for more details:

How Technicolor changed movies (Phil Edwards, Vox)

Media attribution: How Technicolor changed movies, Phil Edwards, Vox on YouTube

You can learn more about Technicolor from the Eastman online research archive.

The history of colour photographic test cards and racial bias

In the 1950s, cameras and colour film became cheaper and more available for anyone to use. The companies that made photographic film and the printers that produced photographs from the negatives required methods for testing whether the colour was accurate and realistic. At that time, the Kodak company had a monopoly on colour film and photographic printing in the western world.

The method of colour testing for photographic printing used images of people (usually women) on the test cards to ensure skin tone was accurate. This was problematic because Kodak originally only used models with white skin as testing controls. This means that there was **bias** in the way colour film presented people with darker skin tones.

These test cards were known as "Shirley cards", because that was the name of the original model used in the Kodak skin tone

standard cards.

It wasn't until the mid-1990s that Kodak developed a multiracial Shirley card, but this was partly because companies that manufactured chocolate and wooden furniture had been complaining for years that photographic prints weren't showing enough variations in the dark brown tones of their products.

Fuji film became the film of preference for photographing darker skin tones at that time, possibly because their colour processing favoured a different range of skin tones.

Watch this video to learn more:

Colour film was built for white people. Here's what it did to dark skin.

Media attribution: Color film was built for white people. Here's what it did to dark skin, Vox on YouTube

It is fair to say that early colour film and printing techniques didn't have the same range of colour dynamics as we have now, and couldn't produce the best skin tones across all skin types. However, it is evident that the way chemical processes were developed at the time favoured showing light skin tones more accurately than dark skin tones.

Learn more about this topic from artists Hito Steyerl and Rosa Menkman: Behind White Shadows.

Colour grading film for skin tones

More recently in cinematography, colourists have developed digital colour grading techniques to better represent all skin types without losing quality or stylised colour effect. Some significant examples of using colour grading in moving images to portray dark skin tones include the films Moonlight (2016, Barry Jenkins dir.) and Black Panther (2018, Ryan Coogler dir., Marvel Studios).

Watch the trailer here to see the different colour gradings used in this film:

Moonlight | Official Trailer

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: Moonlight | Official Trailer HD, A24, on YouTube

Moonlight director Barry Jenkins engaged colourist Alex Bickel, to create a colour grade for the film that increased contrast and colour saturation while preserving detail. The three chapters of the film were designed to look like different film stocks:

- Chapter 1 imitated the Fuji film stock to highlight the cast's skin tones.
- Chapter 2 imitated the Agfa film stock, which increased the cyan colour.
- Chapter 3 imitated a modified Kodak film stock.O'Falt, C. 2016, "'Moonlight' Glow: Creating the Bold Color and Contrast of Barry Jenkins' Emotional Landscape", IndiWire, 26/10/2016, accessed 10/11/2022">[1]

Colour grading techniques in digital photography and film

You may have already used ***filters*** on your own digital media to adjust and enhance the colour of a photograph or video for social media or before you print it. Most image-capturing apps now have a range of colour filters that can immediately change the look of your image in many ways.

This is simple colour grading, and the same principle is applied to professional photography and film – although the processes can be much more technical and customised. Almost all films and TV series have colour grading applied to them. It can be surprising to see the original footage captured in the camera compared to how it looks **post-production**.



Figure 1.41. Colour grading example with increased saturation and contrast: before (left) and after (right). Image attribution: Image by Ioannis Ioannidis from Pixabay

Colour grading in film and video is an art, and colourists are skilled in manipulating colour using a range of digital techniques.

Colour *correction* is not the same as colour grading. Colour correction involves fixing problems with the original captured imagery, like editing out skin blemishes or matching colour between different scenes in a video, for example. Colour grading is more about the overall colour and visual style of the image or video.

You might have noticed that some movies you watch have a lot of deep blue and green tones, while others might have orange and cyan tones, very black shadows, or very vibrant reds. With colour grading, deliberate choices are made to adjust the hue, saturation, contrast, highlights and shadows of still or moving images to enhance drama or match visual themes.

All image and video editing applications currently used in the digital media industry have colour grading tools. Anyone working with digital photography and film can learn how to use these tools and apply colour grading to their digital media projects.

Activities:

1. Make a list of your three favourite films or TV drama series and analyse the colour grading in the video. It is likely that none of your choices are using film or video straight from the camera without any colour grading – unless you are watching a **Dogma 95**.
    - Are the colours similar or different in each of your selected videos?
    - Do certain types or genres (Action, Romance, Comedy, Sci-fi, Horror etc.) have the same colour style?
    - How does the colour add to your experience of what you are watching?
    - How can you improve your own images and videos with deliberate colour grading?
2. Explore the filters on your mobile device apps or the colour editing settings in your image or video editing software and experiment with adjusting the colour in your own photos and videos.

You can learn more about colour grading for video by doing these short **LinkedIn Learning** courses (free for RMIT students with login):

- Creating a short film – 11 – color grading
- Colour grading footage in-After-Effects
- Introduction to video color correction – understanding color theory

---

1. >O'Falt, C. 2016, "'Moonlight' Glow: Creating the Bold Color and Contrast of Barry Jenkins' Emotional Landscape", IndiWire,

26/10/2016, <https://www.indiewire.com/2016/10/moonlight-cinematography-color-barry-jenkins-james-laxton-alex-bickel-1201740402/> accessed 10/11/2022

Colour trends and palettes

A **trend** is a direction that is developing or changing – as with fashion, which is constantly evolving. **Colour trends** are how we describe certain colours or colour **palettes** (selected groups of colours that are used together) that become popular at different times. Knowing about colour trends is useful in design fields like fashion and textile design, interior design, product and packaging design and web design, where new products are continuously emerging.

Commercial colour charts are easy to find for paints and textiles. In design, the **Pantone Matching System (PMS)** for graphics and print and the **Pantone Fashion, Home and Interiors System (FHI)** for textiles and pigments have become industry standards for colour selection for a wide range of design and commercial production solutions.

The Pantone Colour Institute has also become known for its colour trend influencing. They select a “colour of the year” each year.

The 2023 Colour of the Year is:

PANTONE
18-1750
Viva Magenta



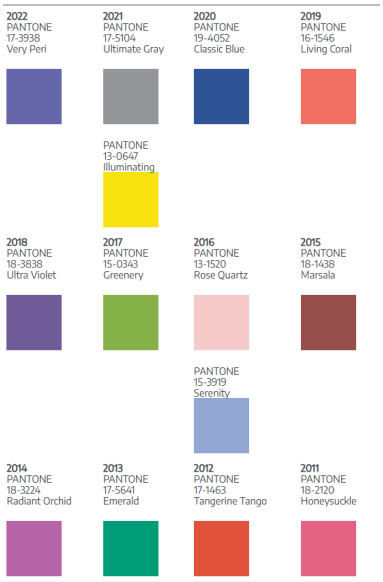


Table 1.3 Pantone Colour of the Year 2011-2022

Pantone past colours of the year.

Aesthetics of colour palettes

A colour palette is a set of colours that a designer or artist chooses to work with on a project like an image, website, fashion range, product packaging etc.

Choosing the right set of colours can play an important role in how successful your design, artwork or product is and how users respond to it.

As previously discussed in this chapter, colour perception and aesthetic taste are subjective things, but colours do have common links to our emotions and moods. Any artist or designer will have their preferred palettes for working with specific projects. However, if you have a design brief from a client, you may need to create a unique colour palette for your client's website or product. It can be difficult to know which colours work best together, and if those colours successfully symbolise or represent your client's business.

Many online tools can recommend currently trending and aesthetically pleasing colour palettes or can help you create your own palettes by using keyword searches. Other online tools allow you to upload images to create a colour palette from the colours used in the image, or use AI to create colour palettes based on machine learning.

Activity:

Here are some online tools that can help you to create your own unique colour palettes for creative projects. Try them!

Colour palette generators

- Canva color palette generator
- Adobe color wheel
- Colormind.io
- Coolors.co
- Colors.muz.li

See Chapter 3.5 Colour wheels and relationships for more information on colour palettes and an interactive colour wheel.

Also, see Chapter 3.4 Pigments and dyes for examples of famous artists' painting palettes.

Test yourself: colour aesthetics

A multiple choice quiz to test your understanding of colour aesthetics

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again.

This page titled 1.4: Colour Aesthetics is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

2: PART 2- THE VISIBLE SPECTRUM

2.1: Introduction
2.2: The Physics of Light and Colour
2.3: Colour in Chemistry
2.4: The Eye- How We See Colour

This page titled 2: PART 2- The Visible Spectrum is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

2.1: Introduction

As stated in Chapter 1, section 1.1, Sir Isaac Newton was the first to classify the visible spectrum as we know it today.

This diagram shows the visible light spectrum and other types of non-visible electromagnetic radiation measured in nanometres (nm).



Figure 2.1. The light spectrum with visible wave lengths in nanometres, by RMIT, licensed under CC BY-NC 4.0.

The colours we see are based on wavelengths, and as Figure 2.1 shows, there are wavelengths that the human eye cannot see, like radio waves, X-rays, and microwaves. In the visible spectrum, violet rays, which are the shortest wavelengths are also the highest in energy. Red light wavelengths are the longest and the lowest in energy.

This chapter will focus on the visible spectrum, and the science-related aspects of colour vision. Each section will include information, links, resources, and learning activities to further develop your knowledge.

This page titled 2.1: Introduction is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

2.2: The Physics of Light and Colour

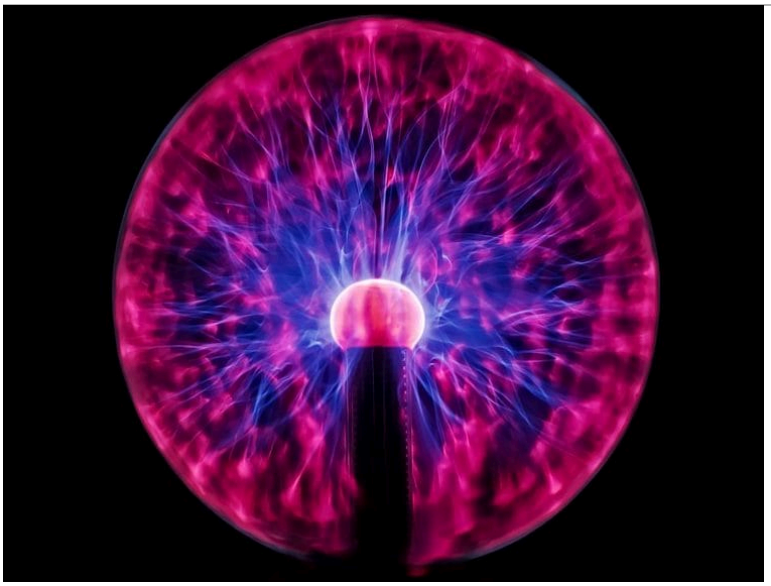


Figure 2.2 Plasma globe by Joshua_Willson via Pixabay, licensed under CC0.

Physics is the science that deals with energy and matter. To understand what colour is and how we see it, we need to explore the physical properties of light as a form of energy and how it interacts with matter – the objects we see.

This section explains the following physics-related topics in an introductory way with videos, links, and learning activities to help you to extend your knowledge of the physics of light and colour.

Light: electromagnetic radiation

Light is a form of electromagnetic radiation. We often talk about light as **waves** because light is made from energy that is radiated in a wave pattern, but light also has properties that are like **particles**. Sometimes light behaves like waves and sometimes it behaves like particles. This may sound confusing – it is!

Watch this video to learn more about the weird physics of light waves and particles (approximately 10 minutes).

Media attribution: Is Light a Wave or a Particle? – Ask a Spaceman, Paul M. Sutter on YouTube

You can also read the article here.

For Colour Theory, we refer to light as waves to describe how light forms different wavelengths that we see as colours. Wavelength is the distance between each wave of light energy – and as shown in Figure 2.3, it is measured in **nanometres**. A nanometre is **one billionth of a metre**, 0.000000001 or 10^{-9} metres.

Electromagnetic spectrum

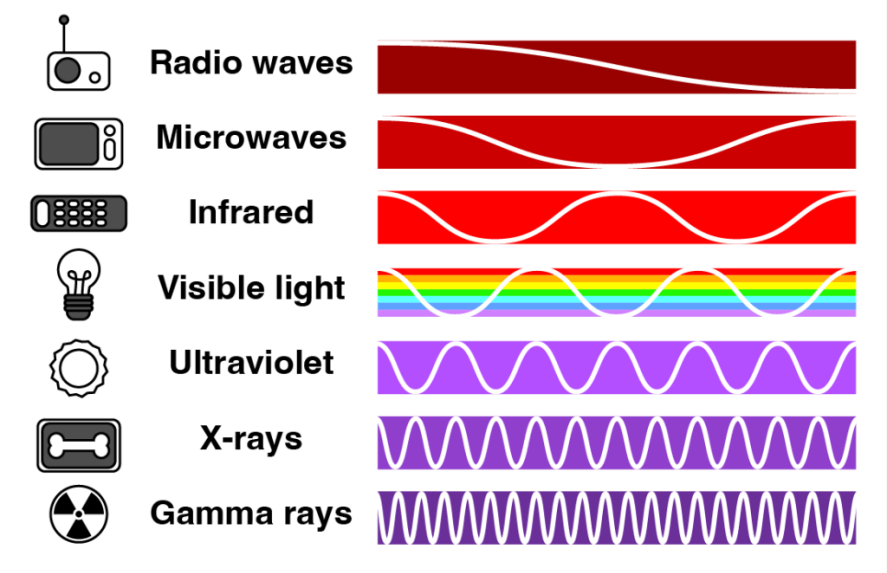


Figure 2.3. Electromagnetic spectrum diagram by RMIT, licensed under CC BY-NC 4.0.

The energy of a light wave is similar to that of a particle moving at the speed of light. However, even the smallest particles would not be able to travel at such high speeds in reality.

The term **photon** is used to represent the smallest quantity of light from any wavelength. It's also called a **light quantum** – an idea that began with **Albert Einstein**. The energy of a photon depends on the wavelength. Ultraviolet, X-rays and Gamma rays have the most energy and the shortest wavelengths. Radio waves, Microwaves and Infrared have the lowest energy and the longest wavelengths. The visible spectrum sits in between these wavelengths and is only a small part of the whole electromagnetic spectrum.

Colour is how we define specific wavelengths in the visible spectrum. For example, red light has wavelengths from approximately 630 to 700 nanometres. Blue light wavelengths are approximately 450 to 500 nanometres. It's difficult to say where one colour ends and another colour begins. Our definitions of colour by wavelength are based on our perception of colour with human eyes, and our classification of six main colours in the spectrum.

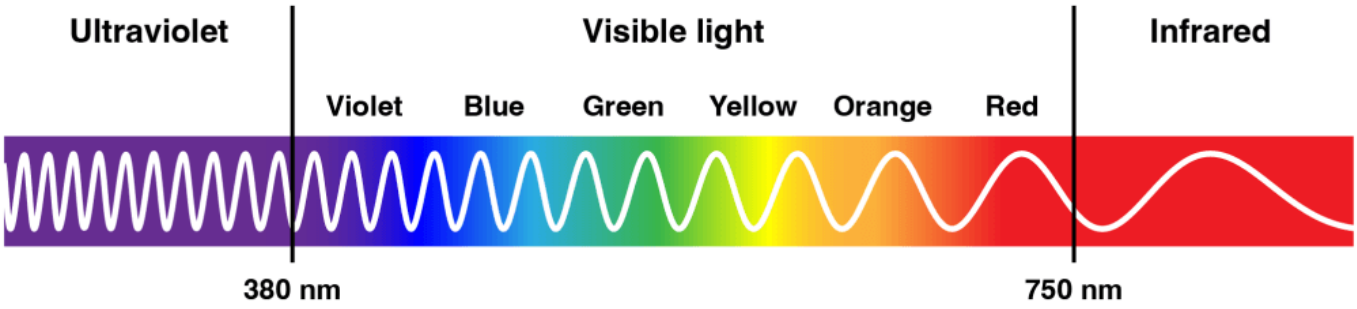


Figure 2.4. The visible light spectrum, by RMIT, licensed under CC BY-NC 4.0.

Interesting Fact: Auroras



Figure 2.5. Aurora Borealis (Northern Lights), Alaska. Image attribution: United States Air Force photo by Senior Airman Joshua Strang, Polarlicht 2, marked as public domain, more details on Wikimedia Commons

Auroras like the Aurora Borealis (Northern Lights) and Aurora Australis (Southern Lights) are natural phenomena that occur near the North and South Poles of the Earth. Auroras are shimmering patterns of coloured lights that appear in the sky – usually in winter, when the sky is darkest at the poles.

Auroras are nothing like rainbows (which are caused by **refraction**), they are made from electromagnetic radiation (light) that is emitted when solar wind particles collide with charged particles in the earth's outer atmosphere – the *magnetosphere plasma*. Sun events like *coronal ejections* can cause more of these disturbances.

Auroras can occur on satellites, comets, and on other planets.

Learn more about the physics of light and colour and the history of theories of light.

Optics 1: lenses and ocular devices

What is Optics?

Optics is a branch of **Physics** – it's the science that deals with light. Optics explains how light energy behaves and interacts with matter. Some of the earliest recorded experiments in optics were done by ancient Egyptians, Mesopotamians, and Greeks using glass lenses and reflective materials like obsidian.

During the Middle Ages and Enlightenment periods, the significant work of scientists **Ibn al-Haythem (Book of Optics c1011)** and **Sir Isaac Newton (Opticks, 1704)** made contributions to the field of optics with their observations of the visible spectrum and how light moves through different substances, as mentioned in Chapter 1.1 History of colour theories.

Other significant developments, such as **Galileo's refracting telescope** (c.1609), also had a great impact on the fields of optics and astronomy. Since that time, many technological developments have expanded the field of optics to include both the visible and non-visible spectrum.

We use optics every day in so many aspects of our lives, including using our eyes to see. Optical glasses, mirrors, devices like cameras and digital devices, remote controls, microwave ovens, X-ray machines, microscopes that can show us cells and viruses up close, telescopes that explore the universe, optical fibre that gives us fast broadband internet, the solar panels we use to generate electricity – all these rely on technological innovations in optics.

Learning about optics is very useful for colour theory in science and creative fields such as art and design, because it has impacted many of the technologies we use in these fields. This page covers a selection of topics related to optics, many of which are used in creative and scientific practice:

Part 1. Selected technologies and innovations that come from the field of optics

- Lenses
- Camera Obscura and Camera Lucida
- Kaleidoscope
- 3D glasses

Lenses

A **lens** is an optical device usually made from transparent polished glass or plastic that focuses or disperses light depending on its shape. Light passing through the material of the lens is bent – that is, it changes direction depending on the shape and thickness of the lens. The word lens comes from the Latin for ***lentil*** because the ***biconvex*** (curving outwards on both sides) shape of a lens looks a lot like a lentil. However, not all lenses are biconvex, some are ***biconcave*** (curving inwards on both sides) or combinations of convex and concave. Biconvex lenses focus light, whereas biconcave lenses disperse or spread light (see Figure 2.6).

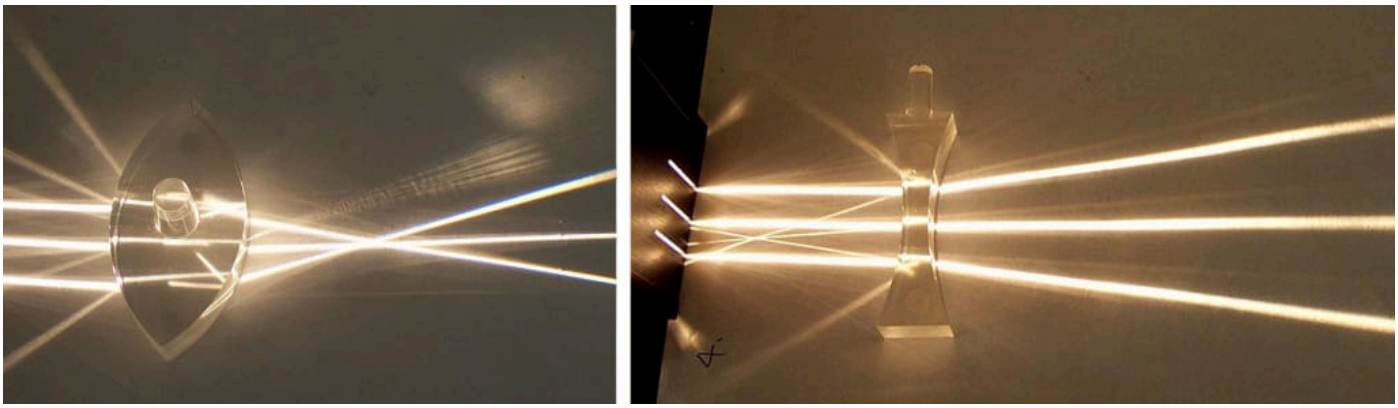


Figure 2.6. Examples of simple convex and concave lenses which can focus or disperse light. Image attribution: Large convex lens and Concave lens images released under the GNU Free Documentation License.

The most common lenses used in optical eyeglasses are ***meniscus*** lenses, which are *convex-concave* lenses that are customised to suit each individual's vision requirements.

Lenses are in many devices we use every day, such as eyeglasses, magnifying glasses, cameras, telescopes, microscopes, etc.

Learn more about lenses.

Camera Obscura and Camera Lucida



Figure 2.7. Camera Obscura engraved drawing. Image attribution: James Ayscough, 1755, marked as public domain, on Wikimedia Commons

A **Camera Obscura** (Latin for *dark chamber*) is a dark space used to create an image projection. It works with a room, tent or box which has a very small hole or lens on one side that projects an image from the outside of the space to the opposite wall on the inside of the space (Figure 2.7). The projected image is upside-down and back-to-front because light bouncing off objects outside the Camera Obscura enters the internal space through the hole or lens at an angle. Light from an object at the top-left of a scene outside the camera, will project onto the bottom-right of the inner wall of the camera.

The concept behind the Camera Obscura led to the development of the **photographic *camera*** – which is where the name comes from. Cameras we use today still work on the same principle as this device, which was created many hundreds of years ago.

Some historians speculate that prehistoric cave paintings may have been inspired by accidental Camera Obscura effects from small holes in tents or animal hides. The Camera Obscura was most notably used as an artist's device during the Renaissance and later periods of realism in painting to assist in the depiction of realistic scenes and accurate **perspective** in artworks. There are records of its use in ancient Chinese, Arabic and European cultures as a means of telling the time of day and year by the position of the sun inside the camera. It was also used to safely view phenomena like **solar eclipses**, which can cause eye damage if viewed directly.

Jump to **Activities** at the bottom of the page to learn how to create your own Camera Obscura **Pinhole Camera box** with a cardboard box, or turn your entire room into a Camera Obscura.

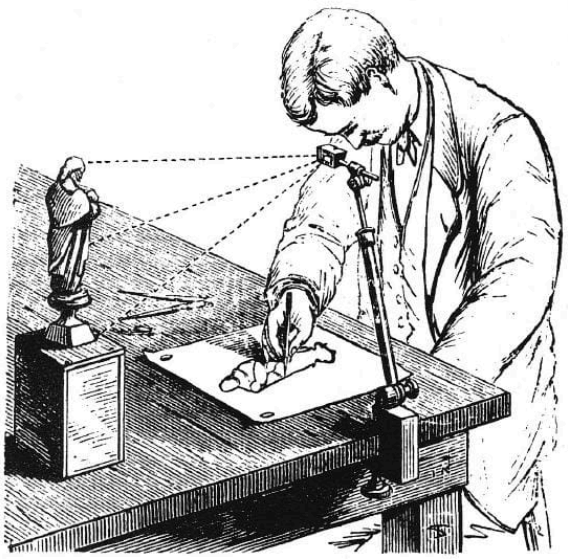


Figure 2.8. Camera Lucida diagram. Image attribution: Unknown author, Camera Lucida in use drawing small figurine, marked as public domain, on Wikimedia Commons

A **Camera Lucida** (Latin for *light chamber*) is a portable device that was developed after the Camera Obscura. The technology may have existed in the 17th century, but it wasn't patented until 1806. A Camera Lucida creates an optical illusion, where the scene in front of the artist is ***superimposed*** onto paper, which is usually on a flat surface like a table. The artist is able to look down into the device, which uses glass, a one-way mirror, or a prism, and see both the image of the scene in front of them, and the drawing on the paper combined together. See Figure 2.8 which shows a diagram of how a Camera Lucida is used.

The artist can then trace the superimposed image (which is an illusion created by the device) and create an accurate representation of the scene with correct proportions and perspective on the paper below. It was much easier to use than the Camera Obscura because it didn't require a darkened space, and you could use it anywhere in any light conditions. The technology of the Camera Lucida is similar to that used in microscopes that use mirrors to reflect the contents being viewed up into a lens that magnifies the image.

Artists used both of these technologies to assist in the depiction of realistic scenes in paintings and other art forms. Camera Lucida devices were also used by biologists and naturalists to create scientific illustrations.

Artist David Hockney wrote a controversial book where he claimed that many famous Old Master artworks were, in fact, created with optical devices like these. Some art historians were upset by this claim – they thought that Hockney was accusing the Old Masters of 'cheating' because of the suggestion that the artists hadn't recreated the scenes in the paintings by eye alone. This implied that these Old Masters were less technically skilled than previously thought.

Along with physicist Charles M. Falco, Hockney claimed that many of the developments in realistic painting from the time of the early Renaissance (c.1430) were due to the technological development of optics devices. This is known as the **Hockney-Falco Thesis.** They didn't consider using optical devices as 'cheating', rather they considered it part of the set of tools and devices artists could use in their work. Artists still require skill in painting techniques and visual style to create great masterpieces.

Hockney, David (2006). *Secret Knowledge: Rediscovering the Lost Techniques of the Old Masters*. Thames and Hudson. ISBN 9780500286388.

This video explores some of Hockney and Falco's claims:

Media attribution: A History of how Optics Has Helped Artists Create Better Paintings, Inside Science, on YouTube

Kaleidoscope

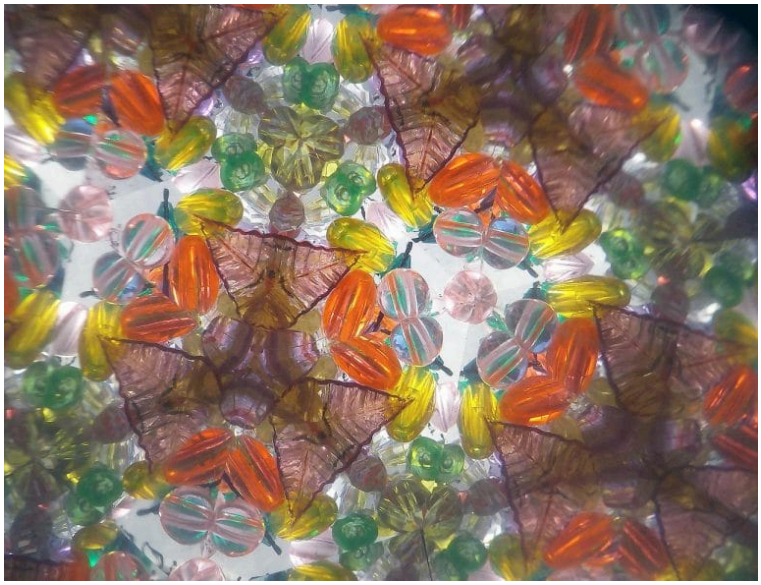


Figure 2.9. Example of the view looking through a kaleidoscope with coloured glass beads. Image attribution: Albarubescens, Rotational symmetries in designs produced by a kaleidoscopeDSCN2440, on Wikimedia Commons, CC BY-SA 4.0

How does it work?

Kaleidoscopes were first invented as toys in 1816 by Scottish physicist Sir David Brewster, but they can also be useful devices for designers and artists because they create complex and colourful symmetrical patterns. A kaleidoscope is usually made from a tube with angled mirrors inside of it that reflect light waves. Light usually travels in straight lines, but if it hits a shiny surface like a mirror, the light waves bounce back at a similar angle – like a bouncing ball.

Some kaleidoscopes have bits of coloured glass, beads or shiny objects inside them, so when you look into the tube, you see interesting geometric patterns made from these colourful objects and the reflected light from the mirrors (Figure 2.9). Other kaleidoscopes have lenses in them that bring light from outside objects into the kaleidoscope, and the patterns are made from the image you are viewing through the kaleidoscope tube.

If you rotate the kaleidoscope while looking through it, you can change the coloured pattern by shifting the coloured objects around or changing the light that the mirrors are reflecting.

You can now install mobile device apps that simulate a kaleidoscope effect using your camera or coloured geometric patterns, and you can save these images to use in creative projects. You can also get kaleidoscopic lenses that can be placed over a camera lens which add interesting patterns to a photographic image.

Learn more about kaleidoscopes from this text: *The kaleidoscope, its history, theory and construction with its application to the fine and useful arts* by Sir David Brewster, 1858 on the Internet Archive.

View Activities below to make your own Kaleidoscope.

3D glasses

Why do we have two eyes?

We have evolved to have two eyes (**binocular vision**), perhaps partly because there is less risk of total blindness if one eye is damaged. But have you ever thought about how we have two eyes but only see one image? The way our eyes work with our brains allows us to see in 3 dimensions (3D), and this is very useful for judging distances between objects and spatial navigation in the world.

More on human vision in 2.3 The human eye – how we see colour.

Stereoscopic photography

Binocular vision has also led to technological developments that try to replicate our 3D vision using different devices. The earliest experiments with this were with stereoscopic photography, where two photographic images were captured at a small distance from each other (similar to the distance between human eyes). These two photographs were placed in a viewer so that each eye views a different image (Figure 2.10). The brain interprets this information as a single image, and it appears that we are looking at a 3-dimensional scene.

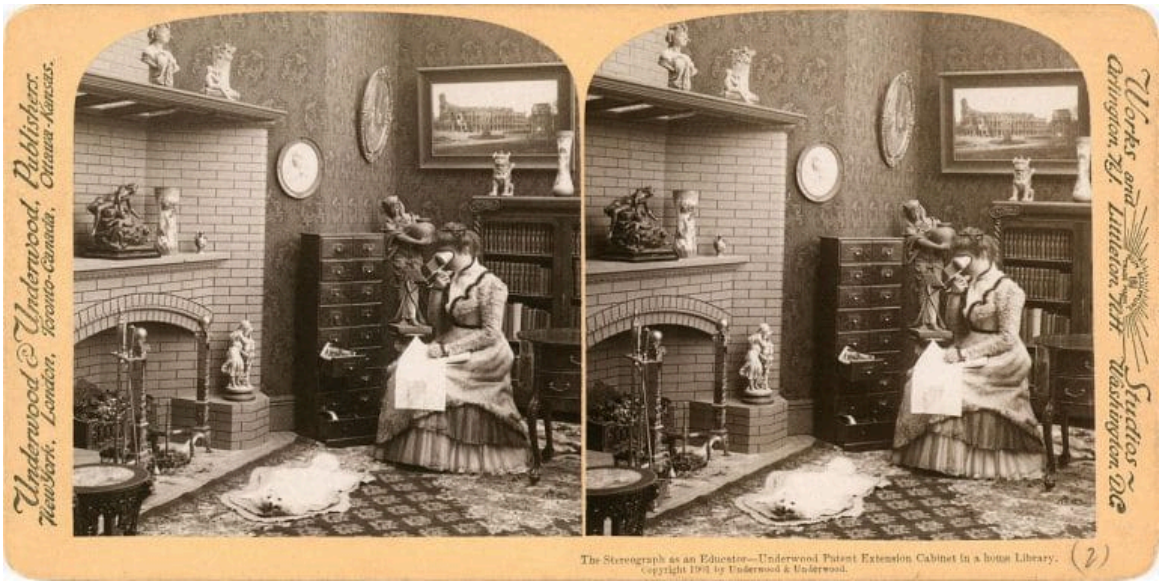


Figure 2.10. Example of a stereograph image depicting someone viewing a stereograph image through a stereoscope. Image attribution: Underwood & Underwood, Stereograph as an educator, marked as public domain, on Wikimedia Commons. Select image to enlarge.

Anaglyph 3D – red/blue 3D glasses

A similar principle is used with the Anaglyph 3D technique, which overlays two images of different colours that are slightly apart. Usually, one image is red, and the other is cyan (Figure 2.11). To view this kind of image in 3 dimensions, you need special glasses with different coloured transparent filters for each eye.

The eye looking through the red filter only sees the cyan image (as a black image), and the eye looking through the cyan filter only sees the red image (as a black image). This is because these two colours are opposites and their light waves do not pass through the filter of the opposite colour.

The effect is the same as the stereoscope because the brain interprets these two images as one, which appears as a 3-dimensional scene.

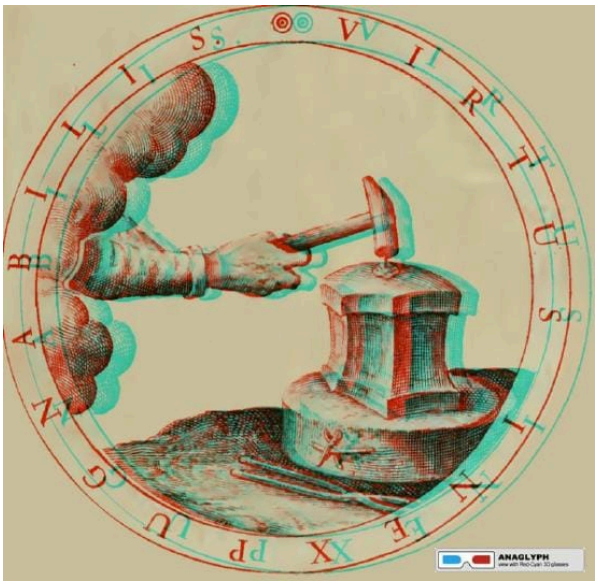


Figure 2.11. Anaglyph image for red-cyan 3D glasses. Image attribution: John Johnston from Glagow, Scotland, Hammer anaglyph (14656149338), on Wikimedia Commons CC BY-SA 2.0

RealD 3D

RealD 3D cinema technology is a **polarised** 3D system that uses **circularly polarised light** to create stereoscopic image projection. The principle for the polarising glasses we wear now for viewing 3D cinema is the same principle as the original stereoscope – the film we are viewing is actually two sets of moving images projected with a special projector that alternates right-eye frames and left-eye frames, switching between them 144 times per second.

These separate projections for each eye are made with a special polarising screen that switches the polarisation, so each eye only sees the frames that match the polarisation of the glasses. This is what gives us a realistic 3D effect (Figure 2.12).



Figure 2.12. Two pairs of RealD 3D cinema glasses demonstrating polarising effect. Image attribution: Fritz Jörn at English Wikipedia, TwoRealDglassesblackening, marked as public domain, on Wikimedia Common

Activities

Pinhole camera – make your own Camera Obscura box

You can make one with any cardboard box:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: How to make a Pinhole Camera, George Eastman Museum on YouTube

or watch this video to learn how to turn your room into a **Camera Obscura:**

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: How to Turn a Room into a Camera Obscura, George Eastman Museum, on YouTube

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: How It's Made: Kaleidoscopes, Science Channel, on YouTube

Learn more here about the history of optics.

Test yourself: electromagnetic spectrum, lenses and ocular devices

A multiple choice quiz to test your understanding of the electromagnetic spectrum, lenses and ocular devices

(5 minutes or less)

Optics 2: electronic technologies and spectral analysis

Learning about optics is very useful for colour theory in science and creative fields such as art and design, because it has impacted many of the technologies we use in those fields. This page covers a selection of topics related to optics, many of which

are used in creative and scientific practice.

Part 2. Selected technologies and innovations that come from the field of optics

- Laser
- Optical fibre
- Photovoltaic cells
- Spectral analysis in astronomy

Laser

How is it different to normal light?

Albert Einstein's paper *On the Quantum Theory of Radiation* (1917) theorised the physics of **lasers** long before they were first created and used in 1960 by American engineer Theodore Harold Maiman. The word **LASER** is, in fact, an acronym: **Light Amplification by Stimulated Emission of Radiation.** A laser light is different from a common light devices because it is a ***coherent*** light source – which means that a laser can be a very narrow spectrum of light – only one colour (temporal coherence) that can be focused on a very small spot (spatial coherence). This is unlike other lights, which have a broader spectrum and radiate out in multiple directions. Lasers can be very powerful because of this coherence. An example of this is laser cutting technology, which uses a very powerful beam of light to heat very small areas of materials like metal or wood to melting or burning point – which "cuts" the material very precisely.



Figure 2.13. Example of six different types of laser. Image attribution: 彭家杰, LASER, on Wikimedia Commons CC BY-SA 3.0

How does it work?

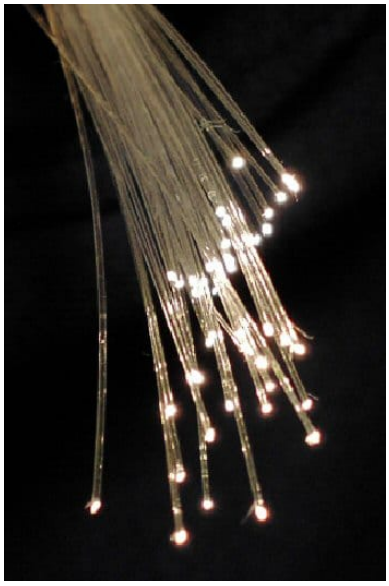
A laser is made with a tube that is filled with some type of gas, liquid or crystal material. The tube has mirrors at both ends, but one of the mirrors is partially transparent to allow some of the light to pass through it.

Energy is applied to the material in the tube – this could be a powerful light source, or some other source of energy like gamma rays. This energy also causes the material in the tube to produce light (photons) by exciting the atoms inside it. The photons bounce back and forth between the mirrors at the ends of the tube, which creates more photons. Some of these photons escape the tube through the mirror that is partly transparent, and this is what makes a laser beam (Figure 2.13). Light from a laser travels in a straight line and doesn't get weaker the further it gets from its source, unlike radiant light. This makes it very useful across long distances.

Lasers are used in lots of ways – in industrial and commercial processes such as in cutting tools, barcode scanners, and laser printers – or at home in optical disc players like DVD and Blu-ray, laser pointing tools, etc.

Learn more about lasers here

Optical fibre



Optical fibre is made from very thin, transparent fibres of glass (silica) or plastic that are a tenth of the thickness of a human hair. These fibres are able to transmit light from one end to another very efficiently by bouncing photons along the length of the fibre.The photons don't escape from the fibre because of a phenomenon called total internal reflection – the photons bounce off the walls at an angle and keep bouncing along until they reach the end of the fibre. Optical fibres are also covered in a different layer of glass cladding that helps keep the light inside the optical fibre tube until it reaches the end (Figure 2.14).Figure 2.14. Optical fibres. Image attribution: BigRiz, Fibreoptic, on Wikimedia Commons, CC BY-SA 3.0

This technology can be used as a form of lighting, and is very useful in lighting small spaces that are difficult to access, such as in medical procedures. You can view internal organs with optical fibre cables without having to cut a body open (**Endoscopy**). This method of light transmission is also used for telephone calls and to send data across the Internet (**Broadband**) through specially developed fibre optic cables that can transmit very large quantities of information very quickly by encoding data in pulses of light.

Optical fibre is a better material than traditional copper wire for transmitting data for a number of reasons:

- there is less signal loss than wire – which means fewer amplifiers are needed to carry data long distances
- there is no electromagnetic interference from other cables – which can happen with copper wire
- it has a higher bandwidth – fibre optic cables can carry a lot more data than equivalent copper wires.

Learn more about optical fibre.

Photovoltaic cells – solar electricity generation

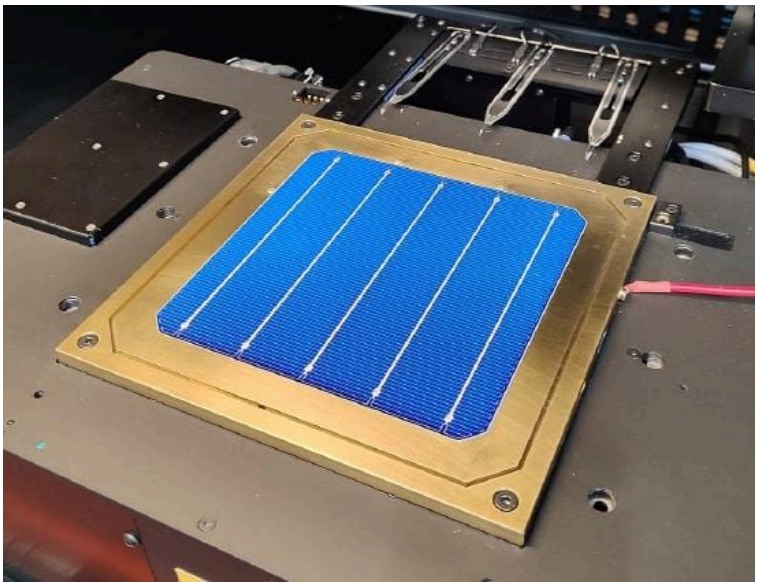


Figure 2.15. A silicon photovoltaic cell. Image attribution: Radiotrefoil, Silicon heterojunction solar cell, on Wikimedia Commons CC BY-SA 4.0

A **photovoltaic cell (PV cell)** (or solar cell) is a special type of semiconductor that converts visible light into **direct current (DC)** electricity. Some PV cells can also convert infrared or ultraviolet radiation into DC electricity. Solar electric systems like the panels we put on our roofs for electricity and hot water, or the little grey squares that power small devices like garden lights, use PV cells to generate power that can be used immediately or stored in a battery for later use (Figure 2.15).

In simple terms, a PV cell is made from two layers of crystalline silicon – one layer is positively charged, and the other is negatively charged. When photons enter the layers of the cell, this generates a flow of electrons from the atoms in the cell material, creating an electrical charge of DC electricity. For solar panels in our homes, the DC electricity is changed into **alternating current (AC)** electricity by an ***inverter*** device.

Learn more about photovoltaic cells and how they work.

Spectral analysis in astronomy



Figure 2.16. Anglo-Autralian telescope at Siding Springs Observatory. Image attribution: Ahilan Parameswaran, Anglo-Australian telescope at Siding Springs Observatory, on Wikimedia Commons CC BY-SA 3.0

A **spectrometer** is a very useful device in astronomy. It splits lightwaves into different parts of the spectrum, which can then be measured and analysed to find out what planets, stars, galaxies and other celestial bodies are made of – even at great distances. It can also detect the speed and direction of their movement. This is called **spectral analysis**.

In 1868 a **spectroscope** was used to detect **helium** for the first time by using a prism to spread out light from the sun. An unusual yellow line was observed in this prism which was determined to be helium.

Learn more about spectral analysis from this CSIRO resource.

Learn more here about the history of optics

Why are things different colours?

Why do different objects we see around us appear to be different colours?

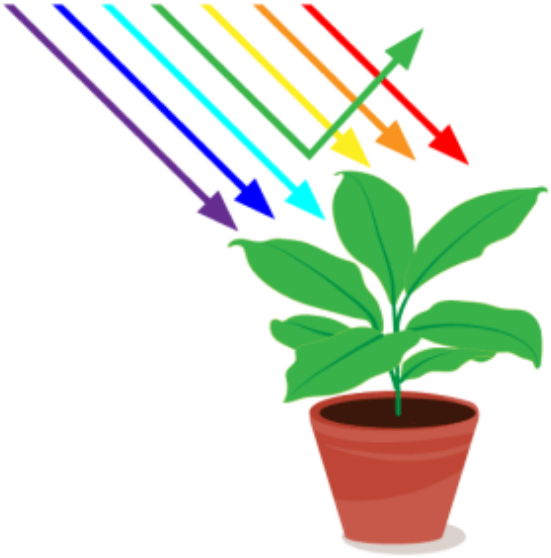
Objects themselves do not create colour (unless they have luminescence – see this section in the Chemistry chapter for more details). What they do is reflect and absorb the spectrum of light waves in different amounts – which includes light waves outside of the human visible spectrum.



For example: a tomato appears to be red because it's absorbing most of the blue, green and other colour light waves (taking those photons into its atoms) and reflecting red light waves out (Figure 2.17). This is what we detect with our eyes and process with our brains. If it's night-time and there is no light shining on the tomato, it doesn't appear red because there are no light waves reflecting off it. The tomato is not generating its own colour. The red colour we see in a tomato comes from a chemical called Lycopene which is a bright red pigment found in other red fruits too. Lycopene absorbs certain light waves and reflects red – this is what we see when we look at a tomato in the light.Figure 2.17. Tomato with light waves reflecting red light, by RMIT, licensed under CC BY-NC 4.0 using tomato by Mostafa Elturkey via Pixabay, CC0.

It's the structure of **molecules** that objects are made of that determines which light waves are absorbed and which are reflected. The electrons within those molecules have energy states that determine which types of energy they can absorb and reflect.

See Additive and subtractive colour systems in this resource for more information.



The reason that most plants and tree leaves are green is because of a pigment called chlorophyll which is used for photosynthesis. Photosynthesis requires red and blue light waves that the plant transforms into chemical energy. The plant doesn't need the green light waves so this is reflected out and that's what our eyes detect (Figure 2.18).Figure 2.18. Plant with light waves reflecting green light by RMIT, licensed under CC BY-NC 4.0 from plant pot by Satheesh Sankaran via Pixabay, CC0.

Some plants have flowers that reflect lightwaves humans can't see – like ultraviolet (Figure 2.19). However, certain insects and birds can see these light waves as colours and are attracted to the flowers as a source of food, which also pollinates the plants, or spreads their seeds so they can propagate. The plants have evolved to use this light-reflecting ability to assist their development, just like the insects and birds have evolved the ability to see ultraviolet light waves to assist their growth too.

This website ***Flowers in Ultraviolet* by Bjørn Rørslett**, has a very detailed list of flower images showing how they look to humans and how they would look if we could see ultraviolet light waves.



Figure 2.19. Mimulus flower photographed in visible light (left) and ultraviolet light (right) showing a dark nectar guide visible to bees but not to humans. Image attribution: Plantsurfer, Mimulus nectar guide UV VIS, on Wikimedia Commons, CC BY-SA 3.0

See How animals see colour in this resource for more information.

Gemstones



Figure 2.20
. Gemstones in a range of col
ours. Image attribution: Arpingstone, Gem.pebbles.800pix, marked as public domain, more details on Wikimedia Commons

Just like all other objects, gemstones absorb and reflect light waves and we perceive the reflected waves as different colours (Figure 2.20). Rubies are red and emeralds are green because of the atomic structures of their elements, including impurities that are also mixed in.

To some extent, the colours of gemstones seem to correspond with where they lie on the periodic table of elements. This corresponds with the behaviour of electrons in their atoms. For example, diamonds are made of carbon – which is on the first level of the periodic table – and these elements are usually colourless. Coloured diamonds are due to impurities and imperfections in the stone such as traces of nitrogen, sulphur or boron.

Learn more about gemstone colour from the Gem Society's Gemology page.

Test yourself: electronic technologies, spectral analysis and different colours

A multiple choice quiz to test your understanding of electronic technologies, spectral analysis and different colours

(5 minutes or less)

This page titled 2.2: The Physics of Light and Colour is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

2.3: Colour in Chemistry

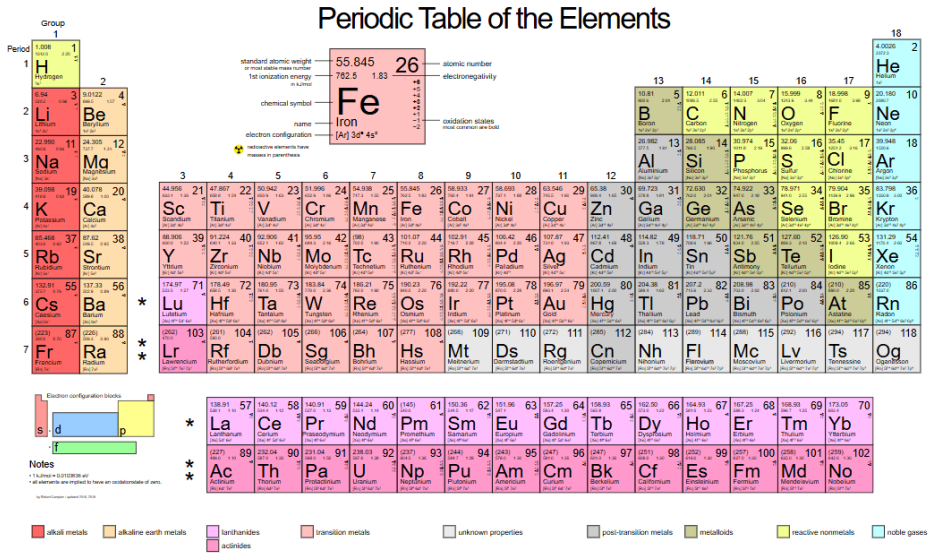


Figure 2.21. Periodic table of elements. Image attribution: 2012rc, Periodic table large, on Wikimedia Commons, CC BY 3.0

The science of chemistry deals with chemical elements – which are the substances of matter (Figure 2.21). Chemistry also deals with the properties and behaviours of these substances when mixed and the development of methods to create new substances.

The relationship between chemistry and colour is complex. Chemical processes are used to create colours that we use every day, and colour is used in chemistry to measure and analyse substances and chemical processes. It's useful to learn about this aspect of colour theory if you're working with colour materials in creative and scientific fields.

This section covers selected topics that explain the relationship between colour and chemistry (you can also find additional information in section 3.5 Colour systems: paint pigments and dyes).

Spectrophotometry and colorimetry

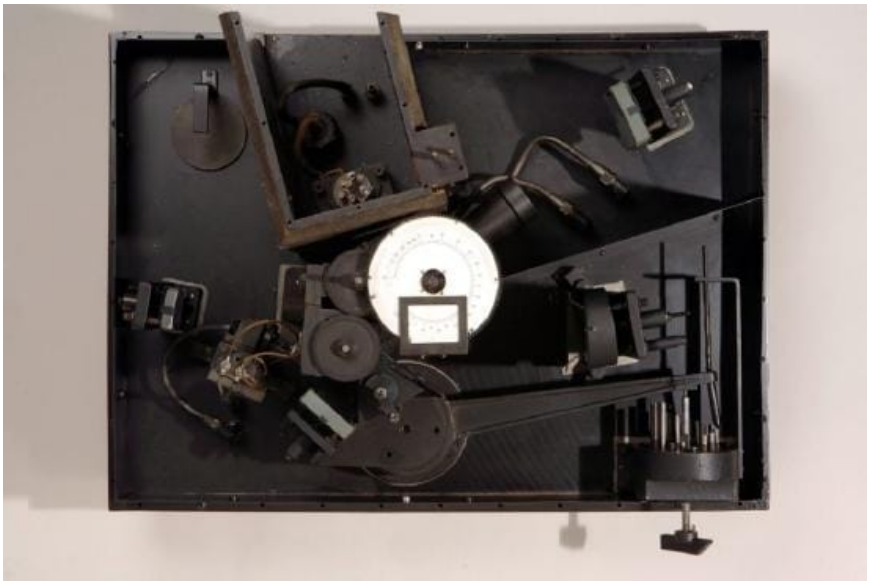


Figure 2.22. Beckman Ir-1 Spectrophotometer, c. 1941. Image attribution: Chemical Heritage Foundation, Beckman Ir-1 Spectrophotometer, ca. 1941, on Wikimedia Commons, CC BY-SA 3.0

Spectrophotometers and **Colorimeters** are both used to accurately measure colour, which is important in some scientific processes and also for matching colours for commercial production of products where colour accuracy is essential. They are both complex devices that are used in many areas of chemistry – and biochemistry in particular. Both use light and a solution (liquid) to measure the absorption of light.

A **Spectrophotometer** (Figure 2.22) measures the reflection and intensity of light for all colours – including those colours that aren't part of the visible spectrum. It measures the exact wavelengths of light – not just the primary colours, by passing a beam of light through a ***diffraction grating*** which splits the light into different wavelengths. A spectrophotometer is used to detect the purity of substances, to detect DNA and RNA concentrations in a sample, and lots of other biomedical analytics.

A **Colorimeter** (Figure 2.23) measures how much of a particular colour from the visible spectrum is in a solution by shining light through coloured filters or shining LED lights through the liquid. The device then measures how much of each colour is absorbed. It measures the three additive primaries (RGB) of coloured light. It can be used for blood analysis, detecting soil and food nutrients, chemical reaction levels, monitoring bacteria growth in biological experiments, etc.

Learn more about both devices



Figure 2.23. Colorimeter. Image attribution: Sonal Shinde, Colorimeter, on Wikimedia Commons, CC BY-SA 4.0

Metamerism – colour perception and matching



Figure 2.24 Room interior with two light sources. Image by 5460160 via Pixabay, licensed under CC0.

> If you work in fashion, interior design or any industry where colour matching is very important, it is useful to understand the concept of colour *metamerism* and how it can affect the colours you use, how you display objects, products, and creative works, and how you use lighting in different environments.

Have you ever decided to wear all black clothes that look the same colour in your bedroom, but when you go outside, you notice they are all slightly different? Some black garments are more reddish-black, others slightly more green or blueish-black?

Have you ever chosen a carpet or paint for your home that you thought would match your furniture, but once you have it in your home, it looks completely different? It might also appear to be different colours between day and night, or on sunny or overcast, cloudy days.

These are examples of **Metamerism,** or in fact, ***illuminant metameric failure***. The light in your home can be different colours from room to room and also a different colour to the sunlight outside. Some colours look the same under certain light sources but different under other light sources, which can include incandescent, fluorescent, LED or sunlight.

We could also say that colour blindness is a form of metamerism – ***observer metameric failure*** – because people see colour differently depending on their biology and the functionality of their eyes – as outlined in the sections on colour blindness and vision difference in this resource.

This also relates to the difference in colour on digital screens. You might design a website with a very specific colour palette, but you can't guarantee that everyone who views your website will have a screen that is properly calibrated to accurately show the colours you selected. You can test whether your computer or mobile device is "colour blind" by following some of the steps on this website: Is Your Computer Color Blind?.

How does Metamerism work?

Metamerism is the term we use when colours match under one lighting condition but not another. Colours that do match in this way are called **metamers**. It's based on the science of how different coloured substances absorb and reflect light, the amount of electromagnetic radiation, and which wavelengths of the visible spectrum are reflected or emitted.

A practical example of a colour metamer is using two different methods of creating orange paints that appear to be identical

You can create an orange paint by:

1. mixing red and yellow paint pigments to create what the eye perceives as orange
2. using a ready-made orange paint pigment that was made with different chemicals to the red and yellow pigments.

Your eyes will see the same colour even though the two oranges were created with completely different pigments that reflect slightly different light wavelengths.

When colours that should be the same don't match under different lighting conditions and are perceived differently, this is metameric failure. Some colours are more prone to metameric failure such as whites, greys, beiges, blacks, pinks and mauves. This is where the science of **colorimetry** becomes important for testing colour consistency and the specific wavelengths of light reflected or emitted.

How to prevent metameric failures (colour mismatches)

If you are choosing fabrics for a fashion collection and you want them to match, you should collect swatches and samples of fabrics and accessories that will go together in an outfit or ensemble and lay them out under different lights to make sure they match and look good together.

For example, you might think you have the perfect matching zip, buttons, sewing thread and bias binding for a cotton dress, but these items are made from different materials (nylon, plastic and metal) to the cotton dress fabric. They might look the same in one type of light, but if you look at them under a different light source, they might reflect different amounts of light wavelengths and appear different to your eyes.

This is because the dyes and pigments colouring these materials may have slight chemical differences and therefore reflect light differently.



Figure 2.25 T-shirts in rainbow colours. Image attribution: Photo by Greg Rosenke on Unsplash

For the same reason, if you are decorating a house, it's a good idea to try sample paint pots or get carpet and fabric samples and put them on the floor or walls to make sure you have the right colour for the environment and where the light falls. You also need to check if the colours match under daylight from the windows and under the artificial lights in your home.

With digital media, it's impossible to know if your viewers have screens that are calibrated. It can help to test your website on as many different types of screens and, if possible, older technology, where screens might not work that well or may not have good brightness and contrast. This way, you will know if your colour designs will look good under different conditions that are out of your control. You could also encourage your audience to take the computer colour blindness test mentioned above.

Test yourself: is it illuminant or observer metameric failure?

A multiple choice quiz to test your understanding of metameric failure

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again: 2.2 Colour in chemistry

Luminescence

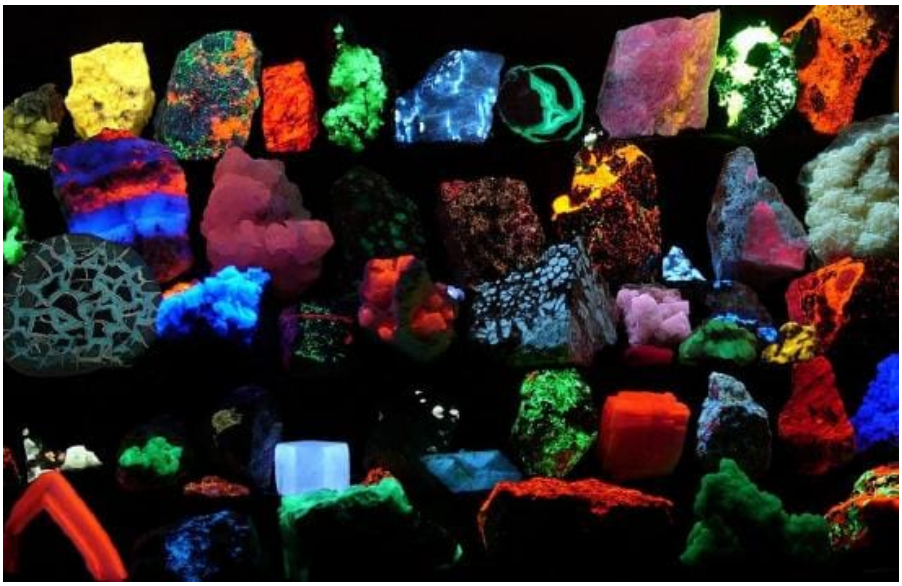


Figure 2.26 Fluorescent minerals. Image attribution: Fluorescent minerals (Hgrobe 06:16, 26 April 2006 (UTC)) – credit: Hannes Grobe/AWI, Fluorescent minerals hg, CC BY-SA 2.5, on Wikimedia Commons

Luminescence is the term we use to describe when substances spontaneously emit light. It's also described as "cold radiation" because it can happen to substances that aren't heated.

There are many different kinds of luminescence, and you may already know some of them because they are quite common. Here are a few examples of luminescence and how they work:

Photoluminescence– resulting from absorption of photons

Fluorescence: photons immediately radiate visible light when ultraviolet light waves hit a fluorescent substance. Examples include fluorescent paint pigments, textiles, fluorescent lights, and blacklight inks and dyes that glow when you shine an ultraviolet light on them (Figure 2.27).

Phosphorescence: when a phosphorescent substance is exposed to short wavelengths of light (high energy), it glows by absorbing the light and emitting it at a longer wavelength (low energy). Photons may radiate for a prolonged period of time after the light source is removed. Glow-in-the-dark toys and paints are good examples of this.

Fluorescent clothes that glow with <span class=

What is the difference between fluorescence and phosphorescence? Phosphorescent substances continue to emit photons for a longer period of time after the light source is removed, whereas fluorescent substances tend to emit photons for a shorter time.UV blacklight" class="internal default" style="width: 454px; height: 341px;" width="454px" height="341px" data-cke-saved-src="/@api/deki/files/190569/1280px-Black_light_theatre_Prague_HILT_13-1024x769.jpg" src="/@api/deki/files/190569/1280px-Black_light_theatre_Prague_HILT_13-1024x769.jpg" data-quail-id="142"> Figure 2.27. Fluorescent clothes that glow with UV blacklight. Image attribution: Black light theatre Prague, Black light theatre Prague HILT 13, CC BY-SA 4.0, on Wikimedia Commons

Chemiluminescence – from chemical reactions

Glow sticks are a good example of **chemiluminescence**. When you crack a glow stick, two chemicals are mixed together that produce a reaction. This reaction excites electrons in the atoms and they emit photons. This reaction is only temporary and you can't "recharge" a glow stick. You can only create this chemical reaction once.

Bioluminescence is a form of chemiluminescence. Marine creatures, fireflies, algae (Figure 2.28), bacteria and other types of organisms that glow in the dark create light through chemical reactions that occur in their bodies. It happens when a light-emitting molecule reacts with a certain type of enzyme that the animal produces.

Learn more about bioluminescence.

Watch a short video of a surfer on a bioluminescent wave here.

Electroluminescence – from passing an electric current through a substance

LEDs (Light Emitting Diodes) are semiconductor devices that emit light when an electric current is passed through them. The colour of LED lights depends on the amount of energy passed through the semiconductors, which then determines the energy of the photons. Different amounts of energy produce different light wavelengths and therefore different colours (Figure 2.29). White light LEDs are created by using multiple semiconductors or a layer of light-emitting phosphors on the semiconductor device. It's a combination of fluorescence and electroluminescence. While it is possible to create white light from red, green and blue LEDs, this isn't the best method for colour rendering as only a narrow band of light wavelengths is used. The first LEDs emitted low-intensity infrared light. Visible and ultraviolet light LEDs were developed later.



Figure 2.29. Red green and blue LEDs. Image attribution: R, G, and B LEDs [7]. by PiccoloNamek, Uploaded to English Wikipedia under GDFL-self (GNU Free Documentation Licence) by the author, on Wikimedia Commons

Radioluminescence – light produced by bombardment with ionising radiation

Radioluminescence happens when light is generated from a substance that is bombarded with ionising radiation, such as alpha particles, beta particles, or gamma rays. Dials on watches and clocks that glow in the dark are made from luminous paint containing the radioactive substance **Radium** (Figure 2.30).

Radium paint is a toxic substance and it created serious health problems for those who worked with it to create watch, clock and instrumentation dials. See Problematic colours in this resource for more information about the *Radium Girls* who worked in the factories that produced these radium dials.

Radium-based paints were replaced with **Promethium** and **Tritium** later in the 20th century as they have much lower radiation, making them safer to use.



Figure 2.30. Radium clock dial from the 1950s. Image attribution: Arma95, Radium Dial, CC BY-SA 3.0, on Wikimedia Commons

Mechanoluminescence – physical pressure applied to substances like crystals

Piezoelectricity: the devices that light gas stoves, grillers and some lighters use ***piezo ignition*** (Figure 2.31). This mechanoluminescence works when pressure is applied to a PZT crystal (lead zirconate titanate) with a small hammer, which produces a sudden high voltage and generates an electric spark that ignites the gas.



Figure 2.31. A Piezo ignition device. Image attribution: Petteri Aimonen, Piezo igniter, marked as public domain, on Wikimedia Commons

There are many other kinds of luminescence not included in this resource. Learn more from this Wikipedia page.

Test yourself: what type of luminescence is this?

A multiple choice quiz to test your understanding of types of luminescence

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again: 2.2 Colour in chemistry

Colour chemistry 1: animals that can change colour



Figure 2.32 Blue ringed octopus. Image by Rickard Zerpe on Wikimedia Commons, licensed under CC BY-SA 2.0.

There are many ways that colour is involved in chemical processes. Some of these processes occur naturally – as with certain animals that can change their colour by **cell signalling** (Figure 2.32). Some processes are used for medical diagnostic tests that help to keep us healthy – like COVID tests. Other processes are used to measure chemical substances and reactions in laboratories, for creative purposes like photography and making art materials, or simply for entertainment like fireworks.

The four pages in this section explain some examples of colour processes in chemistry with links to further information, and practical learning activities that are simple science experiments you can do at home.

Animals that can change their colour

Only animals classed as ***Ectotherms*** are able to change their colour. An ectotherm cannot generate its own body heat like mammals and birds. This group of animals includes reptiles, frogs, cephalopods (including species of squid, octopus, cuttlefish, and nautilus), insects, crustaceans and fish. Colour changes happen because of how light is absorbed and reflected by the chemical pigments in the cells of these creatures.

Reasons for the ability to colour change are mainly to camouflage and protect the animal from dangers such as predators, to assist with hunting prey, or to communicate warning and mating signals to other creatures. Colour change can also help an animal regulate its body temperature. For example: a lizard may be able to change to a darker colour that absorbs more lightwaves from the sun to warm itself.

There are different types of colour change in ectotherm animals, and these can be triggered by different processes in ***chromatophores*** (cells that can produce colour). Some of these processes are physiological – the changes in chromatophores are controlled by muscles and pigment sacs. Others are caused by crystal structures in the cells which can reflect different light wavelengths.

Watch this video to learn about the complex way chameleons and other animals can change their colour (4:28 minutes)

Media attribution: Chameleons are Masters of Nanotechnology by Reactions on YouTube

Learn more from this online resource.

Colour chemistry 2: photography and chromatography



Figure 2.33. Daguerrotype photographic image by Louis Daguerre, 1837. Image attribution: Louis Daguerre creator QS:P170,Q131405, Daguerreotype Daguerre Atelier 1837, marked as public domain, on Wikimedia Commons

Photography

> The section on Optics in this resource explains how cameras work to project an image into the device using lenses and a camera obscura. In digital devices, the image is captured and saved as a digital image file, but originally, in traditional photography, the image was captured and fixed onto a light-sensitive film, which could then be used to reproduce multiple images.
>
> Converting the image that appears in the camera to something that is printed on paper requires multiple chemical processes. An introduction to chemical photography is explained here...

Black and White photography

Black & white photography was invented before colour photography. It involves the use of light-sensitive **silver halide crystals** that form an emulsion on celluloid or plastic film with gelatin (originally, glass plates were used). The energy from the light waves that enter the camera and hit the film causes a chemical reaction with the silver halide. Creating silver halide crystals for photographic film is a complex chemical process making them photosensitive to all visible wavelengths of light.

The more light that comes into the camera and hits the light-sensitive film, the greater the reaction in the silver halide crystals, which creates silver ions. The grains of silver halide create an image by reacting to the different amounts of light hitting different parts of the film and creating different quantities of silver ions. However, you can't see the image on the film until the film is 'developed' because it's still light-sensitive and the image is not yet stable.

Developing photographic film is another process where chemicals are used to turn the silver ions into silver metal – more light produces more silver and a darker, opaque area on the film. Less light produces a more transparent area on the film. This process creates what we call a **negative image** – light parts of the image appear dark and dark parts appear light. Once the film is developed, the chemical processes must be stopped and fixed so that the silver halide crystals are removed and only the silver metal is left. Once developed, you can take the film out into the light and see the negative image.

So how do we create a positive image from the negative film? Another chemical process is used with light-sensitive paper, which also contains silver halide crystals held on the paper with a gelatinous emulsion – like the photographic film.

A white light is shone through the negative film onto the paper, activating the silver halide to create more silver ions on the paper.

You can't see the image on the paper until it is developed in a bath of chemicals that turn the silver ions into silver metal – which oxidises and shows up as dark areas on the paper. The process is then stopped and fixed – just like the film. This is how we get a positive image on a photograph – the clear areas on the negative let more light through and create darker areas on the paper. The dark, opaque areas on the film let less light through and therefore create lighter areas on the photographic paper.

Learn more about the history of photography and Daguerre(Figure 2.33) who was one of the first photographers to create stable photographic images.

Colour photography

Colour photography is more complex than black and white. It is a subtractive colour process. Colour film uses silver halide just like black and white photography, but the colour film has three layers of emulsion, each with a different light-sensitive dye mixed with silver halide that is sensitised so that each layer only captures either red, green or blue light. To create a colour negative image, the dyes form the complementary or opposite colour:

- Red-sensitive layers have cyan-coloured dye.
- Green-sensitive layers have magenta-coloured dye.
- Blue-sensitive layers have yellow-coloured dye.

The film is developed, and the silver halide is removed in this process, leaving only the coloured layers on the film. Printing to colour photographic paper is a similar process to printing black and white, turning a negative colour image into a positive colour image, but the paper has three layers of emulsion, just like the colour film, sensitive to red, green and blue light, which creates a chemical reaction turning the dyes into cyan, magenta and yellow dyes (Figure 2.34).

Note: there are also special colour films that create a positive image instead of a negative one, and these were used in ***slide projectors*** *– a technology not often seen today since the advent of digital photography and projections.*

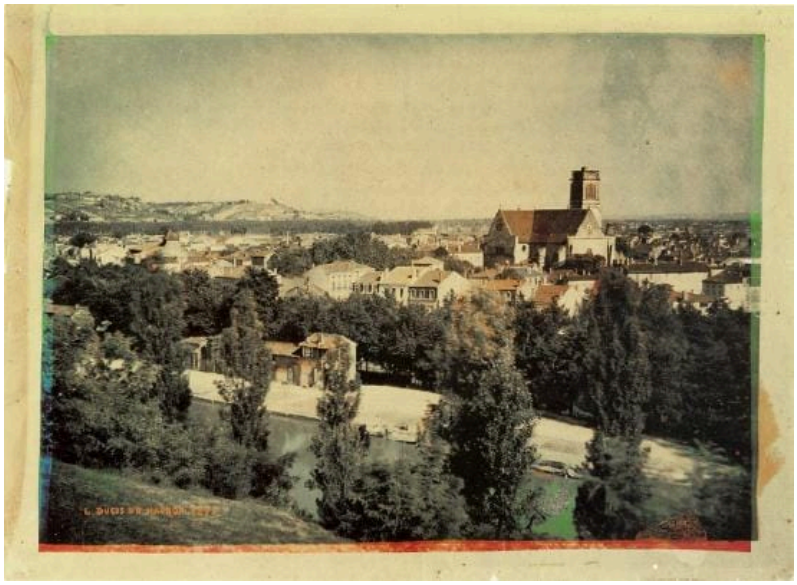


Figure 2.34. Early colour photograph of Agen, France by Louis Ducos du Hauron, 1877. Image attribution: Louis Ducos du Hauron (1837 – 1920), Duhauron1877, marked as public domain, on Wikimedia Commons

Learn more about the history of colour photography.

Chromatography

Chromatography is a chemical process that is used for separating the different parts of a mixture – a liquid or gas substance that has multiple ingredients. The name means 'colour writing' from the Greek words *chroma* and *graphe*. This process was originally used to separate different coloured pigments that were all mixed together – a technique also used to create coloured dyes for making textiles and carpets.

Chromatography today isn't specifically about separating colours. It's used to separate all kinds of substances.

The way it works is by dissolving the mixture in some kind of solvent which could be gas or liquid **– the mobile phase –** and then using another material which could be a liquid or solid – **the stationary phase –** to separate the parts of the mixture. Because the different substances in the mixture travel along the stationary phase material at different speeds, they get separated from each other and form different bands.

If you're trying to separate colours from a liquid mixture by using paper, for example, you would see different stripes of colour appearing as some colours move faster along the paper and so move closer to the top, and others move more slowly, so remain closer to the bottom – like a rainbow of different coloured stripes. Figure 2.35 shows an example of this using paper and a liquid solution to show the chromatography of chlorophyll.

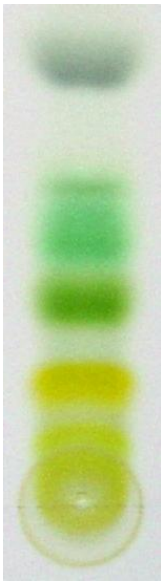


Figure 2.35. Chromatography of chlorophyl. Image attribution: Flo~commonswiki, Chromatography of chlorophyll – Step 7, CC BY-SA 2.5 on Wikimedia Commons

A very simple way to see this process work is to use black ink (the mixture), water (the solvent) and absorbent paper (the stationary phase material) to separate the colours from the ink mixture. See the activity details below – you can try this experiment at home.

Learn more about chromatography:

- Ask a Scientist: What is Chromatography?
- Explain That Stuff: Chromatography

Activity: paper chromatography experiment

You can make your own science experiment at home with a few simple materials to see how chromatography works in practice.

Watch this video for details and try your own experiments:

Media attribution: Paper Chromatography | Fun Experiments and Clear Explanations, Science Buddies on YouTube

Colour chemistry 3: universal indicator and diagnostic tests



Figure 2.36. Test tubes containing solutions of pH 1–10 colored with an indicator. Image attribution: Alvy16, PH scale 3, CC BY 4.0

Universal indicator

We can identify the acidity levels (pH value) of many substances with colour testing.

What is pH?

pH, originally meaning “potential of Hydrogen”, is a numbering system used for measuring the acidity of substances dissolved in a water solution. A low pH value has a higher **acid** content. A high pH value indicates a higher **alkaline** or **basic** substance. Water has a neutral pH value of 7, which is why it’s a good solution to test the pH of other substances dissolved in it. For example, lemon juice can have a pH of around 2 – which is very acidic. Lemons have a high quantity of citric acid in them, which is why they have a low pH value. The detergent you use to wash your dishes is alkaline or basic, so it might have a pH value of around 8.

Learn more from this book Acids and Alkalis by Denise Walker.

To test the pH level of any solution, a universal indicator is used. This can be in the form of a paper tape that you dip into your solution, or it could be a liquid that is added to a solution. The universal indicator contains a set of chemicals that change colour depending on the amount of acid or base substances in the solution (Figure 2.37). They work by producing extra protons depending on how acidic or alkaline the solution is, which in turn emit photons with different wavelengths.

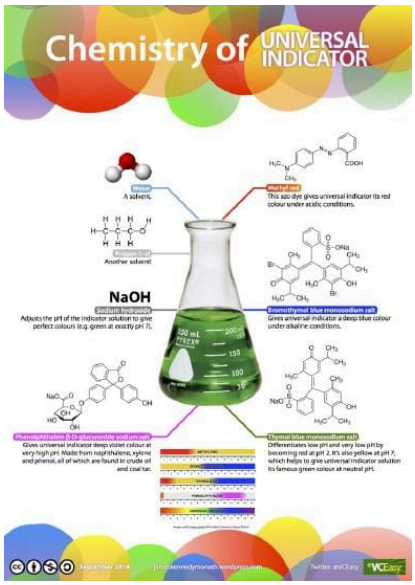


Figure 2.37. Chemistry of Universal Indicator by James Kennedy Monash. Image attribution: Chemistry of Universal Indicator by James Kennedy Monash, Creative Commons licence Attribution-Non-commercial-ShareAlike-4.0, select image to enlarge.

Indicators in Nature

Hydrangeas are flowering plants that can grow flowers in a range of colours, including white, pink, purple and blue. Did you know that Hydrangea flowers can change their colour depending on the acidity of the soil? You can turn your pink hydrangea flowers blue by adding an acidic chemical like aluminium sulphate to your plant's water (Figure 2.38). The roots absorb this chemical, and the flower petals act as a natural indicator, turning from pink to blue if the soil pH level is more acidic than alkaline (basic).



Figure 2.38. Blue hydrangea flowers. Image attribution: photograph by Lisa Cianci, Creative Commons licence Attribution-Non-commercial-ShareAlike-4.0

You can also use **red cabbage** as an indicator by making a solution with chopped-up leaves and water. Red cabbage contains a water-soluble pigment called **anthocyanin**, which turns red if mixed with an acid substance and blue/green if mixed with an alkaline/base substance.

There are other plants that have anthocyanin and can also be used in the same way. Can you find three other examples?

Learn more about acids and bases.

You can buy universal indicator online and do your own experiments with substances around your home to see which are acids and which are bases, or you can make your own indicator with red cabbage. You can start by testing foods, drinks and cleaning products around your home. Is your tap water a pH of 7? If not, it might have other chemicals in it. See the activity below for instructions on making your own red cabbage indicator.

Activity: make a red cabbage indicator

You can make your own **indicator** at home with a red cabbage and a few simple materials to test the pH of different substances.

Watch this video for details and try your own experiments:

Media attribution: Test asides with home-made pH indicator, BBC Earth Lab on YouTube

Diagnostic medical tests

Have you ever wondered how a pregnancy test or a COVID Rapid Antigen Test (RAT) works? How do the coloured lines appear on the test strip?

A pregnancy test uses chemicals that change colour when they come into contact with certain enzymes that attach to antibodies. When you are pregnant, your body produces a hormone called human chorionic gonadotropin (hCG). This hormone is excreted by the kidneys into urine – so putting urine on the test strip will start a chemical process that tests for the hCG hormone. The test strip contains an enzyme that will attach itself to the hCG hormone in the urine. As the urine moves along the test strip, there are two lines that can change colour – one will change colour and become visible if it comes into contact with the enzyme that is attached to the hCG – the test line. Another line will change colour and become visible if the enzymes not attached to hCG come into contact with it – the control line.

Two lines are needed to ensure the test has worked correctly because if there was only one line, it could show a false-negative result if the test didn't work properly.

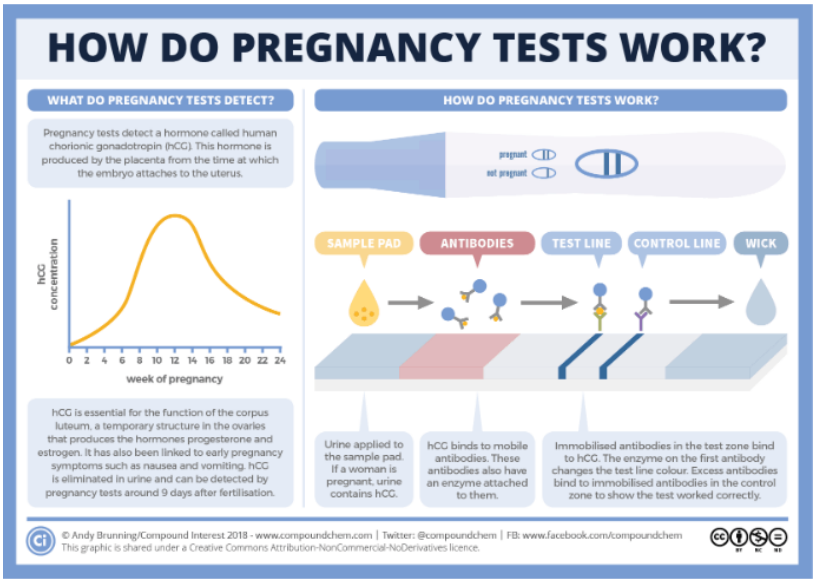


Figure 2.39. How do pregnancy test work? Image attribution: Compound Interest – How do pregnancy tests work? Select image to enlarge.

Watch this video that explains how a **COVID rapid antigen test** works:

Media attribution: Chemist Breaks Down How At-Home Covid Tests Work | WIRED by Wired on YouTube

Colour chemistry 4: fireworks



Figure 2.40. New Year's Eve Fireworks on Sydney Harbour. Image attribution: Rob Chandler, New Year's Eve on Sydney Harbour, CC BY-SA 2.0 on Wikimedia Commons

How do they make different coloured fireworks?

Fireworks were recorded as originating from China in the 8th Century CE. It is said that explosive **black powder** was accidentally invented by alchemists who mixed potassium nitrate (also called s*altpetre*), sulfur and honey together while trying to create the *elixir of life*. The mixture exploded when heated – this is called an **exothermic chemical reaction**. Recipes for this explosive mixture eventually made their way across Asia and the Arabic world to Europe, which is where fireworks as we know them today were first created.

The explosive part of fireworks is gunpowder (black powder) which is now made from saltpetre, sulfur and charcoal. The reason fireworks can appear to have a range of colours is because different chemical compounds are used, which are mostly metals that burn very brightly, and these are coated in gunpowder. Exploding gunpowder burns the chemical compounds, which causes electrons in the compounds to get excited and release excess energy as photons (light). These photons have different wavelengths in the visible spectrum depending on the energy of each chemical's electrons, and this is how we see fireworks as different colours (Figure 2.41).

Some colours, like blue fireworks, are harder to make because the chemical compounds are not stable. Purple is also difficult because it's made from a mixture of red and blue compounds.

Fireworks colours and their chemical compounds:

- **Red – Strontium salts**
  Strontium Nitrate, Strontium Carbonate and Strontium Sulfate
- **Orange – Calcium salts**
  Calcium Carbonate, Calcium Chloride and Calcium Sulfate
- **Yellow – Sodium salts**
  Sodium Nitrate, Sodium Oxalate and Cryolite
- **Green – Barium salts**
  Barium Nitrate, Barium Carbonate, Barium Chloride and Barium Chlorate

- **Blue – Copper salts**
  Copper (I) Chloride, Copper Carbonate and Copper Oxide
- **Purple – Combination of Red and Blue**
  Strontium and Copper compounds
- **Silver – white hot metals**
  Magnesium and Aluminium
- **White – burning metal**
  Magnesium, Aluminium and Titanium

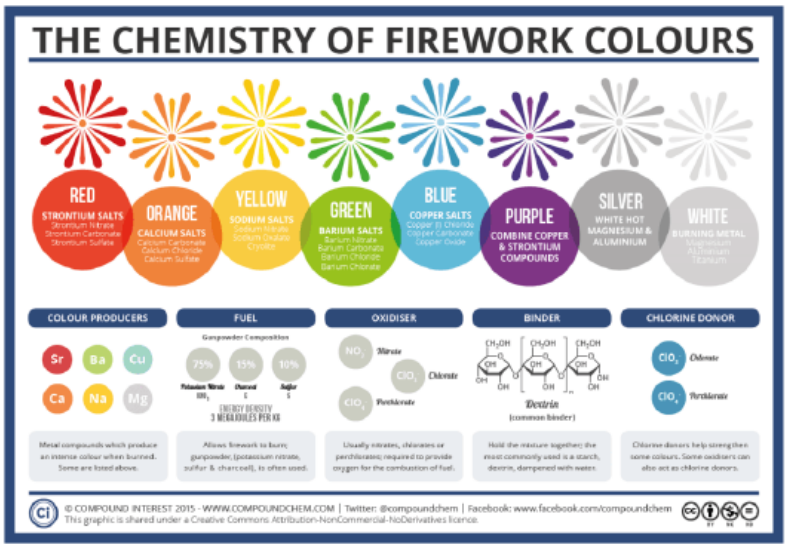
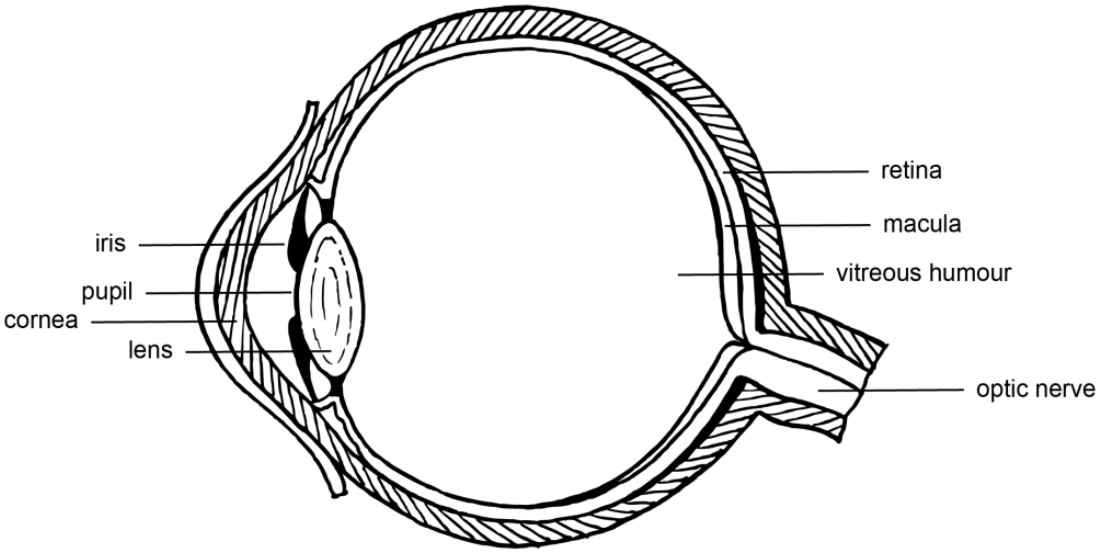


Figure 2.41. Image attribution: this image shared from www.compoundchem.com, Creative Commons Attribution-NonCommercial-NoDerivatives licence, © Compound Interest 2015. Select image to enlarge.

This page titled 2.3: Colour in Chemistry is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

2.4: The Eye- How We See Colour

Anatomy of the human eye



Anatomy of the human eye

The eye works like a Camera Obscura – a small, almost spherical chamber (Figure 2.43) where light enters via the **cornea** and through a small hole (the **pupil**). The **iris** controls how much light enters the eye through the pupil. Light then passes through a **lens** which can change shape to focus the image. The image is projected through a transparent, gel-like substance (**vitreous humour**) to the back of the eye (**retina and macula**), which contains light-sensitive cells. The retina is connected to the brain via the **optic nerve**.

Just like in a camera obscura, the image projected onto the retina is upside-down and reversed, but we learn to interpret the visual input the right way around.

What is perhaps the most interesting part of eye biology for colour theorists is how the cells in the retina are sensitive to light and colour and how this information is transmitted to the brain.

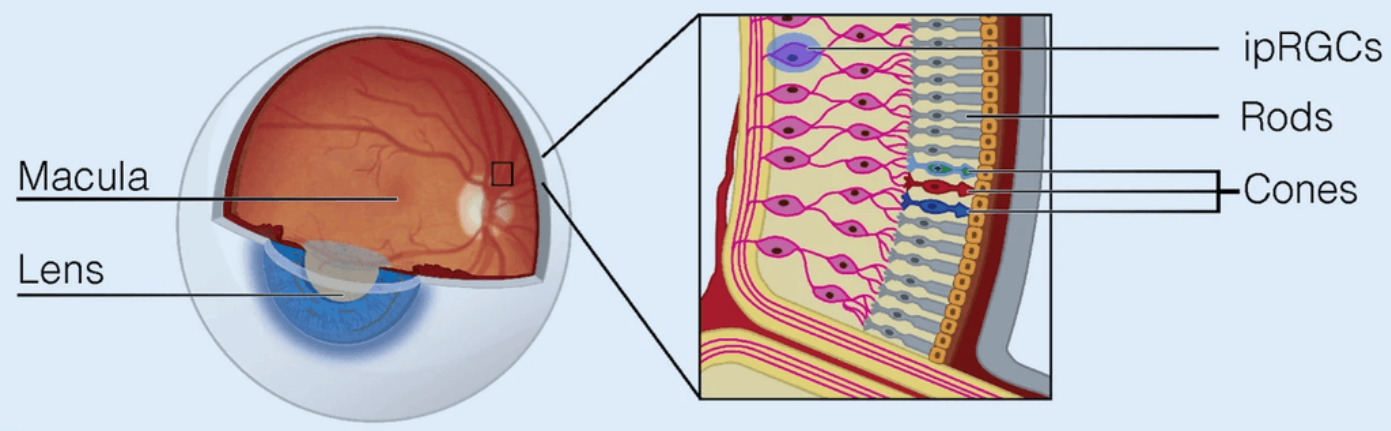


Figure 2.44. Overview of the retina photoreceptors. Schematic view of the eye with the retina at the back of the eye (the fundus), containing cones, rods and the intrinsically photosensitive retinal ganglion cells (ipRGCs) expressing the photopigment melanopsin. Image by Christine Blume, Corrado Garbazza & Manuel Spitschan on Wikimedia Commons, licensed under CC BY 4.0.

Retinal cells

Photons of light falling on the light-sensitive cells of the retina are converted into electrical signals that are transmitted to the brain by the optic nerve (Figures 2.44 and 2.45). The brain interprets this information as vision.

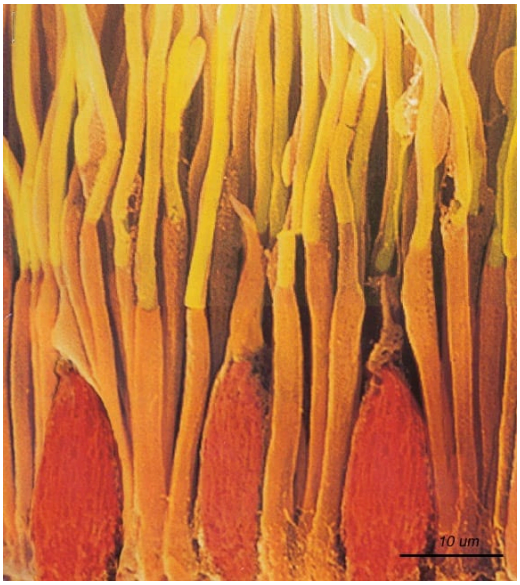


Figure 2.45. Photographic image of rod and cone cells of the retina. Image by: Helga Kolb, Rrods and cones of the primate retina, CC BY-SA 4.0, on Wikimedia Commons

There are three types of cells in the retina that convert light energy into electrical energy.

Rods
These cells respond to low-intensity light and help us to see low-resolution, black-and-white images – it's why we can still see things in very low light. Animals that can see in the dark have more rods than we do.

Cones
These cells respond to high-intensity light and enable us to see high-resolution, coloured images.

Photosensitive ganglion cells
These cells respond to a full range of light intensities and help the eye adjust the amount of light that enters the eye and reaches

the retina. Ganglion cells help define what we see – especially when it comes to recognising edges and borders.

Ganglion cells have also been discovered to regulate the hormone **melatonin**, and the **circadian rhythm**, which both help us have a regular sleep cycle. This is why it's not good to look at your screen devices late at night because the blue light stimulates these cells and can inhibit natural sleep processes.

Cones – how do they detect colour?

There are two current theories about how cone cells detect colour, and they can both help us understand how colour vision works.

Trichromatic colour vision theory

Trichromatic theory of colour vision tells us that we have three different types of cone cells in our eyes – one each for red, green and blue. These cells are stimulated by different ranges of light waves, and it's the combination of information from all three types of cells that makes up the millions of colours our brains can perceive. However, it doesn't fully explain phenomena like how we can't see "yellowish-blue" or "reddish-green".

Opponent and complementary colour theories

The opponent process theory of colour tries to describe how the cone cells are more complicated than just red, green, and blue receptive. Instead, the cones have opposite reactions. Originally the opponent pairs were thought to be red-green, blue-yellow and black-white. But in recent times, complementary colour theory shows us that the three "opponent" pairs are red-cyan, green-magenta, and blue-yellow.

These are very complex theories that attempt to explain all the weird things that we see, like afterimage optical illusions. None of the theories described here are able to explain all of our visual experiences, but research continues to explore how our eyes and brain work together to see colour.

You can test the afterimage and complementary colour theory now – all you need is a white piece of paper or wall and the image in Figure 2.46.

> **Activity – afterimage optical illusion**
>
> Stare at the image in Figure 2.46 for 20 seconds (red square with a smaller white interior square). Then quickly look at a piece of white paper or a white wall and stare at the white area for a while.

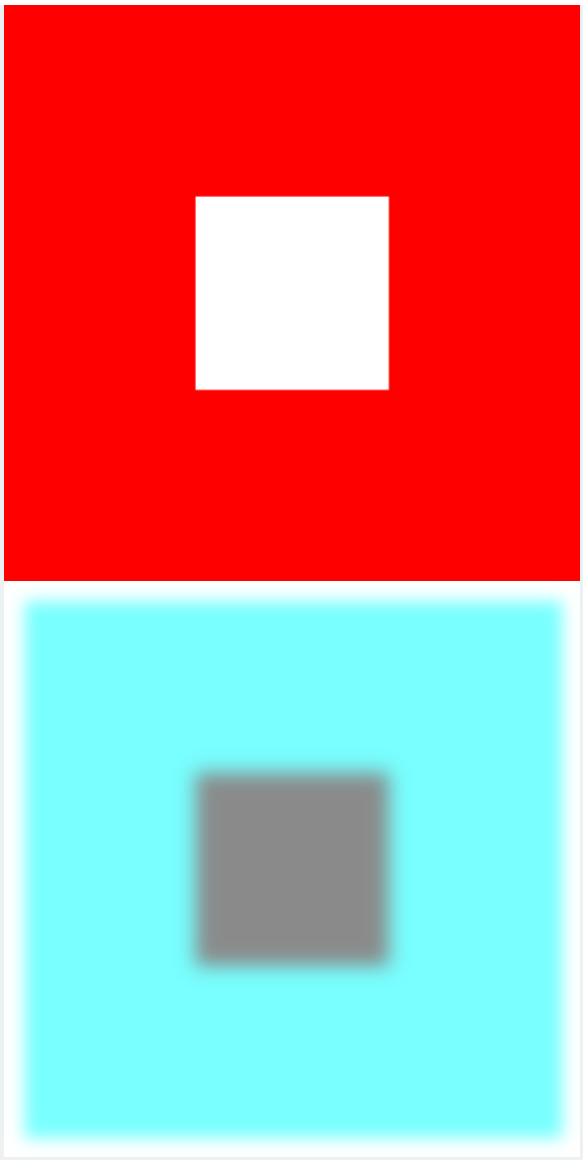


Figure 2.46. Red Square with white interior. Image attribution: Red Square with white interior by Lisa Cianci, Creative Commons licence CC BY-NC-SA 4.0What you might briefly see is a faint afterimage of the opposite colours – a blurry cyan square with a smaller dark square inside it, as in Figure 2.47.This optical illusion can be explained by opponent theory. By staring at the red square for a long time, the cone cells become weaker at detecting red (or transmitting the red vision signal to the brain). Therefore, when you look away to the white paper, the white colour doesn't register properly as white, it leaves out the red part of white light, and you only see the opposite colour – cyan.After a while, this illusion fades and your vision will return to normal.Figure 2.47. Red afterimage: cyan square with grey interior. Image attribution: Red afterimage: cyan square with grey interior by Lisa Cianci, Creative Commons licence CC BY-NC-SA 4.0

[Learn more about opponent process on Wikipedia]

Chimerical colours – impossible or imaginary colours.

The afterimage in the experiment above is also known as a **chimerical colour**, after the mythical beast, the **Chimera**. Objects around us do not have imaginary colours, we use that term to describe colours we might see that are not part of normal vision. However, theoretically, there are mathematical descriptions of colours that are outside the visual colour space.

The cone cells in our eyes have sensitivities to short, medium and long wavelengths, and these sensitivities overlap a bit. We don't

usually see colour with only one type of cone at a time – it's usually a mixture. An impossible colour might occur, for example, if we only saw green with the medium-length cone – we might see it as an extremely intense green. Something outside of the range of the CIELAB colour space.

Types of Chimerical colours (Figure 2.48)

Stygian

Stygian colours are both dark and impossibly saturated. You could see "stygian blue" by staring at bright yellow (to cause a dark blue afterimage), then looking at a deep black surface. The blue afterimage is viewed over the black, and simultaneously as dark as the black.

Self-luminous

The experiment using Figure 2.46 is an example of self-luminous colour. The cyan afterimage is self-luminous and might appear even brighter than the white paper you are looking at.

Hyperbolic

This is an impossibly highly saturated colour (hyperbolic means exaggerated). You can try an example of this more intense and highly saturated colour by changing the experiment using Figure 2.46.

Try the experiment again, and this time, after you focus on the red square (Figure 2.46), look straight at the blurry cyan square below it (Figure 2.47). You should see an impossibly bright cyan – brighter than any colour you could see with normal light.

Eye fatigue template for impossible colours

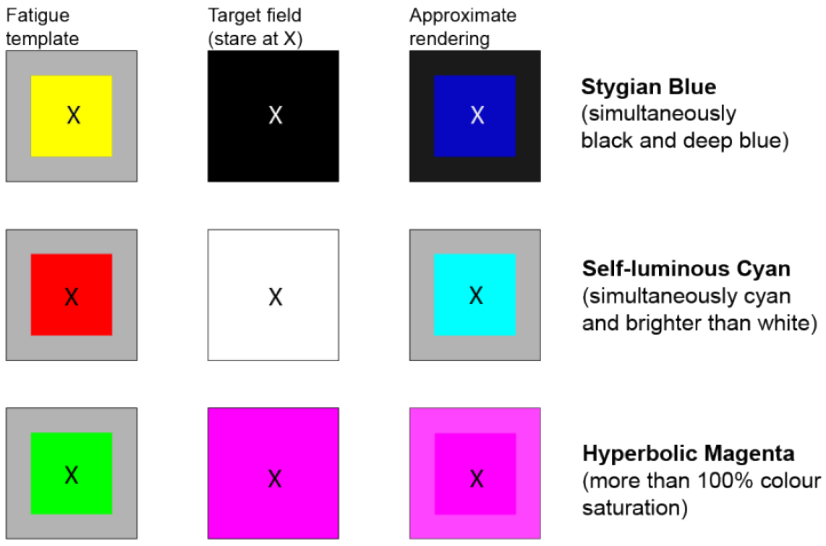


Figure 2.48. Diagram for viewing "impossible" chimerical colours that are only accessible via fatigue effects in the human eye. Image attribution: Lisa Cianci, adapted from an image by Zowie at English Wikipedia, Chimerical-color-demo, CC BY-SA 3.0, on Wikimedia Commons

How the brain interprets colour information

Binocular vision

As stated in the Optics section on 3D glasses, we have two eyes, yet only see one image. The brain processes a lot of visual information that comes from two sources at the same time, and it puts this all together to make one image that allows us to

interact with the world around us. There are many complex processes happening very quickly, all at once. It is thought that around 40% of the brain's function is used for processing vision.

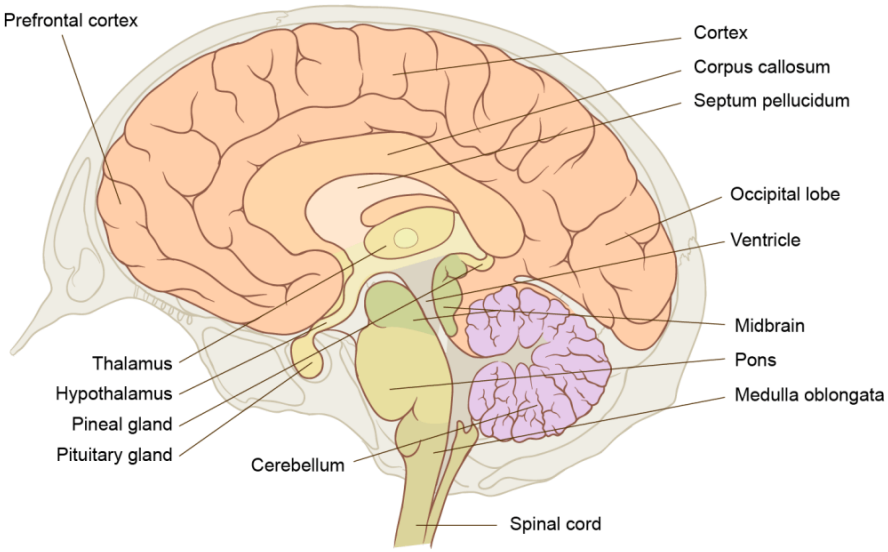


Figure 2.49. Human brain, adapted from an image by Patrick J. Lynch via Wikimedia Commons, licensed under CC BY 2.5.

The optic nerve connects the retina at the back of the eye to a part of the brain called the **thalamus** (Figure 2.49). The thalamus processes the information from both eyes and sends it to another part of the brain – the **visual cortex** in the **occipital lobe**. The visual cortex contains cells that detect different kinds of visual information, like colour, form and movement. It puts all of this information together into what we perceive as an image. This image is then sent to the **prefrontal cortex**, which processes that information along with other information, like emotions and memories. This all helps us to not only see but to understand what we are seeing and make sense of objects, movement, depth perception, light and colour.

Watch this video for more information

Media attribution: How Your Eyes Make Sense of the World | Decoder, National Geographic, on YouTube

The way we perceive colour is subjective and can depend on how we are seeing the environment, the lighting, and the positioning of colours next to each other. This relates to the content in chapter 1, section 1.3 colour aesthetics, and the creative experiments done by artists and theorists like Johannes Itten and Josef Albers.

Read this article: Colour is all in our heads!

Is Magenta a real colour?

There was a recent online article claiming that magenta isn't a real colour because it doesn't exist on the colour spectrum. Of course, you could say that about any colour that isn't visible on the spectrum as a single wavelength (like brown, for example) because our brains interpret many light wavelengths from the visible spectrum and mix the wavelengths for red and blue to make a colour that we see as magenta.

Read this *Ars Technica* article to understand the whole story.

Optical illusions

Optical illusions can tell us a lot about how our brains make sense of the light waves that enter our eyes. One of the most common illusions relates to relative colour and lightness. A colour can look completely different depending on what's next to it.

The animation in Figure 2.50 is a good example of the concept. The moving square does not change colour at all, but our perception of the colour changes as the background colour blends from pink to green.

[Content couldn't be imported.]

It also helps explains recent viral social media phenomena like the striped dress – is it blue and black or white and gold?

Learn more about optical illusions here and watch this video for more information.

Media attribution: Optical Illusions show how we see | Beau Lotto, Ted on YouTube

This video discusses how what we see is subjective – can you really trust what you see?

Media attribution: Everything You See is Fake | Fractured Realities, BBC Earth Lab on YouTube

Colour blindness

Colour blindness is usually a genetic condition that you are born with. It is often a hereditary condition, which means that it is passed down from your parents, but there are other ways that people can become colour blind, including through disease or injury.

Colour blindness affects colour perception – most people with colour blindness can see clearly and can see some colours, but not all colours of the visible spectrum. Some forms of colour blindness affect more males than females. For example, the gene mutation responsible for red/green colour blindness is carried on the X chromosome. Males only have one X chromosome, and females have two, which means that females are less likely to have colour blindness because even if they have the mutated gene on one X chromosome, they have another one which may not have the mutation.

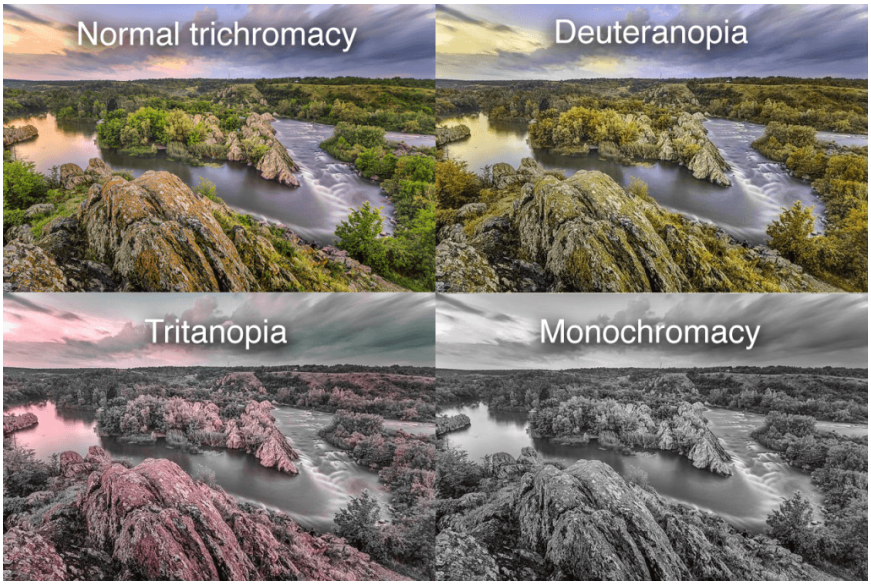


Figure 2.51. Comparisons of vision differences: normal trichromacy, deuteranopia, tritanopia and monochromacy. Image attributions:Q-lieb-in, Вечір на “інтегралі” – річка Південний Буг, CC BY-SA 4.0, Tohaomg, Deuteranopia sight, CC BY-SA 4.0, Tohaomg, Tritanopia sight, CC BY-SA 4.0, Tohaomg, Monochromacy sight, CC BY-SA 4.0

Types of colour blindness

Normal colour vision is called **Trichromacy** (*tri* means three, *chroma* means colour) where all three types of cone cells function properly.

Anomalous trichromacy is where normal trichromatic vision doesn’t work properly (Figure 2.51). The cones might still perceive light, but they are not perceiving the right range of light wavelengths. This can also have different levels of severity. Some people with anomalous trichromacy might not have trouble seeing a full range of colours, while others will have noticeable vision differences.

Types of anomalous trichromacy

- **protanomaly** – reduced sensitivity to red light
- **deuteranomaly** – reduced sensitivity to green light
- **tritanomaly** – reduced sensitivity to blue light (the rarest form)

Dichromacy (*di* means two) is where only two types of cone cells function properly. This means that there are parts of the visible spectrum that can't be perceived by the brain.

Types of Dichromacy:

- **protanopia** – unable to see red light
- **deuteranopia** – unable to see green light
- **tritanopia** – unable to see blue light (the rarest form)

A common type of colour blindness is red/green colour blindness, but it's more complex than not being able to see red or green. The type and severity may be different for each person. Learn more about red/green and other types of colour blindness here.

Monochromacy (achromatopsia)

Monochromacy (*mono* means one) is where no colour can be seen at all – everything appears to be in black and white with shades of grey. This form of colour blindness is rarer than Dichromacy (Figure 2.52).

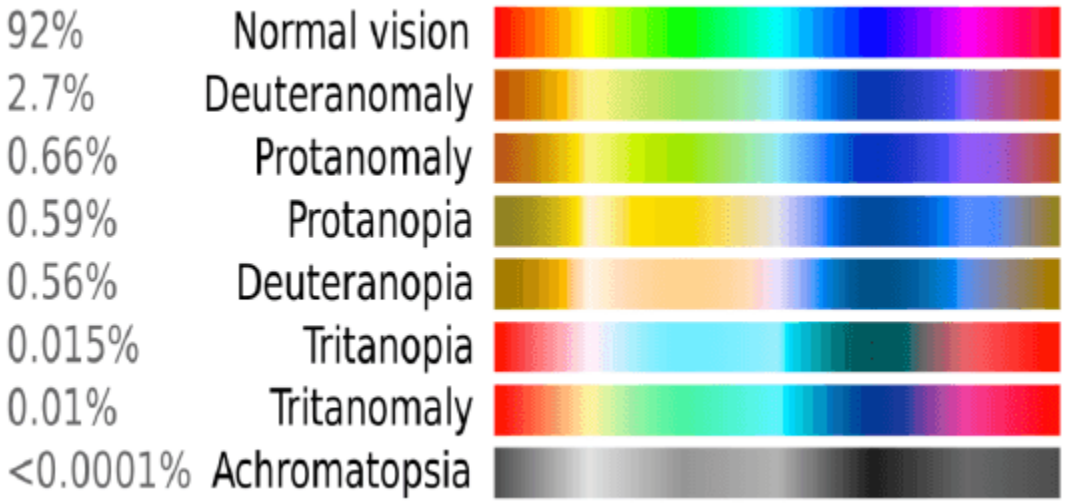


Figure 2.52. A comparison of the visible colour spectrum in common types of colour blindness. diagram. Image attribution: SyntaxTerror, Color blindness, marked as public domain, more details on Wikimedia Commons

Watch this video for more information about colour blindness:

[Content couldn't be imported.]

How do I know if I am colour blind?

Some people may not be aware that they have colour blindness – especially if it's not severe. Other people may find out early or late in their lives. If you think you might be colour blind, there are websites with online tests that you can try for red/green colour

blindness, but not for blue colour blindness.

You can see your doctor if you think you may have colour blindness or vision difference. Professional testing is recommended for certain professions like pilots, astronauts, truck drivers, and designers or creative people working with colour. One of the disadvantages of colour blindness, apart from not seeing a full spectrum of colours, is understanding common communication devices, like traffic lights, which are red, amber and green.

Activities – test yourself

The Ishihara 38 plate CVD test is a popular test you can try now for red/green colour blindness (Figure 2.53). It uses circles with coloured dots that display numbers or lines. If you have a red/green colour vision problem, you may find it difficult to see the numbers and lines in many of these circles.

Ishihara Plate 9 – Can you see a number in this image?

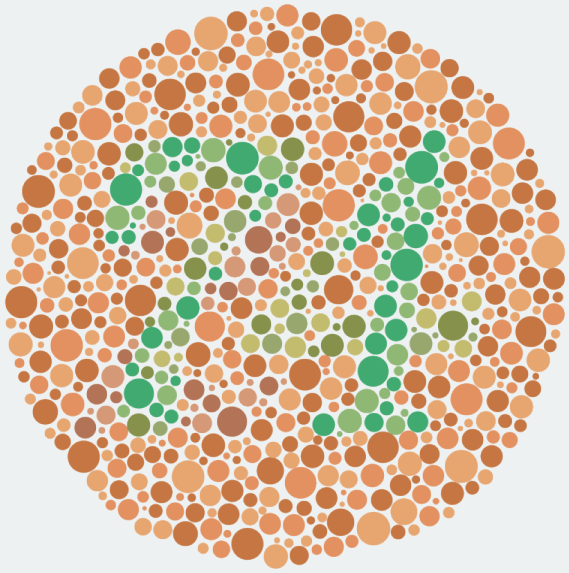


Figure 2.53. Ishihara Plate 9. Image attribution: Original: Shinobu Ishihara creator QS:P170,Q530761 Derivative work: Pbrks, Ishihara 9, marked as public domain, more details on Wikimedia Commons

The Farnsworth-Munsell hue test is for the arrangement of colours – whether you can see the slight differences in a gradient between two colours can tell you if you have a colour deficiency.

These resources contain information and self-test activities to learn more about colour blindness.

- ColourblindAwareness.org
- Xrite.com: color perception part 1
- Xrite.com: hue test
- ColorVisionTesting.com
- Color-blindness.com: Ishihara cvd test

Vision difference: tetrachromacy and synesthesia

Not everyone sees the same colours or perceives the world around us in the same way. Here are two examples of vision difference:

Tetrachromacy

Tetrachromacy (*tetra* means four and *chroma* means colour) is the name for having four types of cone cells in the eye to perceive

colour. It is common in the animal world, but not normal in humans. However, some female humans are tetrachromats and can see a wider range of colours than normal trichromats.

Research is ongoing to determine how this works. One theory suggests that it's related to colour blindness, and the reason it only affects females is because they have two X chromosomes. If a person has one X chromosome with the mutant gene for colour blindness, and the second X chromosome is normal, then this might cause tetrachromacy. This theory speculates that if a person has two different kinds of red/green cone cells that detect different wavelengths of light, they will have the ability to see more colours. Some tetrachromats may also be able to see better in low light conditions.

Watch this video to learn about an artist with tetrachromacy:

Media attribution: Seeing colours nobody else can – Incredible Medicine: Dr Weston's Casebook | Episode 2 – BBC 2, BBC on YouTube

You can also read the BBC article here.

Synesthesia and colour sensory perception

Synesthesia is a neurological condition where you experience one sense through another. An example of synesthesia is hearing music and seeing coloured shapes or for some synesthetes, associating certain numbers or words with particular colours. It's not only colour-related, though. For some people, hearing certain sounds causes tingling sensations in different parts of their bodies. There are many different kinds of synesthesia.

Synesthesia is a type of neurodiversity, and appears at a higher rate in people with other types of neurodiversity such as Autism Spectrum Disorder, or people who identify as transgender or gender variant. Quite a few visual artists and musicians have synesthesia – it's possible this *cross-wiring* of the senses can be a benefit to creative practitioners. Some people with synesthesia have incredible memories too, which could be due to how the brain associates sensory input and how it is stored in memory.

Two of the more common forms of synesthesia are:

- **Chromesthesia** – Sound to colour
- **Grapheme-colour synesthesia** – letters and numbers to colour

Watch this video for more information:

Media attribution: What color is Tuesday? Exploring synesthesia – Richard E. Cytowic, Ted Ed on YouTube

Synesthesia and creativity

Visual artists from history who were known to have Chromesthesia (sound to colour) include: Wassily Kandinsky (Figure 2.54), Vincent Van Gogh, David Hockney, and Arcimboldo (he had vision and taste Synesthesia also).



Figure 2.54. Entwurf 2 zu Komposition VII by Wassily Kandinsky. Image attribution: Wassily Kandinsky artist QS:P170,Q61064, Entwurf 2 zu Komposition VII (Wassily Kandinsky) DSC1682, CC0 1.0 on Wikimedia Commons

Learn more from these links:

- Listening to Art by Alanna Irwin
- How synaesthesia inspires artists

Contemporary artists with synesthesia

- Melissa McCracken
- Carol Steen
- Sobrane Symcock

There are many popular musicians who also have chromesthesia – can you search the Internet and find some that you know about?

This synesthesia FAQ (frequently asked questions) web page has some useful information if you want to learn more.

***Note**: A study that indicated more females have synesthesia than males may not be accurate due to the bias that more females would be likely to self-refer for the study.*[1]

1. Simner, Julia & Carmichael, Duncan. (2015). Is synaesthesia a dominantly female trait? Cognitive neuroscience. 6. 10.1080/17588928.2015.1019441. [1]

Accessible colour

Using accessible colour is important in the media and objects we interact with in everyday life. This enables the greatest number of people to see and understand what is communicated. As explained in the previous sections about vision difference, not everyone can see the same range of colour or light, and some people have other vision problems that make it difficult to see. This is particularly relevant for reading text and for viewing visual communications content like maps, diagrams, charts and infographics that present information in very visual and colourful ways.

If you are a designer working with print or digital media, knowing about accessibility and how to make sure your content is accessible is very useful for creating content that can engage with a wide audience, and promote values like equality and fairness in branding for products and services.

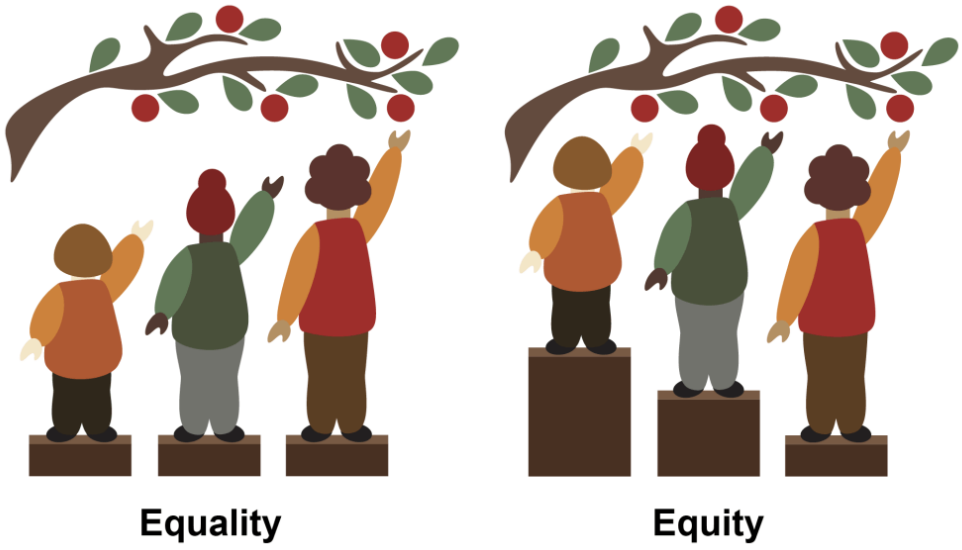


Figure 2.55. Equality and equity, by RMIT, licensed under CC BY-NC 4.0.

Universal, Inclusive and Equity focused design – what are they?

Universal, inclusive and equity-focused design are concepts and principles that can assist you as a designer. They can ensure you consider all user needs when creating all kinds of products, buildings, online content, and anything that goes through a design process.

- **Universal** design principles are about making sure your design is accessible to everyone.
- **Inclusive** design principles include focusing on user groups that might have special needs or who might be otherwise excluded.
- **Equity-focused** design principles are proactive in working with user groups who are minorities or have special needs to create solutions and form ongoing relationships with those communities.

You can use one or more of these as part of your design methodology. Read this article for more information: **Universal, Inclusive and Equity-Focused Design: Why They are Critical for Your Website**.

What does this mean for accessible colour in art and design?

Planning your colour schemes and relationships for creative work should involve careful consideration of accessibility issues that might impact your audience. Examples of accessible colour for both print and digital media include:

- using appropriate contrast (light and dark) in text and background colour
- using colour combinations (hue, saturation and lightness) in text and graphics that people with colour blindness can see
- having enough space around colour elements so they are not confusing to understand
- having text at the appropriate size and weight, or allowing resizable text
- including warnings for moving or flashing colours and images that can trigger seizures in some people.

Example of good and bad colour combination for accessibility

Red text is bad on black	Yellow text is good on black
Cyan text is bad on orange	Black text is good on orange
Magenta text is bad on green	Black text is good on green
Green text is bad on blue	White text is good on blue
Grey text is bad on grey	White text is good on grey

Figure 2.56. Examples of good and bad colour combinations for accessibility. Image attribution: image by Lisa Cianci, Creative

Commons licence Attribution-Non-commercial-ShareAlike-4.0. Select image to enlarge.

This Mozilla article gives a good overview of understanding colour accessibility for the Web.

The World Wide Web Consortium (W3C) has a Web Accessibility Initiative (WAI), which develops standards and support materials to help you understand and implement accessibility in your online content.

Activities: using tools and resources for accessible art and design

Activity 1.
Try testing the colours of your own website or print graphics to see if they have good accessibility. If not, how can you tweak your colour palette to have more accessible text and graphics?

There are many free online tools that you can use in your art and design work to check that the colour combinations you are using are accessible and comply with W3C standards. Most of these are checking foreground and background colour contrast for text and graphics. Here are three examples:

- Accessible web contrast checker
- Web AIM contrast checker
- Colour contrast checker

Activity 2.
If you're planning an exhibition or creative event, whether online or in a physical space, make a checklist based on information in the resources listed here. You can work through each item in your checklist to ensure your event has the best accessibility you are able to provide. That might include things like the colour of signs and labels, easy-to-read instructions with adequate fonts, lighting, arrangement of artworks, etc.

These links and resources for artists and designers can help make your creative work more accessible:

- Access Arts resources
- Accessible Arts -accessible exhibition design
- Tangled art & disability – resources
- Arts Access Victoria
- Creative User Projects (Canada)
- Centre for Inclusive Design
- The A11y Project – resources
- W3C standards – accessibility

Activity 3.
Explore this topic further in a real world context in *Learning Lab Contextualised Content*

- Using accessible colour in design

How animals see colour

The ideal gas law is easy to remember and apply in solving problems, as long as you get the **proper values a**



Figure 2.57. Spotted eagle owl. Image by jeanvdmeulen via Pixabay, licensed under CC0.

We humans are **mammals** and **primates**. The way we see colour is similar to many other animals. However, there is a wide range of colour vision in the animal kingdom, and many different kinds of eyes or "vision systems". This is due to animals' biological makeup, environment, and evolutionary history.

This page gives a short introduction to some of the weird and wonderful ways living creatures have evolved over millions of years to detect light and colour, and why it is useful to have colour vision. Studying colour vision in the animal world helps us understand visual systems and could lead to new discoveries in fields such as optics, chemistry and biology.

Topics covered on this page

- Primates and other mammals
- Birds, reptiles and sea creatures
- Insects, arachnids and other creepy crawlies

As explained in other parts of this resource, colour is not a fixed attribute of an object. Colour is a property of the "visual system" of the animal that sees it. The same light wavelengths reflected or emitted from an object can be seen differently depending on the anatomy of an animal's vision.[1]

Primates and other mammals



Figure 2.58. Monkey's eyes. Image by a_m_o_u_t_o_n via Pixabay, licensed under CC0.

Primates mostly have good **trichromatic** colour vision, and humans may have the best colour vision of all primates. Most mammals have a mixture of **rod** and **cone** cells in the retina of the eye – just like humans – but the amounts of each type of light-detecting (**photoreceptive**) cells may differ between species. It is thought that being able to see colour is an advantage when searching for food. Being able to tell the difference between ripe (red and orange) and unripe (green) fruit on trees and plants, for example, makes it much easier to find things to eat.

Many mammals like cats, dogs, rabbits, cattle, sheep, and goats can only see a small amount of colour. These animals are mostly **dichromats** (they can only see two colours) and may only see pastel shades of blue and yellow. This means they have **protanopia** (red–green colour blindness).

Some mammals (like cats and wolves) have evolved so that their eyes contain more rods than cones, allowing them to see and hunt in the dark. It's not much use having good colour vision in the dark (as explained in Why are things different colours? in this resource), but having lots of rods that can perceive subtle differences between light and dark is much better for detecting the movement of prey in dark environments.

Some sea mammals, like dolphins, can detect blue light very well – which is useful when underwater, but cannot differentiate between colours at all. Dolphin eye lenses can change shape to be able to see well both above and below water – they can do something called "spy-hopping", where they raise their heads above water vertically to see their surroundings , accessed 12/01/2023">[2].

Birds, reptiles and sea creatures

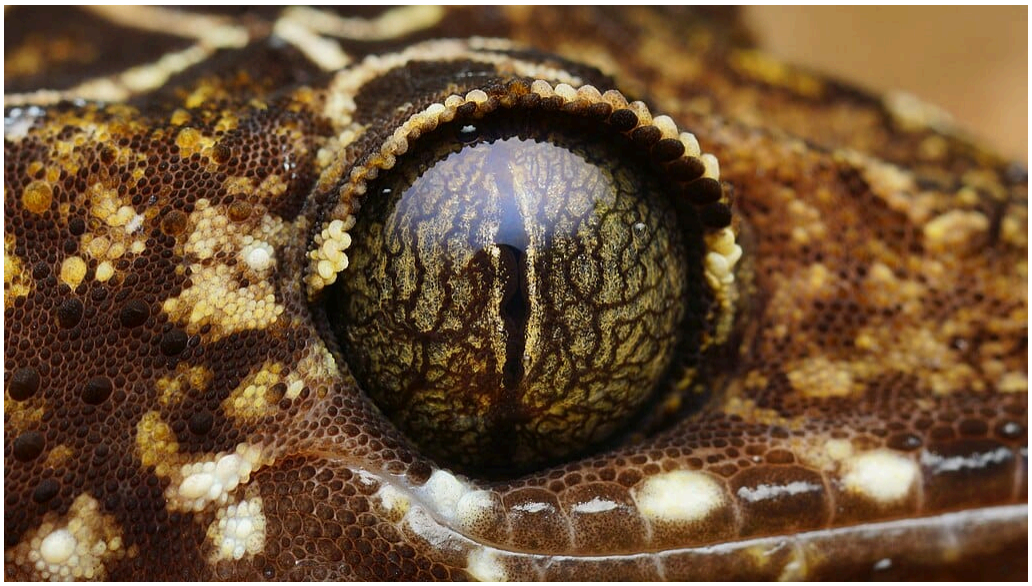


Figure 2.59. Banded forest gecko eye. Image by Kean Leng Ang via Wikimedia Commons, licensed under CC BY 4.0.

Birds of prey, such as eagles and hawks, have excellent colour vision, with four types of cone cells (**tetrachromacy**), allowing them to see the visible spectrum plus ultraviolet light, which we humans cannot see. This ability helps these birds to locate prey from great distances. For other birds, tetrachromatic colour vision makes it easier to locate specific flowers, nectar and fruits, and is important in mating behaviours. Pigeons have five types of cone cells (**pentachromacy**), but owls, as nocturnal predators, have very little colour vision. Early research suggested that owls were completely colour blind, relying only on highly sensitive rod cells to detect light and dark. However, more recent studies have found that owls do have some colour vision. They have the ability to see ultraviolet at night and most likely do see some the visible spectrum during the dayUV-sensitive cone opsin and red oil droplets, but see UV light at night: Retinal transcriptomes and ocular media transmittance', Vision Research, Vol 158, Pages 109-119, https://doi.org/10.1016/j.visres.2019.02.005. (https://www.sciencedirect.com/science/article/pii/S0042698919300471), accessed 12/01/2023" data-quail-id="672">[3].

The gecko is a type of lizard that has a complex colour vision system, which has been the subject of many research studies. One of the most impressive features of gecko eyes is their excellent colour vision at night. Unlike many other lizards, which have only two types of cone cells (dichromacy), some gecko species have four types of cones (tetrachromacy), allowing them to perceive a wider range of colours.

Another interesting feature of gecko vision is the presence of oil droplets within the cone cells. These droplets act as filters, absorbing certain wavelengths of light and enabling a greater sensitivity to other wavelengths[4]. The exact function of these oil droplets in gecko colour vision is still not fully understood, but they are thought to play a role in improving the ability to tell the difference between colours, even in low-light environments.

Chameleons are well known for their ability to change colour, but they also have very good colour vision – possibly the best vision of all lizards. Chameleons have “double cones” and four types of single cone cells, but very few rod cells, which means they don’t see well in the dark. The cone cells also contain oil droplets like geckos. Chameleons can see a wider range of colours than humans can, including ultraviolet light, and their eyes can move and focus together or independently of each other (monocular and binocular vision). They can focus on objects at great distances because of the shape of their corneas and lenses. Chameleons (and certain other animals) also have a layer in their eyes called the **tapetum lucidum**, which reflects light and enhances their vision in low-light conditions.

Snakes do not have colour vision in the usual sense. They are able to distinguish between light and dark, but they cannot perceive different colours. However, some species of snakes have specialised receptors in **pit organs** on their faces that allow them to ‘see’ (or sense) infrared light, which helps them locate warm-blooded prey. This is not the same as photoreceptors in the eyes. However, it is a means of detecting wavelengths of electromagnetic radiation.

Octopuses and squids (cephalopod species) have good vision – although cannot detect colour. Their eyes are more similar to those of humans and other vertebrates than those of most other invertebrates, with a single lens and a retina that contains

photoreceptor cells. However, the way these photoreceptor cells function in cephalopods is quite different from that of humans and other vertebrates. They also have a unique type of photoreceptor cell called a **rhabdom** that helps to detect polarised light, which is important for things like communication, navigation, and camouflage. If you're wondering how colour changing octopus can detect colour in its surroundings to camouflage itself without seeing colour with its eyes, see this page: Colour chemistry 1: animals that can change colour (hint: they have special cells in their skin that can produce colour to mimic their environment)

In fish, the number and distribution of cone cells for colour vision vary depending on the species and the environment in which they live. For example, fish that live in shallow water with a lot of sunlight tend to have more cone cells than those that live in deeper water with less light. Some fish also have rhabdom cells that allow them to see polarised light, which they use for navigation and communication.

Crustaceans have a more complex visual system than fish, with a wider range of visual pigments and photoreceptor cells. Some crustaceans, like the mantis shrimp, also have a type of compound eye (like insects) called an **apposition eye**, which allows them to have high spatial resolution and sensitivity to small changes in light intensity. Mantis shrimp also have 12 types of cones – although these cones only show very narrow bands of light wavelengths, so they don't see more colours than we do. Like fish and cephalopods, crustaceans also have rhabdom cells that allow them to see polarised light, and are also used for navigation and communication.

Insects, arachnids and other creepy crawlies



Figure 2.60. Robber fly eyes. Image by Opo Terser via Wikimedia Commons, licensed under CC BY 2.0.

Insects and arachnids have evolved to have different types of colour vision. Insects, for example, have trichromatic colour vision, which allows them to see three primary colours: ultraviolet, blue, and green. In contrast, arachnids, such as spiders and scorpions, generally have dichromatic colour vision, which allows them to see two primary colours: blue and green – although there are exceptions to this.

Insects usually have **compound eyes**, which are made up of many tiny lenses called **ommatidia**. Some insects can have over 20,000 ommatidia in each compound eye, which can give them an almost 360-degree range of vision. Each ommatidium contains a single photoreceptor, and the brain processes the signals from many ommatidia to create an image. Most insects can see ultraviolet light, which is used to detect nectar and pollen and is also used in mating behaviours. For example, bumblebees are trichromats, like humans, but the light wavelengths their photoreceptors detect are in a different range to ours – closer to ultraviolet light.

Most spiders have eight eyes, and each eye has a single photoreceptor. Some spiders can only detect light, but cannot see in colour. However, some species of jumping spiders have excellent colour vision, with four types of photoreceptors (tetrachromacy).

It is thought that some species of butterflies have the most photosensitive receptors of all insects.

> ***The bluebottle butterfly has 15 types of photoreceptor!*** *With one type of cone stimulated by ultraviolet, another by violet, three by varying shades of blue, one blue-green, four by green and five by red light, the common bluebottle butterfly has five times as many colour photoreceptors as we do.[...] Researchers believe the butterflies only use four of their photoreceptors for day-to-day colour vision, while the others[sic] 11 are used in specific environments, such as picking out objects hidden in vegetation.* viewed 12/01/2023">[5]

The exact anatomy and systems of colour vision in many different kinds of animals are still being studied. There is much that is not yet fully understood. We can study the anatomy of different eyes and how they detect light and colour, but we don't exactly know how each animal's brain interprets the information from photoreceptor cells like rods and cones.

The research to date has provided valuable insights into the evolution and function of colour vision in these animals. You can find out more about how different animals see colour by starting your own research online. You can visit the links on this page or search online or at the library to find books, journal articles and videos on this topic.

Media attribution: Watch: How Animals and People See the World Differently, National Geographic, on YouTube

Further reading on colour vision in animals

Color Matters – How animals see color

Wikipedia – Evolution of color vision

Ask A Biologist – Colors animals see

Cosmos Magazine – The incredible and bizarre spectrum of animal colour vision

Queensland Brain Institute – Colour vision in animals: a comprehensive overview

Natural History Museum UK, *How do other animals see the world?*

Natural History Museum UK, *Amazing eyes: 17 vision champions*

Gerl, E.J. and Morris, M.R. The Causes and Consequences of Color Vision. *Evo Edu Outreach* 1, 476–486 (2008). https://doi.org/10.1007/s12052-008-0088-x, accessed 12/01/2023

Kelber A. and Osorio D. 2010, From spectral information to animal colour vision: experiments and concepts, *Proceedings of the Royal Society B., Biological Sciences,* 277: pp.1617–1625 DOI:http://doi.org/10.1098/rspb.2009.2118, accessed 12/01/2023

1. Gerl, E.J. and Morris, M.R. The Causes and Consequences of Color Vision. *Evo Edu Outreach* 1, 476–486 (2008). https://doi.org/10.1007/s12052-008-0088-x, accessed 12/01/2023 [2]
2. Scoggins, J. 2016, "Colour and Vision in Dolphins", *Sea Watch Foundation*, <https://www.seawatchfoundation.org.uk/colour-and-vision-in-dolphins/>, accessed 12/01/2023 [3]
3. Höglund J., Mitkus M., Olsson P., Lind O., et al (2019), 'Owls lack UV-sensitive cone opsin and red oil droplets, but see UV light at night: Retinal transcriptomes and ocular media transmittance', Vision Research, Vol 158, Pages 109-119, https://doi.org/10.1016/j.visres.2019.02.005. (https://www.sciencedirect.com/science/article/pii/S0042698919300471), accessed 12/01/2023 [4]
4. Bowmaker, James & Loew, Ellis & Ott, Matthias. (2005). The cone photoreceptors and visual pigments of chameleons. Journal of comparative physiology. A, Neuroethology, sensory, neural, and behavioral physiology. 191. 925-32. https://doi.org/10.1007/s00359-005-0014-4., accessed 12/01/2023 [5]
5. Smith, B. 2016 "The spectrum of animal colour vision", Cosmos Magazine, <https://cosmosmagazine.com/science/biology/the-incredible-and-bizarre-spectrum-of-animal-colour-vision/> viewed 12/01/2023

Test yourself: the eye – how we see colour

A multiple choice quiz to test your understanding of how the eye sees colour

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again: 2.3 The eye – how we see colour

This page titled 2.4: The Eye- How We See Colour is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3: PART 3- APPLICATIONS WITH COLOR



Chapter Overview: Understanding Colour in Theory and Practice

Colour is an essential part of visual communication. It affects how we see the world, how we respond emotionally to images, and how artists and designers create meaning. In this chapter, you will explore how colour functions across daily life, digital media, printed materials, pigments, dyes, and creative practice.

This chapter introduces the major systems artists and designers use to understand and apply colour. You will examine the difference between additive colour, used in digital screens, and subtractive colour, used in printing and physical materials. You will also learn how digital colour formats such as RGB, hexadecimal codes, HSL, and HSV help define colour in electronic media, while CMYK and spot colour systems help manage colour in print production.

In addition to technical systems, this chapter explores the history and material qualities of pigments and dyes. From prehistoric pigments to synthetic dyes and contemporary sustainability concerns, colour has always been connected to culture, technology, material access, and human creativity.

You will also study colour wheels, colour relationships, and common colour schemes such as monochromatic, analogous, complementary, split-complementary, and triadic palettes. These tools help artists and designers create harmony, contrast, emphasis, mood, and visual organization. Key colour terms such as hue, value, saturation, chroma, tint, shade, tone, and achromatic grays will support your ability to describe and analyze colour with greater accuracy.

By the end of this chapter, you will have a stronger understanding of how colour works in both theory and practice. You will be able to identify colour systems, explain how colours mix, compare digital and print applications, recognize important colour relationships, and apply colour vocabulary to your own creative work. This knowledge will help you make more intentional colour choices in studio art, design, digital media, and visual communication.

3.1: Introduction
3.2: Additive and Subtractive Colour
3.3: Colour Systems- Digital
3.4: Colour Systems- Printing
3.5: Colour Systems- Pigments and Dyes
3.6: Colour Wheels and Relationships
3.7: Color Terms

This page titled 3: PART 3- Applications with Color is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.1: Introduction

Colour theory: working with colour

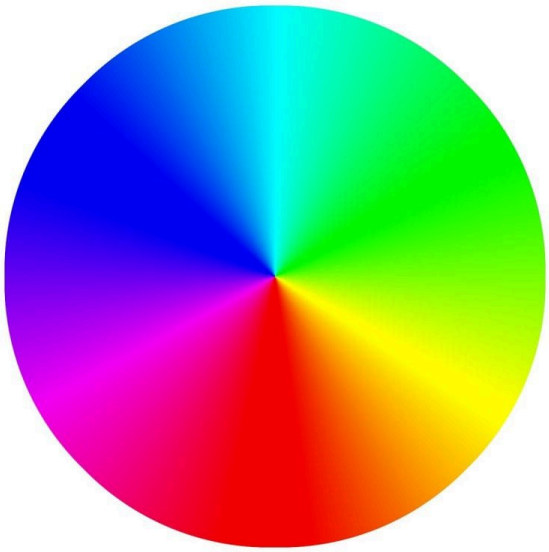


Figure 3.1. Colour wheel by TheDigitalArtist via Pixabay, licensed under CC0.

Introduction

Colour is used in so many aspects of our lives – in the objects and environments that we see all around us every day, our clothes, homes, art and design creations, and digital media like photography, videos, games and websites.

This chapter explains the colour systems used in mixing and creating colour in both digital media, such as images, videos, websites, and physical materials, such as printing, paint pigments, and dyes.

This page titled 3.1: Introduction is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.2: Additive and Subtractive Colour

Additive and subtractive colour systems

Additive Colour

Additive colour works by mixing colours of light. The more colours of light you **add** together, the closer you get to **white light**. It is the opposite of the colour spectrum, where white light is *refracted* (broken up) into a rainbow of colours.

Additive primary colours are **Red, Green and Blue (RGB**). These are the colours from which all other colours of light are made. You can see evidence of this on your computers, televisions and mobile phones. Pixels emit light in different colours based on how much of each primary colour is emitted from each pixel (RGB values).

More about additive colour can be found in this resource: 3.3 Colour systems: digital.



Figure 3.3. Interactive Additive Colour Mixer. Image attribution: Interactive Additive Colour Mixer by Lisa Cianci, Creative Commons licence Attribution-Non-commercial-ShareAlike-4.0

Subtractive Colour

Subtractive colour involves mixing physical materials like paint pigments, printing inks, and dyes. The more colour materials you mix, the darker the colour gets. It's called 'subtractive' because of the absorption or ***subtraction*** of certain wavelengths **from white light**. This absorption is based on how different atoms behave when light hits them. See Chapter 2. Colour theory: the visible spectrum in this resource for more information about the physics and chemistry of colour.

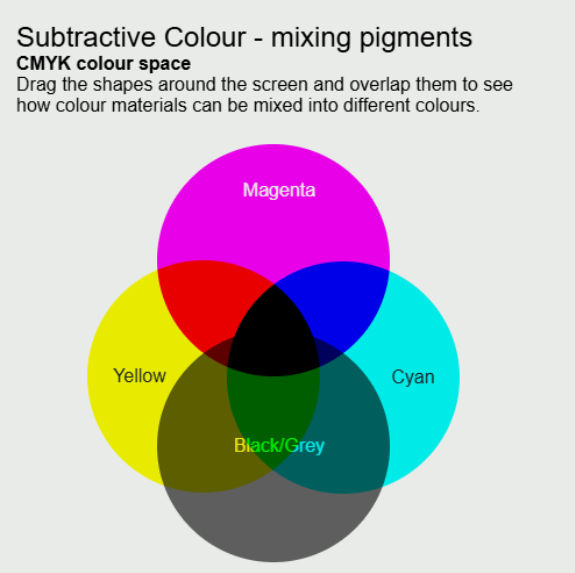


Figure 3.4. Interactive Subtractive Colour Mixer. Image attribution: Interactive Additive Colour Mixer by Lisa Cianci, Creative Commons licence Attribution-Non-commercial-ShareAlike-4.0

Subtractive primary colours are **Cyan, Magenta and Yellow (CMY)**. The traditional primaries **Red, Yellow and Blue (RYB)** are also useful to know about in some contexts, like understanding the historical development of colour theory and using older colour wheels. Psychological primaries **Red, Yellow, Green and Blue** are colours that were once also defined as primary because of historical colour theories about how our eyes perceive colour. See Biology of the human eye for more information about human colour vision and subtractive colour.

A simple example to explain how subtractive colour works

Observe something yellow, like a bowl of lemons with white light shining on it (Figure 3.5). The lemons are **reflecting** light wavelengths that we perceive as yellow and **absorbing** all other light wavelengths. We see a yellow colour because its opposite colour – blue (and other similar light wavelengths) is **subtracted** from the white light. Red and green light when mixed create yellow, so certain amounts of red and green light wavelengths (and other wavelengths between red and green) bounce off the lemons and our eyes see those light wavelengths as yellow.

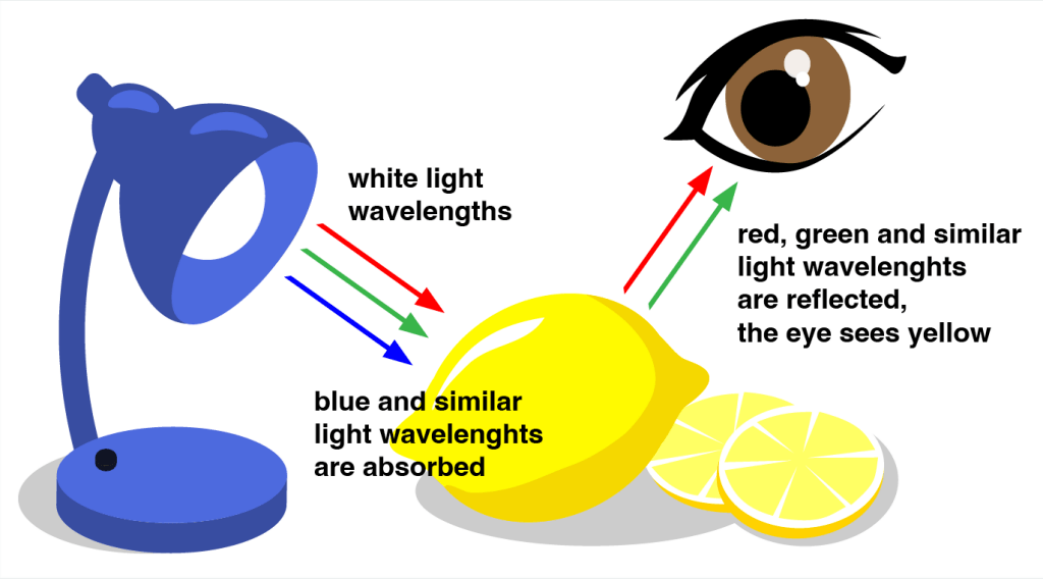


Figure 3.5. How subtractive colour works by RMIT, licensed under CC BY-NC 4.0 using images by OpenClipart-Vectors and Simona via Pixabay, CC0.

***Note**: for printing, we use the **CMYK colour system**. In this system, **K** represents **blacK**. Black is used as an extra colour when printing because conventional CMY printer inks don't blend well enough to create a good black colour. Also, black ink tends to be much cheaper than coloured inks.*

More detailed information about subtractive colour can be found in 3.4 Colour systems: printing and 3.5 Colour systems: paint pigments and dyes.

Additive and subtractive colours on the colour wheel

You might observe from the diagram on the previous page that mixing two additive primary colours gives you a subtractive primary colour. You might also observe that mixing two subtractive primary colours gives you an additive primary colour. This can be confusing until you understand how additive and subtractive colour works.

> *The confusion is at once resolved when it is realized that red, green, and blue are selected as additive primaries because they provide the greatest colour gamut in mixtures. For the same reason, the subtractive primaries are, respectively, red-absorbing (cyan), green-absorbing (magenta), and blue-absorbing (yellow).*[1]

Our current scientific knowledge and practical understanding of additive and subtractive colours have led to a more accurate colour wheel that displays both additive and subtractive colours, as shown in Figure 3.6.

Chapter 1. Colour theory: history and culture describes varied theories of primary, secondary and tertiary colours throughout history. This includes some very different examples of colour wheels, including the RYB (Red, Yellow, Blue) colour wheel (Figure 3.7), which is still used in some contexts to teach colour mixing in visual arts.

Here is an image example of a contemporary colour wheel that shows additive primary, secondary and tertiary colours:

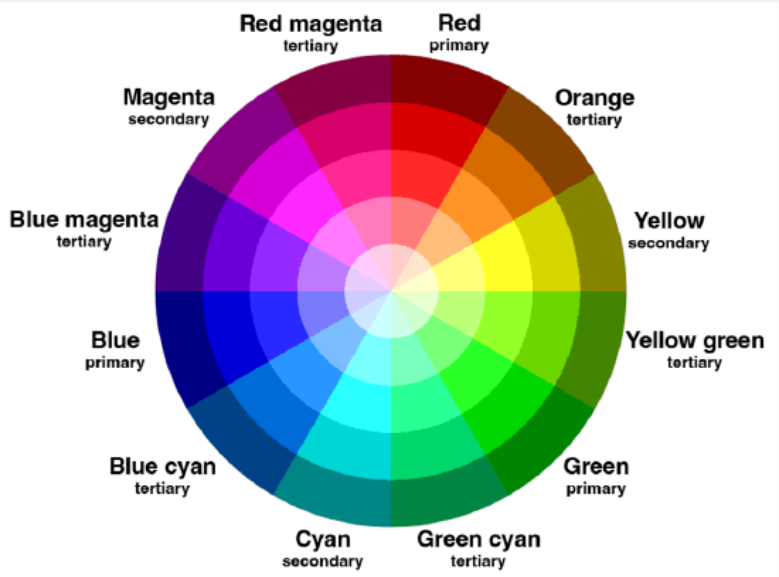


Figure 3.6. RGB colour wheel by RMIT, licensed under CC BY-NC 4.0.

And here's an image of a traditional RYB colour wheel

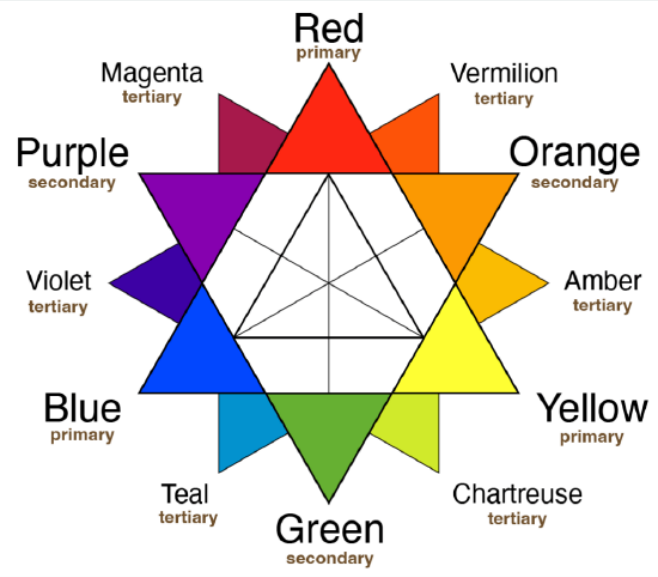


Figure 3.7. RYB color star (modified to show primary, secondary and tertiary colours), by Kwamikagami via Wikimedia Commons, licensed under CC BY-SA 4.0.

To see an interactive colour wheel with colour relationship options, visit 3.6 Interactive colour wheels and relationships in this resource.

1. Encyclopedia Britannica online (*Britannica.com*), 'The Visible Spectrum' https://www.britannica.com/science/color/The-visible-spectrum

How additive and subtractive colour works when printing a digital image



Figure 3.8. RGB to CMYK conversion flow diagram by RMIT, licensed under CC BY-NC 4.0

When you create a digital image and then print it on paper, this involves a process of converting the additive colour system (RGB colour) in your digital image to a subtractive system (CMYK colour inks) that prints the correct colours onto paper.

Your image editing software or printer software is going through this conversion process, attempting to match what we can see on the digital screen with what will come out of the printer. It's a complex process, and there are many different automated and manual methods for colour conversion.

More detailed information about subtractive colour and the print process can be found in 3.4 Colour systems: printing. View this page for more about converting images from RGB to CMYK.

Practical activities: mixing additive and subtractive colours

These practical activities can help you to understand how additive and subtractive colour works, and when we use each one to mix colours.

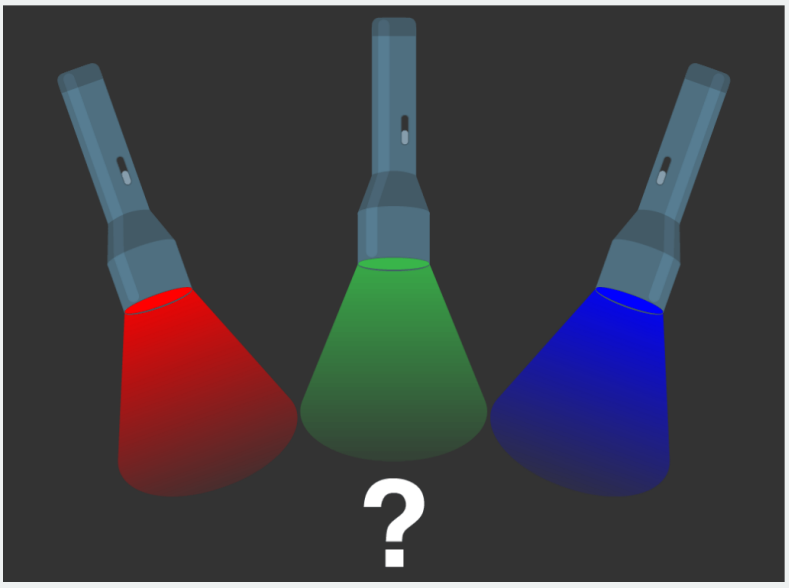
Additive colour activity

You can do some experiments at home with torches and red, green and blue coloured cellophane or transparent coloured plastic or glass to test how additive colour works (you can also do this experiment with red, green and blue LED lights).

If you have red, green and blue cellophane, you can cover three torches – each with different coloured cellophane.

In a darkened room, shine the coloured light from the three torches on a white piece of paper or a white wall so the coloured light overlaps.

What do you see? How many colour combinations can you make?



Interactive Content

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this Interactive Content online

What happens if you layer two colours of cellophane together – red and green on the one torch, for example?

Does any light shine through the two layers onto the paper? How can you explain this with what you know about additive and subtractive colour? (Hint: the light waves are filtered through one layer of cellophane first, then the other.)

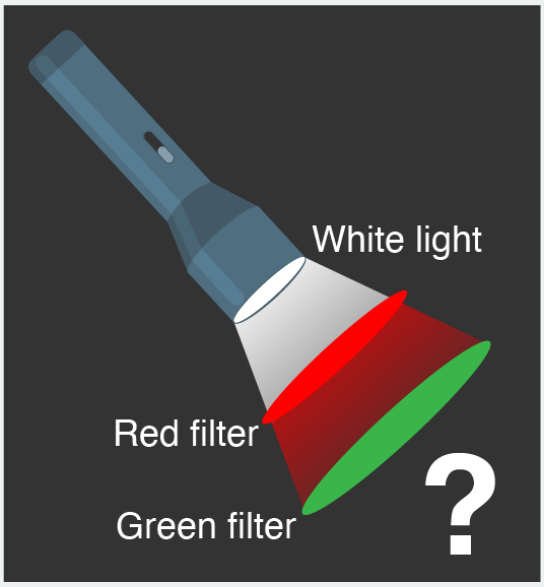


Figure 3.10. Additive colour – two filters on one torch by RMIT, licensed under CC BY-NC 4.0.

Interactive Content

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this Interactive Content online

Subtractive colour activity

Mix paints, inks or felt-tipped pens of different colours to see how many different colours you can make on white paper. It's easy to make darker colours with these materials, but how hard is it to make a lighter colour without using white paint or adding water to thin the colour out?

Most cheap sets of felt-tipped pens have cyan, magenta and yellow colours, as well as red, green, blue, black, brown and possibly even grey. What colours can't be mixed from other colours? There's more information on mixing subtractive colours in 3.4 Colour systems: pigments and dyes in this resource.



Figure 3.11 Coloured pencils. Image by Stefan Schweihofer via Wikimedia Commons, licensed under CC0.

Additive to Subtractive colour activity

If you have a digital editing or drawing software app on a computer, tablet or mobile phone, try and find the colour wheel, colour picker or colour sliders to select different colours to draw or paint with.

See if your app has information about RGB colour, CMYK colour, or other colour systems like *Hexadecimal* (covered in the next part of this resource – 3.2 Colour systems: digital). If you can print an image from your digital device, compare the colours on the screen to your printed image – how similar are they?

Often the RGB-Red to CMYK-Magenta/Yellow-mix colour conversion is the hardest to get right when printing digital images, although greens and blues can be tricky too, depending on the quality of your printer and printing inks.

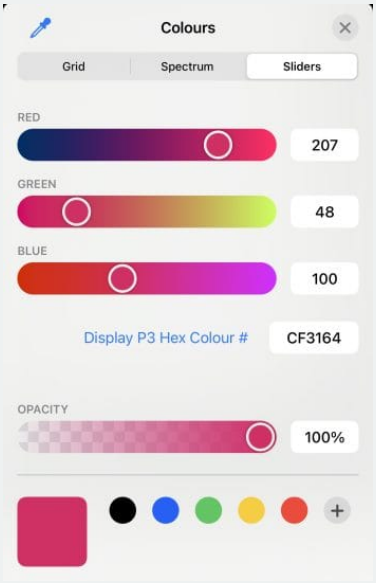


Figure 3.12. Colour slider example. Image attribution: Colour slider image from GIMP image manipulation software application, GNU public licence v.3

Test yourself: is it additive colour or subtractive colour?

A multiple choice quiz to test your understanding of colour systems

(5 minutes or less)

View each type of colour application and choose if it's using **additive** or **subtractive** colour systems, or **both...**

How did you go?

If you need to learn more about this topic, you can read this section again.

This page titled 3.2: Additive and Subtractive Colour is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.3: Colour Systems- Digital

Colour gamuts and colour spaces

The previous section of this resource explained the **Additive RGB** colour system, which is the system used for colour in digital media. However, there are multiple colour spaces related to RGB that are used to describe and create the millions of colours that our digital screens can display – and that we can see with human eyes. It's useful to know about this if you are working with digital tools and software applications to create digital media.

Colour Gamut

Colour gamut (also known as **colour space**) is the complete range or subset of colour that can be produced or recorded by an application, system or device.

A common representation of the colour gamut used in digital and print systems is shown in Figure 3.20, which displays the **gamut** of **visible colours** and the extent of different colour spaces within that.

You can see that the RGB colour space and the CMYK colour space are smaller than the LAB colour space – which is what the human eye can see (for more about CIELAB colour space, visit Contemporary Colour Systems (c. 1930 – 2020+) in this resource).

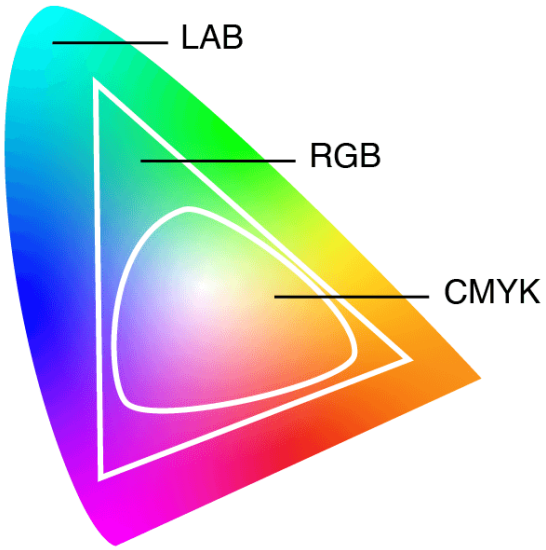


Figure 3.20. CIELAB, RGB and CMYK colour spaces – approximate values only, by RMIT, licensed under CC BY-NC 4.0.

Learn more about colour gamut and colour space :

- Wikipedia: Gamut
- Wikipedia: CIELAB_color_space

RGB colour spaces

There are multiple RGB colour spaces, and they each have different colour gamuts. Some have more greens or more reds and yellows. Some are better for digital-to-print conversion. Here is a summary of some popular ones you will probably find on your digital devices:

sRGB is a standard RGB colour space (or colour gamut) that HP and Microsoft created cooperatively in 1996 to use on computer displays, printers, and the Internet. It was standardised by the International Electrotechnical Commission as IEC 61966-2-1:1999.

It is a preferred standard for web-based media, and many websites and video games have been made using this colour space.

opRGB or **Adobe RGB** was developed in 1998. It was designed to represent most of the colours achievable on CMYK printers, but by using RGB primary colours on a computer display or digital device.

The Adobe RGB colour space encompasses approximately 50% of the visible colours specified by the CIELAB colour space, which improves on the sRGB colour gamut, mainly in cyan-green hues. It was standardised by the IEC as IEC 61966-2-5:1999 with the name opRGB (optional RGB colour space) and is used in HDMI (High Definition Multimedia Interface) – a standard for simultaneously transmitting digital video and audio from a source, such as a computer or TV cable box, to a computer monitor, TV or projector.

DCI p3 (Digital Cinema Initiatives – Protocol 3) is a more recent standard used by the film industry – mainly for films shown in cinemas. It covers around 45% of the visible colours of the CIELAB colour space and has a wider range of colours than sRGB – around 25% more colours. This increase in visible colour allows for more vibrant colours and can also be used by screens that can display 30-bit colour, such as HDR TV screens. It favours an increase in red-yellow colours as opposed to Adobe RBG, which favours blue-green colours.

Viewsonic: using DCI p3 color gamut for video editing

In a practical application, these different colour spaces can affect how we see images, movies, video games etc., on different devices and why sometimes graphics can look better or worse on different screens. See the next page for details about how digital screens work.

How digital screens display colour

Pixels on our digital screens emit light in different colours based on how much of each primary colour is emitted from each pixel (RGB values). The number of colours we can see created from a digital RGB system depends on the 'colour depth' of our screens (also called *monitors* or *displays*).

The first colour computer screens had an '8-bit' depth which only displayed 256 colours (you might remember old 8-bit video games with very basic colour graphics). Now we have ***true colour*** on most computers, which is 8-bit for each RGB colour – or '24-bit' depth. This can display over 16.7 million colours.

Some recent high-quality computer displays have '30-bit' depth, which can display 1.07 billion different colour combinations. There is debate about the need for so many colours and whether our eyes can see the difference, although it is claimed that having over one billion colours is useful in certain situations when working with very bright, very dark or very light colours, where a finer level of definition is needed.

Viewsonic: color-management and color blindness – how can monitor technologies help?

Colour calibration

Calibration is the process of aligning your digital screen's colour output to the RGB standard – so what you are seeing on your screen is a true representation of the RGB colours created by your computer. This process is important for working with digital content like photography and digital-to-print processes where it's necessary to have colour accuracy. Most computer systems will have their own calibration tools, or you can find online applications to help you calibrate your screen.

Activity – test and calibrate the colours on your digital devices



Figure 3.21. Test Pattern. Image by Zacabeb via Wikimedia Commons, licensed under CC0.

Save a link to this page and open it on all of your digital devices. View the test pattern image in Figure 3.21 and see how it looks on your computer, tablet, mobile device and TV screen. Are the colours different on each device? Is the brightness different? Can you adjust your settings to get the best colour and brightness on each device?

Learn more about digital screen calibration from these links:

- Calibrating – Les Walkling & Co (A great resource for digital media and printing from a significant Australian artist)
- Viewsonic: Color management – a checklist for digital artists
- Viewsonic: Best monitor calibration tool – hardware vs software – calibration
- Viewsonic: What is fogra and why does it matter?

Television settings

Your home television has picture settings that change the colour, brightness and contrast according to perceived usage. The 'standard' picture mode might be OK for sports and reality TV but may not be the best for watching movies or drama series as they were intended by directors because it alters the colour settings. You may be able to change your TV settings to '**cinema'** or '**movie' picture mode** when watching movies or streaming TV series to get the best colour. See Colour grading in the Colour aesthetics section of this resource for more about the importance of colour in film and video.

Learn more about TV colour setting and "The Soap Opera Effect", TV picture settings for colour and motion smoothing.

What is Hexadecimal colour?

What is Hexadecimal colour?

The **Hexadecimal**, or **HEX** colour system, was developed for creating colours in **HTML (HyperText Markup Language)** for websites. It's another way of describing RGB colour values – with a single number.

Hexadecimal is a *base-16* number system (hex means 6, and decimal means 10), which allows us to represent larger numbers with fewer digits.

It uses the numbers 0 to 9 and the letters A to F to describe RGB value colours:

> **0 1 2 3 4 5 6 7 8 9 A B C D E F**

> **This is an example of a HEX colour**
> **(the hash symbol '#' denotes a HEX colour in HTML code):**
>
> **#E86F1F**
>
> - **E8** is the **Red** value
> - **6F** is the **Green** value
> - **1F** is the **Blue** value
>
> **Here's a swatch of the colour:**
>
> 

Note that the highest value is Red (E8 is a high number), the second highest is Green, and the last is Blue – which produces this particular shade of orange.

The same colour in RGB would have the following values:

#E86F1F = RGB(232, 111, 31)

The HEX value is a more efficient way of representing RGB colour information.

This colour picker tool (Figure 3.22) shows RGB and HSV values, and the Hexadecimal colour value (HTML notation).



Figure 3.22. Colour Picker showing various RGB colour values. Image attribution: Colour picker image from GIMP image manipulation software application, GNU public licence v.3

White in HEX colour is **#FFFFFF** – the highest number – and black is **#000000** – the lowest number.

If you convert **#FFFFFF** from a hexadecimal to a decimal number, you get the number **16,777,215** – which is the exact number of colours that can be displayed on 24-bit computer displays.

If you want to test your HEX colour identification skills, you can try this online guessing game – WHAT THE HEX? – It's fun and can be addictive!

Other RGB colour models

Within RGB colour space, there are different models for describing aspects of colours. These were originally developed for different purposes like television or computer graphics. Representations of these models are still found in many common image editing applications.

HSL represents the values of **Hue**, **Saturation**, and **Lightness.**

HSV represents **Hue, Saturation**, and **Value (**also referred to as **Brightness)**

HWB represents the values of **Hue**, **Whiteness**, and **Blackness.**

- **Hue** is the colour wavelength on the visible spectrum
- **Saturation** is the intensity of that colour, and;
- **Lightness** describes lighter and darker variants of a colour.
- **Alpha-channel**: in **HSL-A** colour or **RGBa** colour, the **A** represents the **Alpha channel**, or *transparency* of the colour, which is used in image editing and web design contexts to allow for transparent layers of colour to be represented.
- **Value/Brightness**: this value is different to Lightness in HSL – it relates to how bright a colour is, not how light (pale) or dark a colour is.
- **Whiteness & Blackness** – used in the **HWB** colour model, these values are different to Lightness and Brightness and

represent how much white or black is mixed with the Hue.

It can be confusing to understand what these different values mean until you see them working in a practical way. Here is an interactive colour selector you can use to learn about different colour values. You can enter a colour value and it will display values for six different colour models

Activity: type an RGB, HEX, or other set of colour values into the space provided and see the colour and values for each model.

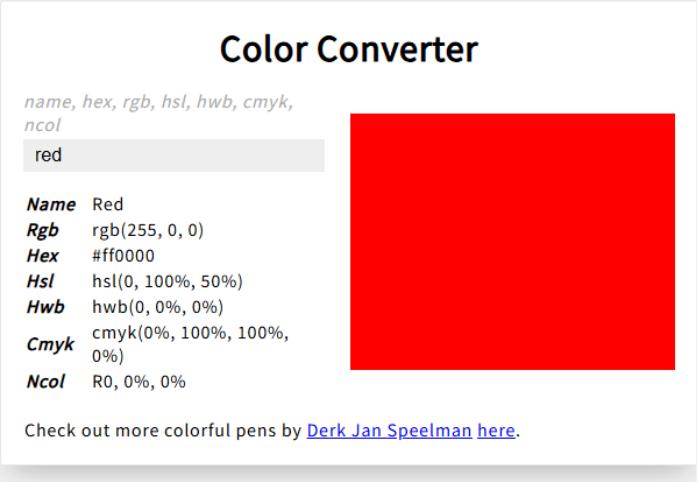


Figure 3.23. Colour converter tool. Media attribution: Interactive colour converter (JavaScript) by Derk Jan Speelman on CodePen

How do digital images and videos display colour?

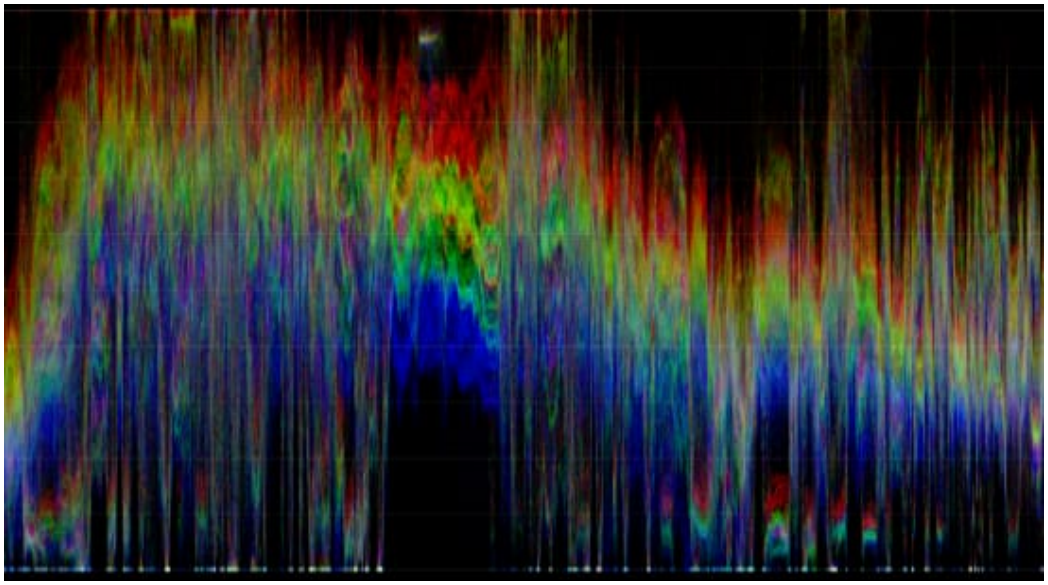


Figure 3.24. Waveform (RGB) data from MP4 video. Image attribution: Waveform RGB data from MP4 video by Lisa Cianci, Creative Commons licence Attribution-Non-commercial-ShareAlike-4.0

Digital image and video objects record and store colour information in different ways depending on their format and encoding methods. When creating visual digital media content, we usually want to have the best quality image possible, but with the smallest file size possible to allow for fast internet download and rendering by software applications.

Topics covered on this page

- Resolution
- Compression and encoding
- Image file formats
- Digital video properties
- Video codecs

Resolution

Both image and video files have properties such as **Resolution**, **Width**, **Height**, and **File size**.

Resolution is how much detail the image holds. This is measured by pixel count in digital images and video. Pixels are tiny squares or dots of colour that form the rectangular grid of an image or video's visible area. The more pixels in your image, the higher the resolution and the more detail or information stored in the image. This also means better quality and colour.

You might notice on your digital camera or mobile phone how many **megapixels** the camera can capture. This is the total number of pixels (one megapixel equals 1,048,576 pixels, usually rounded down to 1,000,000 pixels) that can be recorded in a single image. Higher megapixels give a higher-quality image. If your camera can capture an image that's 12 megapixels, this would be an image that is approximately 4290 x 2800 pixels in width and height.

Image resolution is important to understand if you're working with screen and print media. We generally use a lower resolution image for screen media and content on the Internet because we want fast loading times, and our screens have a limited resolution display. For printing, a higher resolution is better for image quality. Printers can print at different resolutions depending on their capability. Commercial and professional printers can produce extremely high-resolution imagery necessary for fine art photography and publications. Your home inkjet printer can also print at different resolutions, depending on the quality of the printer.

Resolution in images is measured by the number of pixels in width multiplied by height, but also the **density** of those pixels – measured by **dots per inch (DPI)**, which is how many dots/pixels are in a square inch. The higher the DPI, the better quality the image will be.

The image in Figure 3.25 on the left is low-resolution. It only has 1% of the information contained in the high-resolution image on the right. Select the image to enlarge.



Figure 3.25. Example of low and high resolution versions of the same image, from a photo by lum-box via Pixabay, licensed under CC0.

Have you ever seen an image on a webpage that looked great on your computer, but when you try to print it, it looks terrible? This is because the screen image has a low resolution – possibly 72 DPI – and low dimensions – possibly 800 pixels width x 600 pixels height or less.

Your printer can produce images that are anywhere from 150 to 1200 DPI (or higher, depending on the printer), so your small image doesn't have enough pixels to produce a good quality print image.

It's important to save your image at the right resolution and dimensions for its purpose, and to use the right colour system – RGB for screens, CMYK for print.

Also important!! Once you have reduced an image's resolution – width/height or DPI – and saved it, that information is lost. If you try to increase the resolution, your editing software compensates by duplicating or replacing pixels and filling in the space according to its encoding system, but it cannot replace that lost information, so you'll still see a blocky and pixelated image. This affects the colour as well – the lost colour information cannot be replaced.

Many software editing applications have processes that attempt to compensate for the loss of information, and more recently Artificial Intelligence (AI) is increasingly used to 'intelligently' enhance image quality by replacing the lost information or repairing images that are damaged or blurry. These tools are useful, although if you work with very high-resolution images, image enhancement is no match for retaining the original image information.

Learn more about AI image enhancement from this article about AI super resolution.

Compression and encoding

More pixels results in a bigger file size – which is the number of bytes (kilobytes, megabytes, gigabytes, terabytes, etc.) in the file. This can be problematic with video – even a short video can have thousands of frames and in theory, each frame is an image. Video files are much bigger in file size than still images.

Image and video files also store colour information in different ways.

Image file formats

RAW is a ***raster*** image format (based on a fixed grid of pixels) used for unprocessed images usually captured with a camera. There are many different RAW image formats, and these are often dependent on which camera you use. RAW images are ultimately converted to another format to be used for digital media (JPEG, PNG) or print (TIFF, high-quality JPEG). Your camera or mobile device may have the settings option to save images as RAW or JPEG.

Note: RAW images will take up more file space on your device.

Think of a RAW image like a traditional physical photographic negative that can be reproduced in multiple formats (although a RAW image is not a negative image). Keeping a RAW version of an image means that you have all the original information of the image, which can then be altered using ***non-destructive editing techniques*** to achieve a particular result. For example, you might change the exposure, brightness, contrast, and colour values of an image in your editing software and save that as a TIFF image file for printing, but you still have the original RAW file to return to if you want to create a different version of the image with different colour values.

Learn more about RAW
Learn more about non-destructive editing.

GIF (Graphics Interchange Format) was one of the first raster image formats used on the Internet. It has a very limited palette of colours available – only 256 colours. This is partly because it was created when bandwidth was much lower and slower than it is today. Only the smallest of image file sizes could be used to share images across networks or display graphics on web pages. Also, screens only displayed 256 colours at that time, so there was no requirement for more colour information. The innovative compression used in GIF identifies repeating patterns, then simplifies them, allowing for lossless compression of files – meaning none of the data is trimmed in the shortening process (Lempel-Ziv-Welch compression algorithm).

GIF images can save different minimal colour 'palettes' – you can choose to save only the colours used in the image (indexed colour), which makes the file sizes very small. Because of the limitations of GIF image colour, it is a good format for simple graphics like logos but not good for photographic images. You can also save transparency in a GIF image – which is useful for something like logo design, where you might want a transparent background so that the same image can sit on different coloured backgrounds – for example, in webpages.

GIF was the first common image format that allowed animation (WebP images also allow animation, but are not commonly used at this time). Animated GIFs are multi-frame images that hold information like frame rate and looping properties. They have had a resurgence in popularity on social media and in meme culture because they are usually very short in timeframe and small in file size, therefore easy to access on mobile devices.

Learn more about GIF:

Smithsonian magazine: A Brief History of the GIF, From Early Internet Innovation to Ubiquitous Relic.

The **JPEG** (Joint Photographic Experts Group) raster image format became a standard image format in the late 1980s and early 1990s. It allows for millions of colours in an image (24-bit colour), which is good for capturing photographic images. JPEG uses a system of **lossy compression** to reduce the amount of information in an image file and therefore reduce the image file size – making it a useful image format for the Internet.

It's called 'lossy compression' because visual data that the human eye can't see is removed, and colour variation is averaged, so some of the image information is lost in the compression process. You might have seen low quality JPEG images on websites or social media where the image looks blocky or has visible 'artefacts' (noise or aliasing on the edges) – this is due to the JPEG format compression.

The user can control the level of compression in a JPEG image – more compression results in a lower quality and smaller file size. Less compression results in a higher quality and bigger file size. Your image editing software will give you compression options when you save your image as a JPEG/JPG file.

Learn more about JPG:

JPEG.org: jpeg.

Adobe: jpeg.

SVG (Scalable Vector Graphic) is a very different kind of image format. It is not a resolution-dependent raster image format, rather, it is based on ***vector graphics***, which are mathematical statements that describe lines, curves, shapes and colours on the Cartesian plane (x,y axis). This makes it ***scalable***, so no matter how big or small you size the image, it will retain its quality – it redraws the geometric information at any size. Because an SVG file stores mathematical information and not pixel information, SVG files are generally very small and can also be used in websites as XML code.

This kind of graphic is generally not used for photographic images – calculating the vector maths for a complex photographic image would be less efficient than using pixels and compression formats. However, vector graphics are very useful for visual materials that need to be reproduced at different sizes in both digital and print media, such as advertising graphics output like posters, banners, billboards, signage, etc. Other common vector image file formats that digital media creators may encounter include EPS, AI, and PS.

Learn more about SVG.

There are many, many more image file formats that are useful to know about when creating digital media, such as:

- **PNG** – (Portable Network Graphic): raster image format good for photographic images, supports lossless compression and has millions of colours, transparency (PNG-24), and is commonly used in webpage design.
- **TIFF** – (Tag Image File Format): raster image format popular with photographers for storing lossless, high-quality images for printing.
- **BMP** – (Bitmap): a high-quality, uncompressed raster image format. Originally created by Microsoft.
- **HEIC** – (High Efficiency Image Format): a more recent raster file format that has better quality than JPEG, using HEVC (High Efficiency Video Coding) for compression. It is now commonly used in Apple devices. A HEIC image may be half the size of a JPEG but with higher quality.
  Adobe: HEIC vs JPEG.
- **WebP** is a more recent raster image format developed for the web. It has better quality lossless and lossy compression compared to either PNG or JPEG. It uses predictive coding to compress the visual data, resulting in comparatively small file sizes, and is currently supported in recent browsers. You can also have animated WebP images.
  Google developers: WebP.

There are also ***native*** image file formats that are the image files created by particular software applications. For example, Adobe Photoshop has a native file format that has the extension **PSD**. This file can only be used by Photoshop – you have to export a JPEG, PNG, GIF or another type of file from the Photoshop PSD file if you want to use your image on the Internet for example.

Learn more about image file formats from this video (14 minutes):

Media attribution: Explaining Image file Formats, Explaining Computers on YouTube

Digital video properties

Video files without compression are so big in file size that they would be very slow to download – even with very fast Internet – and difficult to play without ***lagging*** and ***buffering*****.**

If we didn't have compression, you wouldn't be able to stream videos from platforms like Netflix or Google Play.

A video file has certain properties:

Container – type of file – MP4, AVI, MOV, etc.

Dimensions/resolution – width and height in pixels (Figure 3.26).
Some common video resolutions:

- SD (standard definition) any video with a height of 480 pixels or less
- HD (high definition) – 1280 x 720 pixels
- full HD – 1920 x 1080 pixels
- 4K UHD (Ultra HD) – 3840 x 2160 pixels
- 8K (full ultra HD) – 7680 x 4320 pixels

This image shows the difference in video resolutions – select the image to enlarge



Figure 3.26. Video resolution comparison by RMIT, CC BY-NC 4.0. from a photo by Babelphotography via Pixabay, licensed under CC0.

Learn more about video resolution here... Typito: video resolutions

Frame rate – how many frames per second (fps): 24 fps has been a standard frame rate for many years, 30 fps is used for TV broadcasts, 60 fps is becoming more common in 4K HD video, and for capturing slow motion footage, we see frame rates of 120 fps and higher, captured by high-speed cameras that can handle such high frame rates.

Duration: the length of a video in hours, minutes, and seconds (HH:MM:SS). For example, **01:30:24** describes a video duration that is one hour, 30 minutes and 24 seconds long.

Bit rate (bitrate) is the amount of data stored per each second in a media file (video and audio). It's measured in megabytes per second (MBPS).

- A **high bitrate** is associated with a **high resolution** and/or **low compression**, which means bigger file sizes.
- A **low bitrate** is associated with a **low resolution** and/or **high compression**, which means smaller file sizes.

As with still images, you can't turn a low-quality video into a high-quality video because there isn't enough data about the pixel colours in each frame to increase the resolution or replace the data lost in compression. AI tools may be able to fill in and define low-resolution video to improve quality. For example, grainy, low-light video footage can be smoothed and better defined, but this functionality is limited and is not equal to capturing high-resolution video in the first place.

Learn more about bit rate.

Video Codecs

Codec (a *portmanteau* word for **coder-decoder**) is the software encoding method that compresses video data and stores it in the container (file) so it can be decompressed and played back.

Video compression, as with image files, reduces the amount of colour information stored in the video file without visually altering what the viewer can see. Most video codecs are **lossy** – some of the data of an uncompressed video file is lost in the compression process, necessary to make file sizes small enough to play back smoothly and download quickly or stream at the right speed.

There are many different kinds of video and audio codecs, and they all use different compression methods to reduce file size. Codecs in video work by reducing the data by **motion compensation**, **macroblocks** (large blocks of pixels that have the same colour or motion) and **chroma subsampling**.

Motion compensation uses keyframes – I-frames, P-frames and B-frames. I-frames contain the complete image, whereas P-frames look for which pixels have changed and only record the information for those changed pixels. I-, P- and B- frames make up what we call "groups of frames", and this method can reduce the size of the video file by up to 90%.

Chroma subsampling reduces the amount of colour information by using a different colour space instead of RGB. It's a complex system to understand: the **YCbCr** colour space works for video because the human eye is more sensitive to changes in brightness than changes in colour. **YCbCr** represents the following colour information in video:

- Y (luminance or luma)
- Cb (blue-difference chroma)
- Cr (red-difference chroma)

luma = brightness, chroma = colour

Some common video formats and their codecs:

> **MP4 (MPEG 4)** – the MP4 container is the current industry standard for HD video. It most commonly uses the **H.264 codec** (also known as Advanced Video Codec or MPEG Part 10), which supports up to 8K video. It produces high-quality video at a low bitrate which means smaller file sizes – useful for streaming video content online.
> Wikipedia: Advanced Video Coding.

> **MOV (Quicktime video format)** is an Apple standard video format that usually uses **MPEG-4 compression**. In fact, the MPEG-4 format evolved from the Quicktime file format (QTFF) around 2001. MP4 is a revised version of this.

> **AVI (Audio Video Interleave)** is a Windows standard video format created by Microsoft in 1992, which commonly uses the **DivX codec.**

Learn more about video formats, containers and codecs from this video (14 minutes):

Media attribution: Explaining Digital Video: Formats, Codecs & Containers, Explaining Computers on YouTube

Learn more about video here:

- Basics of video encoding
- Wikipedia: comparison_of_video_container_formats
- Wikipedia: comparison_of_video_codecs

Test yourself: colour systems – digital

A multiple choice quiz to test your understanding of digital colour systems

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again.

This page titled 3.3: Colour Systems- Digital is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.4: Colour Systems- Printing

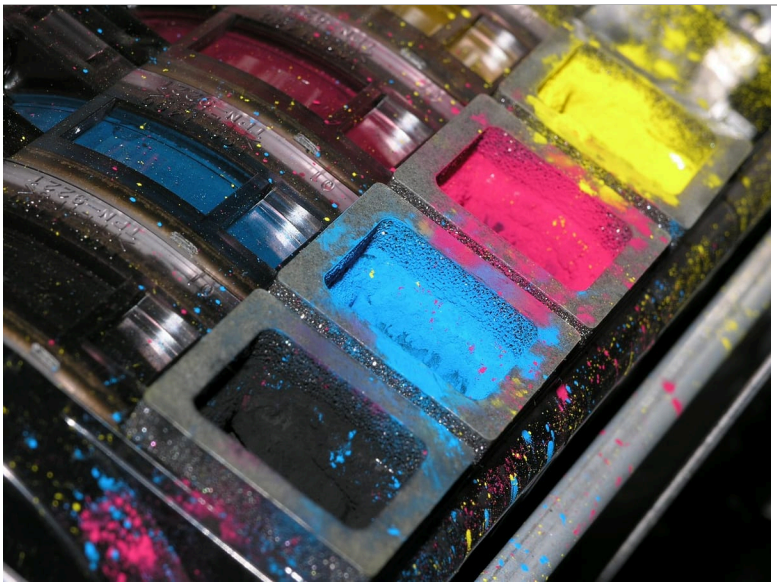


Figure 3.27 Printing machine with CMYK colour. Image by Magnascan via Pixabay, licensed under CC0.

Colour printing requires a range of different methods for printing all kinds of imagery onto different kinds of materials. This includes photographic imagery, artwork, publications, and graphic, industrial, fashion, and textile design products.

Understanding how subtractive colour systems work, how inks, pigments and materials behave in printing processes, and how to achieve effects like metallic and fluorescent colours or gloss and embossed finishes requires special skill and expertise.

This section is a short introduction to how colour works in printing – from digital media to a physical product.

Do I need to convert an RGB image to CMYK to print it?

Do I need to convert an RGB image to CMYK to print it?

You can send an RGB image directly to your home inkjet printer and it will print it out. However, this is relying on the printer's software to convert your RGB image into CMYK for the four or more inks that your printer uses. You may not get the best result by doing this, and your printed images may not have the most accurate colour.

***Note**: some inkjet printers also have a grey ink cartridge – CMYKg (and some also have green and orange) – the grey ink is a dye, whereas the black ink is a pigment and not transparent. Grey ink is good for shades and mixing with the other colou*

If you convert your RGB image to CMYK in your image editing software, you have more options and control over how the image will look when printed, and most professional printers will ask for images already converted to CMY

Watch this video to see some examples of RGB to CMYK colour conversion in action. You don't need to have Photoshop to convert your images, but it helps to have an image editor that has properties you can adjust to get the best results.

Media attribution: Essential Tips Converting RGB To CMYK | The Art Of Printing | Getting Started | Matt Irwin, Matt Erwin Photography on YouTube

For a more technical and detailed overview of digital-to-print, see the **resources on this page by artist and authority on digital printing – Les Walkling**. In particular, see the PDF on ***Matching Prints to Screen.***

This video by Les Walking for the Colour Society is a more technical and detailed examination of the factors that affect the conversion of digital image to print: link to video on Youtube (cannot be embedded):

Process (CMYK) and Spot (Pantone) colour printing



Figure 3.28. Printing house by andreas160578 via Pixabay, licensed under CC0.

Colour printing can be complex and requires specific skills and knowledge to perfect. Print methods used depend on the type of print job and the colours you want to print.

Not all colours can be produced with **Process** colour (also called the **four-colour process** because of the four inks used – **CMYK**). Process colour printing mixes colours by laying down tiny dots in the printing process. Process colour is good for photographic images and complex images with subtle tones and shades, but it's not good for some kinds of printing, like logos, packaging, or printing designs on fabric, like t-shirts.

Spot colour is what we call it when pre-mixed colours are used in the **offset** printing method (Figure 3.28). This method is preferred when a small set of exact colours are needed – or if colours are needed that can't be mixed with the process method – such as pastels, fluorescents, or metallic colours. Spot colours are solid colours and are usually made with the **Pantone** colour-matching system. There are 18 basic inks that are used to mix all the Pantone colour

Some printing jobs use both Process and Spot methods to achieve the best result. For example, some company logos require a very specific spot colour which can't be reproduced with process printing, so a spot colour is added to the Process colour printing to get the exact colour.

There is also a third printing method called **Extended Colour Gamut process colours.** This method is recent and not yet as popular. It involves adding additional colours (orange, green and violet – **OGV**) to the CMYK colour printing method to extend the number of colours (the gamut) that can be printed – **CMYK+OGV**.

Designers often refer to Pantone colour swatch books (Figure 3.29) and online swatch charts to help select and match colours for printing. You will also find colour libraries, including Pantone, in your image editing softwar

Visit these links for more information:

- Pantone: Spot vs process color
- Adobe: Spot vs process color
- Graphics Mob: How to find and add Pantone colors in Photoshop



Figure 3.29. Pantone swatches. Photo by Christina Rumpf via Unsplash, licensed under CC0.

Colour management – what can go wrong?



Figure 3.30. Image attribution: Image by Gino Crescoli from Pixabay

Colour management is important to ensure colour is accurately represented across digital devices, screens and printing processes. It's useful to know about if you are a graphic designer, photographer, printer, or any kind of colour worker.

This chapter has covered working with colour from a range of perspectives, like colour gamuts and systems, different kinds of digital media devices, and printing methods. All of these elements are affected by colour management. Sometimes, things can go wrong in colour processes – especially when transferring images between devices or outputting to printers.

What can you do to improve your colour management?

If you know what can go wrong, you will know what to look out for and how to solve any problems that might happen. Here are a few things that you can check in your own colour workflow processes that might be creating colour problems for you:

1. **Screen colour problems (Calibration)**
   If you are working with an old computer screen/monitor, or one that isn't calibrated properly, you may not be able to see the correct colours in your digital media. Try calibrating your device screen to get the colours as accurate as possible. See How digital screens display colour in this resource for more information.
2. **RGB to CMYK (Conversion)**
   Not converting RGB images to CMYK before printing, as mentioned in Do I need to convert an RGB image to CMYK to print it? in this resource.
3. **Image editing in CMYK instead of RGB**
   This will not show you accurate colours on your computer, and may not let you use all the editing functions of your software. Check that you are editing your image in RGB to get the best results.
4. **Colour loss from conversion**
   Understanding the different colour systems and colour loss when converting from RGB and CMYK is useful. RGB is a bigger colour gamut than CMYK, so not all colours transfer from digital to print.
5. **Do you have the right colour profile?**
   If you're not using the right colour profile or library when creating/editing your digital images, your colour may not print accurately. Learn about colour profiles here: Adobe: working with colour profiles
6. **Colour correcting**
   Learn how to use colour pickers and HSB settings to change the saturation or brightness of colours and adjust your images where necessary. See Other RGB colour models in this resource for more information.
7. **Double colour management**
   If your software and printer are both applying colour management to your image, you could end up with bad colour outputs – for example, your reds look too pink. Check your colour settings in your editing software and your printer.
8. **Proofing and paper stock**
   Print a sample (proof) first to check your colours and see how they look on different types of paper – then you can adjust your colour if it's not looking the way you want it to. Different types of paper can affect how your colours print too.

Learn more about colour management issues here:

- Adobe: working with colour profiles
- Colour management theory
- Colour management guide

Test yourself: colour systems – printing

A multiple choice quiz to test your understanding of printing colour systems

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again.

This page titled 3.4: Colour Systems- Printing is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.5: Colour Systems- Pigments and Dyes

Colour pigments: history and usage



Figure 3.33 Artist's palette by Rosa Bonheur via Wikimedia Commons, in the public domain.

A timeline of colour pigments and dyes

Since pre-historic times, pigments have been used for painting and decoration. Pigments can be made from organic (plants and animals) or inorganic substances (minerals). Early pigments were made simply from grinding ochres found in earth and rocks into a powder that could be painted onto objects or bodies by mixing with water, oils or resins. Over time, cultural groups all over the world developed wider ranges of colours using more complex methods to extract colours, and they created various mediums for using these colours as paints and dyes.

Here is a list of many commonly known pigments and dyes, grouped roughly in chronological order by when they were first discovered and used. You can select any of these pigment or dye links to open a new tab with a Google search for each one, so you can begin your own research and learn more about what they are made from, where and when they were first discovered, and examples of their usage.

Timeline of pigments and dyes

Pre-history

Red, yellow and brown ochres | Lamp black | Bone black | Bone white | White chalk | Woad



Figure 3.34 Pigment by Marco Almbauer via Wikimedia Commons, licensed under, CC BY-SA 3.0

Traditional Australian Indigenous Ochres

Watch this video by Aboriginal Elder*Yidumduma* Bill Harney to learn about traditional Australian Indigenous ochres that have been used for millennia by the *Yubulyawan* clan of the *Wardaman* people of the Victoria River region in the Northern Territory of Australia:

Media attribution: Red, White & Black Ochre, Paul Taylor on YouTube

Antiquity



Figure 3.35, Bucket of indigo, by gitane via Wikimedia Commons, licensed under CC BY 3.0.

Watch this video to learn about Egyptian blue:

Media attribution: Egyptian Blue: How an Ancient Pigment Could Save Lives, SciShow on YouTube

Mediaeval

Ultramarine (Lapis lazuli) | Lead tin yellow* | Smalt | Vine black | Kermes | Peach black | Dragon's blood | Graphite | Lac | Gamboge* | Arzica (weld) | Brazilwood | Verdigris | Gall ink | Walnut | Stil de grain



Figure 3.36. Cinnabar by H. Zell via Wikimedia Commons, licensed under CC BY-SA 3.0.

Watch this video to learn more about Dragon's blood (jump to 3:02 for the start of the lecture):

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: Saturday University: Dragon's Blood and the Blood of Dragons Seattle Art Museum on YouTube

Renaissance & Enlightenment

Burnt Sienna | Burnt umber | Copper resinate | Naples yellow (antimony)* | Van Dyke brown | Cobalt green | Potter's pink | Blue verditer | Mummy brown (*caput mortuum*) | Bistre | Logwood



Figure 3.37. Cobalt Oxide Green pigment by Stephhzz via Wikimedia Commons, licensed under CC BY-SA 3.0.

Media attribution: Raw vs Burnt Earth Colors, Walcott Fine Art on YouTube

Industrial Age and Modern

Prussian blue | French ultramarine | Chrome yellow | Chrome orange | Alizarin crimson | Cobalt blue | Cobalt yellow | Cobalt violet | Manganese violet | Scheele's green* | Emerald green* | Cadmium red | Cadmium yellow | Lemon yellow | Viridian | Cerulean blue | Zinc white | Titanium white | Mars colours | Indian yellow | Mauvine (aniline purple) | International Klein Blue | Fluorescent pigments | Phosphorescent pigments



Figure 3.38. Stamp by Post of Aden via Wikimedia Commons, in the public domain.

Watch this video to learn more about the different types of white pigment used in artists' paints:

Media attribution: Artist's White paint: Zinc White Issues Malcom Dewey on YouTube

Contemporary (late 20th Century +)

YInMn blue | Vantablack | MIT black | Pinkest Pink | Thermochromic pigments (colour-change with heat) | Photochromic pigments (colour-change with light) | Bio-pigments from bacteria | Pearlescent pigments | Interference pigments (different colours from different angles)



Figure 3.39. Mas Subramanian, YInMn Blue – cropped(opens in new tab), CC BY-SA 4.0

Watch this video to learn more about the recently developed YInMn blue pigment and other colours created by Mas Subramanian:

Media attribution: A Beautiful New. Blue Makes Its Debut, Oregon Public Broadcasting on YouTube

**toxic pigment*

For more detailed information on pigments and how they are created and used, you can read this book, *Chromatopia* by David Coles, which has a detailed history of colour pigments and includes recipes for many colours you can make yourself:

Coles, David, and Adrian Lander. *Chromatopia: an Illustrated History of Colour*. Port Melbourne, Vic: Thames & Hudson, 2018

There's also a fun infographic: History of pigments by Korwin Briggs, that gives a humorous summary of selected pigments mentioned on this page.

Other references:

- Pigments through the ages: timeline
- Indigenous Australian pigments

Mixing paint pigments

Pigments are not pure primary colours

Chapter 1 covered a history of colour theory that included the development of different systems of primary colours – like RYB, RYGB, RGB and CMYK. Learning about primary colours can help us understand how to mix different colours, but it doesn't always help us to understand how **subtractive** colour mixing works in real and practical ways.

Most pigments (and dyes) are not pure primary colours. Pigments are made from substances that have a mixture of atoms that reflect a range of light waves. Paint mixing skills are important to learn in your creative practice.



When you first learn how to paint – whether with watercolours, acrylic paints, oil paints or other types of mediums – you will usually start with a basic set of pre-mixed artist-quality paint colours that can be used to mix a wide variety of different colours.

A basic set of paint colours includes a mixture of warm and cool colours, and opaque and transparent colours.

Some examples of this might include:

- Two different reds: **cadmium red** is an opaque, yellowish red, and **alizarin crimson** is a transparent, blueish red.
- Two different blues: **Prussian blue** is dark, cool, and transparent, and **cobalt blue** is intense, warm and opaque.
- There are also many types of **yellows** and **greens** that are cool or warm, opaque or transparent.
- There are also different types of **black** and **white** paint, and a range of earthy colours like **umbers**, **siennas, ochres** and **browns**.
- You might also have **violets** and **oranges** in your paint set that can't be mixed by combining other paint pigments.
- There are also other special paints that might have metallic or pearlescent pigments mixed with other colours or different paint mediums.

You can add to your basic paint set if you want more colours. Art materials suppliers have a large range of artists' paints with many colours to choose from. However, you probably don't need every colour available. Your particular colour palette will ultimately depend on the colours you want to use in your artworks. It's good to learn how to mix your own colours and avoid only using pre-made colours straight from the paint tube or pot.

If you are studying painting, you will learn how to mix the different pigments in your paint set to achieve a wide range of colours and avoid muddy or dull colours – unless you want neutral or subtle monochrome colours. You can learn to mix many **tints**, **shades** and **tones** of warm and cool greys or browns from your paints. Learn more about colour properties from the **Colour wheel** in this resource.

There are different paint mixing methods to create many colours in your artwork, such as:

- ***physical*** mixing of two or more paints to create a different colour
- ***glazing,*** which is overlaying transparent layers of different coloured paints to create a new colour
- or by using methods similar to the Impressionist painters, who placed small dots or patches of colour next to each other to give the ***impression*** of another colour when viewed at a distance.

Artists' paints are pigments that are mixed with different mediums:

- **Watercolour** paints are pigments mixed with gum arabic.
- **Gouache** paints are similar to watercolour but thicker and more opaque.
- **Inks** can be made with pigments or dyes and can have different mediums, like water, solvents, gels, gum arabic, or shellac.
- **Acrylic** paints are pigments mixed with an acrylic medium and there are different materials you can add to acrylics to make different textures for your paints.
- **Oil** paints are pigments mixed with an oil base, like linseed oil, but can also include waxes, pumice and solvents to create different thicknesses or textures.
- **Enamels** and **lacquers** are traditionally oil-based, with a hard, glossy finish – but you can also get acrylic resin-based versions.
- **Resin** – traditional resins were made from natural materials like tree sap. Synthetic resins use a two-part epoxy system that has a synthetic polymer and a hardener. Once combined, a chemical reaction occurs which turns the two liquids into a hard, solid material.
- **Encaustic** paint has a hot wax medium with pigments added to it.
- Other types of paint include: **Tempera** (egg yolk) and **Fresco** (wet plaster), which are not often used in contemporary creative practice because they must be made at the time of painting and are not practical to store or transport.

You can use more than one type of paint medium in an artwork, but it's important to learn which ones work together. For example, you can put oil paint on top of acrylic paint, but not the other way around. You can, in some cases, use different oil-based paints together, and different water-based paints together, but depending on the thickness or glossiness of the paint medium, this doesn't always work well. There is a lot to learn about painting methods and techniques!

Why does red and blue make brown?

Watch this video to learn more about colour pigment mixing...

Media attribution: Why Red and Blue Make Brown: Color Wheel Myth Dispelled, WriteArt on YouTube

You can also read this book to learn more about paint mixing:

Wilcox, Michael. *Blue and Yellow Don't Make Green*. [2nd ed.]. Bristol: School of Colour, 2001. Print

David Briggs has a very detailed and technical explanation of colour mixing on his website: *The Dimensions of Colour: Modern Colour Theory*. Read the section about Mixing of Paints for more information.

The artist's palette as a colour system

You can learn quite a lot about colour and painting techniques by studying the artworks of others. Some artists and art historians also like to delve deeper into an artist's methods and processes by studying the paint pigments that the artist has used, and how they arrange their painting palettes to mix colours before applying them to their paintings.

Photographer **Matthias Schaller** has created a series of photographs of famous artists' paint palettes – ***Das Meisterstück*** (*The Masterpiece*). He considers these to be a reflection of the artists' work and has created over 200 of these images. You can view some examples **on his website** and **in this Hyperallergic magazine article** .

Digital tools have also been used to analyse the basic colour palettes of famous paintings to help artists and designers learn about colour relationships – view some examples here:

The Art Squirrel: Colour Gamut Mapping for Painting

Experiments with Google: Art Palette

Colour dyes: a (very) short history of dyes from around the world



Figure 3.41 Juana Gutierrez grinding indigo at the Porfirio Gutierrez family workshop in Teotitlan del Valle, Oaxaca, Mexico. Image by Thelmadatter via Wikimedia Commons, licensed under CC BY-SA 4.0.

Throughout history and across cultures and continents, dyes have been used for thousands of years to colour materials. Many dyes were originally used to colour textiles – fibre-based materials such as threads, yarns or fabrics that are woven or knitted and made from plant or animal fibres, such as cotton, linen, flax, hemp, grasses, wool, silk, human hair, etc. Dyes were also used to stain wood, pottery, and animal hides.

Dyes are different to pigments because they are soluble (they can dissolve in water) and traditionally were mostly made from organic substances (plants or animals). Dyeing processes can also be more complex than working with paint pigments because the dye must be absorbed and held fast in the material it is colouring. Different techniques were developed over time to bind dye colours with the material to prevent the dye from washing out or fading too quickly.

Many of the discoveries for improving dyes throughout history relate to developing chemical processes for creating more vibrant colours, and for creating colours that last longer, which includes ***lightfastness*** and ***colourfastness*** properties, and the ability to bind with materials they are absorbed into. The development of fixatives (known as ***mordants***) was a necessary innovation to prevent dyes from being washed out of textiles, enabling long-lasting colour. Some methods were more successful than others, and evidence has been discovered of ancient textiles that still have some colour from dyeing.

Ancient discoveries

Archeologists have discovered examples of dyed textiles that date back to Neolithic times. One example is from around 10,000 BCE, in the Timna Valley, South Israel, where ancient copper and ore mining sites have been uncovered. [1].

Another archeological example is the discovery of 30,000 year-old flax textiles found in Dzudzuana cave, located in the foothills of the Caucasus region in Georgia, Europe. The flax was dyed in many different colours, including “yellow, red, blue, violet, black, brown, green and khaki.”[2]

The ***Silk Road*** was an ancient trading route that ran from the Roman civilisation on the Mediterranean, through Afghanistan, the *Levant* and India, to the Xi’an region in northern China. This route was over 6,400 kilometres long! It was a pathway for trading between east and west cultures in many products such as spices, textiles, and precious metals. It was also the pathway for trading **dyestuffs** and knowledge about dyeing processes., accessed 03/01/2023, https://www.britannica.com/topic/Silk-Road-trade-route ">[3]

Because of the Silk Road, and ancient ***maritime*** trade routes, many cultures had access to dyes that were not made from plants native to particular areas – including indigo, woad, saffron, madder, and safflower. Here are some (very) short stories about the history of selected dyes from locations around the world:

China and Japan

In ancient Chinese silk production, colouring the thread began right from the first stage when the silkworm creates silk thread to form a cocoon. By feeding the silkworm white garden mulberry or wild mulberry leaves, the silk produced could be either white or yellow. Creating different coloured silk threads often involved bleaching it first by boiling threads in the ash of *Lian* tree fruit. Blue dye was made by fermenting indigo, black from iron vitriol, red from madder root or safflower, and yellow from *Jinzi* fruit.

The Ming (1368–1644) and Qing (1644–1911) Dynasties in China created very detailed records of types of dye and the dyeing methods and processes used. These records are an important historical resource for understanding how different natural substances were used to achieve the diverse and vibrant colours we associate with Chinese silk and other textiles.[4]

Japan has a long tradition of dyeing materials such as textiles, paper and wood, going back 2000 years. There are also records going back to the 7th century that document textiles dyed with red, blue, and other colours. These dyes were made from natural materials native to Japan, but also those that came via the Silk Road, maritime trade, and from the influences of Chinese and Korean textiles and dyeing methods. Evidence exists of textiles dyed with vermilion, sappanwood, cinnamon and ***Gunjyo*** – a blue pigment made from mining a mineral ore that had copper in it., accessed 04/01/2023, https://www.aic-color.org/resources/Documents/jaic_v5_gal2nar.pdf ">[5]

Japan is also known for its indigo dye and textiles called ***Aizome***. Indigo was introduced to Japan in the Heian period around the 7th Century CE. Since that time, techniques for creating indigo textiles have developed to become culturally significant, and Japanese indigo textiles are highly valued around the world.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

South-East Asia

Although **Batik** (wax resistance dyeing) is historically found in many places around the world, its origins in Java, Indonesia, are significant. Indonesian Batik was recognised by UNESCO in 2009 and placed on the Representative List of the Intangible Cultural Heritage of Humanity.

Watch this video to learn more about the history and techniques of Batik:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: What is Batik? Historically Speaking, Ours For All on YouTube

India

India's ancient history of dyes is significant. Not only did they produce many dyes and techniques for achieving vibrant colours, but they also developed mordants and processes to fix the dyes, which were closely guarded secrets for a long time. Indian textiles were highly prized across Europe. The name "Indigo" is a reference to India, where the plant *Indigofera Tinctoria* was grown, although it was also found in much of Asia and parts of Africa too.

The ancient Sanskrit texts, known as the **Vedas** (meaning "knowledge"), are the oldest Hindu texts known to exist – from around 1500-500 BCE. These contain details about textiles and clothing worn at different times of the year or at religious ceremonies, with reference to multiple colours. From these texts, we know that Indian dyeing techniques for creating vibrantly coloured fabrics existed around that time.

Tie-dye, known as **Bahndani** (meaning "to tie up"), is also accredited to Indian culture, going back thousands of years. Other techniques like **Batik** and **Ikat** were also used with dyed yarn or woven fabrics. India was one of the first places to produce cotton in large quantities, and produced many dyed cotton textiles that were traded in other countries.

This video discusses the complex and problematic history of Indigo dye beyond South Asia (see also North America below for more details about the creation of blue jeans):

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: A Short History of the Colour Indigo, National Gallery UK, on YouTube

Egypt and Persia (North Africa & Middle East)

Ancient Egyptians wore mostly white linen textiles, but they also dyed fabrics in a range of colours. They used Madder for red dye, Safflower for yellow, Indigo or woad for blue, and Murex snails for purple (Tyrian purple was originally made by the Phoenicians).

Ancient Persians also developed rich colours using dyes like *runas* (madder), *red grain* (kermes or cochineal beetles), walnut, *neel* (indigo), vine leaves, and other plant materials. Methods for dyeing wool and silk with these diverse colours coincided with the creation of woven and knotted carpets – something we still associate with Persian culture today.

The first carpets date back over two thousand years and were created by nomadic tribes and royal courts. Each group would have their own designs and colours which reflected the history and symbolism that was important to the creators. Carpets created during the Safavid Empire (1501-1736) are world famous for their intricate designs using intense colours, and there are many examples held in museums around the world – here is one example shown in Figure 117.



Figure 3.42. Hunting Carpet made by Ghyath ud-Din Jami, Wool, cotton and silk, 1542–1543, Museo Poldi Pezzoli, Milan. Image attribution: Ghyas el Din Jami – Weaver (Persian) Born in North-West Persia. Died in North-West Persia. Google Art Projectでのアーティストの詳細, Ghyas el Din Jami – Tabriz (?) – Google Art Project, marked as public domain, more details on Wikimedia Commons

Watch this video to see the restoration of a Safavidic carpet:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: Conserving the Emperor's Carpet, The Met on YouTube

West and South Africa

There are many different types of dyes and textile designs that come from the many countries and regions in Africa. Groups develop their own designs with colours that have symbolic and cultural meanings. Techniques such as batik and tie-dyeing developed in African cultures, and common dyes included indigo, kola nut (brown), annatto (a yellow and orange colour), and earth colours.

Visit this website: *The Fabric of Africa* , on Google Arts and Culture, to see many beautiful and diverse examples of African textiles from different parts of Africa.

This video shows the work of artisans who practice West African (Nigeria, Ghana and Mali) ancient textile traditions: Adire, Adinkra and Bogolan 'Mud cloth'. (19 minutes)

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: West African Textiles, BurroGrande Films on YouTube

Greek, Roman and other Mediterranean civilisations

Ancient Greek, Roman and neighbouring civilisations used a range of plant and animal dyes to create coloured textiles. Plant dyes included crocus sativus (ochres), madder, woad, weld (yellow), walnut hulls, oak gall (brown and black), orchil lichen (pink/purple), alchanet (red), and saffron crocus (yellow).

Animal dyes included kermes beetles (red/cochineal) and seashell creatures such as Hexaplex trunculus, Bolinus brandaris, and Stramonita haemastoma, which created a purple dye similar to the Murex sea snail that was used by the Phoenicians and Romans to create Tyrian purple., accessed 21/12/2022, https://artextiles.org/en/content/dyes ">[6].

Watch this video for more details about how Tyrian purple was created:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: Tyrian Purple | History of Colours, Little Art Talks on YouTube

British Isles and North/West Europe

Civilisations from the British Isles and Western Europe used a range of plant materials to create diverse dye colours. Despite being grown across southern Europe and the Caucasus, Britain is primarily known for its woad (*Isatis Tinctoria*) dye, perhaps because of the legends of **Boudicca** and the **Iceni** tribe, who painted their faces with the blue dye. The Celts also used it as body paint and possibly tattoo ink – Romans referred to the Celts as "Picts" (Picti means painted people in Latin) because of their blue tattooed bodies. Evidence of plant materials goes back as far as the Iron Age, and the plant was used for medicinal purposes as well as dye.

Vikings created their own dyes from local plant materials, but they also traded for colours like woad, indigo, madder and cochineal to create more vibrant colours than they could make from local ingredients. They used small amounts of dyes to create decorative edgings on their textiles rather than dyeing entire fabrics. They also used a range of available mordants to fix the dye colour, such as iron, tin, copper, and alum.

Watch this video to learn about traditional dyeing methods, including the use of different mordants that would have been available during the Iron Age (1200 – 550 BCE) in Europe.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: Iron Age Dyes: Woad, Weld & Madder, Sally Pointer on YouTube

North America

Many plants were used by Indigenous Northern Americans to create a wide range of dye colours, such as sumac, bloodroot, alder, cottonwood and black walnut. Early western colonisers noted that native coloured textiles tended to fade quickly, so it is thought that coloured dyes were used in a ***direct*** or ***substantive*** dyeing method where mordants were not used. accessed 02/01/2023, https://www.fs.usda.gov/wildflowers/ethnobotany/dyes.shtml ">[7]

Blue Jeans, Denim and Dungarees

'Bleu de Gênes' was made from "bastard indigo", a plant related to *Indigofera,* called *Amorpha Fruticosa*. It was used to produce a blue dye for sail cloth that became known as 'Bleu de Gênes' (the blue of Genoa – from Italy), shortened to "***jeans***".

'Tenue de Nîmes' (Clothes from Nîmes – from France), short name "de Nîmes", was a textile developed in the 17th century that had a twill weave using one light thread and one dark thread, so the fabric was dark on the outside and light on the inside. The English and Americans eventually turned the name of this textile into what we now know as '***denim***.', accessed 01/01/2023, https://medium.com/@tsbojer/the-history-of-indigo-dyeing-and-how-it-changed-the-world-35c8bc66f0e9 ">[8].

The term "dungarees" most likely comes from a sturdy cotton textile made in Dungri, Gujarat, India, that was often coloured with indigo dye.

Although they originated in Europe and India, these blue textiles are now associated with American culture due to the production of the clothing item we call "blue jeans". In 1853 a German immigrant, Levi Strauss founded his company in San Francisco, USA, which stocked "denim" fabric. In 1873, Latvian emigrant and tailor Jacob Davis and Levi Strauss patented and manufactured the "XX" pants, which became known as Levi 501s. These are claimed to be the world's first blue jeans. These jeans had metal rivets on the pockets and a button-fly, which made them tough and suitable as workwear.

Claims that Levis were the first "blue jeans" are disputed by some historians who point to evidence that similar garments were first created by enslaved black people working the indigo and cotton plantations in Southern states. These enslaved plantation workers needed tough working clothes for the hard labour that was part of plantation life. They had ready access to the cotton that came from the plantations to produce the fabric, and they had the cultural knowledge from their African homelands to know how to dye the fabric with indigo – which also had anti-fungal and antibacterial properties.

According to these historians, Davis and Strauss merely added metal rivets to their work pants design and patented the product. , accessed 23/12/2022, https://www.phillytrib.com/commentary/michaelcoard/enslaved-blacks-invented-blue-jeans/article_57de5262-5b78-534d-a133-bfc406f87a78.html ">[9]

Watch this video for an overview of the origins of blue jeans:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: Where Did Blue Jeans Begin? | Riveted: The history of Jeans, American Experience | PBS on YouTube

Central and South America

Indigo was used in Central and South American civilisations. There is evidence that it was used in the Andes as far back as 6200 years ago – which predates its use in India, Egypt and other ancient civilisations.[10]

Maya blue was "made by burning incense made from tree resin and using the heat to cook a mixture of indigo plants and a type of clay called palygorskite". The process of mixing the indigo and tree resin with clay created a long-lasting colour that didn't fade. In fact, the discovery of artefacts containing this dye has led to physicists developing their own modern version that is resistant to fading and weathering. accessed 03/01/2023, https://phys.org/news/2010-07-ancient-mayans-modern-proof-dye.html ">[11].

Relbun (similar to madder) was used to create red dye over 2000 years ago, but the advent of using cochineal beetles around the 5th Century CE changed dye production in places likes Mexico and Peru. Cochineal became a valuable commodity used for trading and was worth as much as silver to Spanish colonisers. For many years, the Spanish claimed that cochineal was a seed and hid the fact that it was an animal product – to prevent others from breaking their trading monopoly.

Watch this video to learn more about cochineal:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: Cochineal Origins, Harvard Museums of Science and Culture on YouTube

Australia

Australia has Indigenous cultures that have used dyes from a variety of plants, minerals and animal products to colour fibres used for textiles, basket weaving, knotting, and other products for many thousands of years. Different language groups around the continent developed their own knowledge bases using different methods and diverse local materials they found in their geographic locations.

Sally Blake, an Australian artist based in Canberra, studied eucalypts at the Australian National Botanical Gardens, specifically for their dye properties. She has produced an extensive database of Eucalyptus dye colours, which shows the wide range of colours achieved by using the different eucalyptus species, different parts of the plant such as leaves or bark, use of different mordants such as alum, iron or copper, and use with different textiles – wool, silk and linen.

Select the link below to watch this video on YouTube, which shows the bundle dyeing technique using native plants to colour fabric – from Boon Warrung, Wurundjeri and Ngarluma Country. Included are eucalyptus leaves, for yellow, grey or purple colours, eucalyptus bark for purples, and acacia leaves, which can create orange or red colours:

Create unique coloured patterns on fabric using native plants | My Garden Path | Gardening Australia on YouTube



Figure 3.43. *Eucalyptus tereticornis* buds, capsules, flowers and foliage, Rockhampton, Queensland. Image attribution:L Ethel Aardvark, Eucalyptus tereticornis flowers, capsules, buds and foliage, CC BY 3.0

Further resources (RMIT Library search)

Abel, A. 2012, “The history of dyes and pigments: From natural dyes to high performance pigments” *Colour Design: Theories and Applications*. pp.433-470. 10.1533/9780857095534.3.433. https://rmit.primo.exlibrisgroup.com/permalink/61RMIT_INST/4t5l5f/cdi_knovel_primary_chapter_kt011G8M02

Samanta, Ashis Kumar, Nasser Awwad, and Hamed Majdooa Algarni. Chemistry and Technology of Natural and Synthetic Dyes and Pigments. Edited by Ashis Kumar Samanta, Nasser Awwad, and Hamed Majdooa Algarni. London: IntechOpen, 2020. https://rmit.primo.exlibrisgroup.com/permalink/61RMIT_INST/1adn3cm/alma9922172764201341

Delamare, Francois., and Bernard. Guineau. Colour: Making and Using Dyes and Pigments. London: Thames & Hudson, 2000. https://rmit.primo.exlibrisgroup.com/permalink/61RMIT_INST/1adn3cm/alma9911669840001341, https://rmit.primo.exlibrisgroup.com/permalink/61RMIT_INST/1adn3cm/alma9911669840001341

Papadakis, Raffaello. Dyes and Pigments: Novel Applications and Waste Treatment. Edited by Raffaello Papadakis. London: IntechOpen, 2021. https://rmit.primo.exlibrisgroup.com/permalink/61RMIT_INST/1adn3cm/alma9922172633201341

---

1. Sukenik N, Iluz D, Amar Z, Varvak A, Workman V, Shamir O, Ben-Yosef E. "Early evidence (late 2nd millennium BCE) of plant-based dyeing of textiles from Timna, Israe"l *PLoS On,*. 2017 Jun 28;12(6):e0179014. doi: 10.1371/journal.pone.0179014. PMID: 28658314; PMCID: PMC5489155. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5489155/
2. Kvavadze, Eliso, Bar-Yosef, O., Belfer-Cohen, A. Boaretto, E., Jakeli, N., Matskevich, Z., and Meshveliani. T. 2009. "30,000 Years old wild flax fibers - Testimony for fabricating prehistoric linen", *Science* 325(5946): 1359. p.2. http://nrs.harvard.edu/urn-3:HUL.InstRepos:4270521
3. Britannica, T. Editors of Encyclopaedia. 2023 "Silk Road." *Encyclopedia Britannica*, <https://www.britannica.com/topic/Sil...ad-trade-route>, accessed 03/01/2023, https://www.britannica.com/topic/Silk-Road-trade-route
4. Han, J. and Quye, A. 2018, "Dyes and Dyeing in the Ming and Qing Dynasties in China: Preliminary Evidence Based on Primary Sources of Documented Recipes". *Textile History*. 1-27. 10.1080/00404969.2018.1440099. https://www.researchgate.net/publication/323917857_Dyes_and_Dyeing_in_the_Ming_and_Qing_Dynasties_in_China_Preliminary_Evidence_Based_on_Primary_Sources_c
5. Yoshioka, s. 2010, "History of Japanese Colour: Traditional Natural Dyeing Methods", *Colour: Design & Creativity*, Society of Dyers and Colourists p. 1, <https://www.aic-color.org/resources/...v5_gal2nar.pdf>, accessed 04/01/2023, https://www.aic-color.org/resources/Documents/jaic_v5_gal2nar.pdf
6. Artextiles.org, 2017, "Dyes", *Artext: Hellenic Centre for Research and Conservation of Archeological textiles*,<https://artextiles.org/en/content/dyes>, accessed 21/12/2022, https://artextiles.org/en/content/dyes
7. U.S. Forest Service, "Native Plant Dyes", *U.S. Forest Service*, United States Department of Agriculture, <https://www.fs.usda.gov/wildflowers/...any/dyes.shtml> accessed 02/01/2023, https://www.fs.usda.gov/wildflowers/ethnobotany/dyes.shtml
8. Stege Bojer, T. 2007, "The History of Indigo Dyeing and How It Changed the World", *Medium.com*, <https://medium.com/@tsbojer/the-hist...d-35c8bc66f0e9>, accessed 01/01/2023, https://medium.com/@tsbojer/the-history-of-indigo-dyeing-and-how-it-changed-the-world-35c8bc66f0e9
9. Coard, M. 2022, "Enslaved Blacks invented blue jeans", *The Philedelphia Tribune*, March 1, 2022 <https://www.phillytrib.com/commentar...406f87a78.html>, accessed 23/12/2022, https://www.phillytrib.com/commentary/michaelcoard/enslaved-blacks-invented-blue-jeans/article_57de5262-5b78-534d-a133-bfc406f87a78.html
10. Annalee Newitz - Sep 15, 2016 8:53 pm U.T.C. (2016) *World's most valuable dye existed in Peru 1,800 years before anywhere else*, *Ars Technica*. Ars Technica. Available at: https://arstechnica.com/science/2016...anywhere-else/ (Accessed: January 9, 2023). https://arstechnica.com/science/2016/09/worlds-most-valuable-dye-existed-in-peru-1800-years-before-anywhere-else/
11. Powell, D. "Ancient Mayans Inspire Modern Fade Proof Dye", Phys.org, July 30, 2010 <https://phys.org/news/2010-07-ancien...proof-dye.html> accessed 03/01/2023, https://phys.org/news/2010-07-ancient-mayans-modern-proof-dye.html

Colour dyes: methods and processes



Figure 3.44. Wool coloured with natural dyes by Himalayan Weavers. Image by Alamcsd at wts wikivoyage via Wikimedia Commons, in the public domain.

Early dye processes involved soaking and boiling textiles in coloured solutions made from substances such as roots, berries, bark, leaves, wood, fungi, and animal products in a **direct** or **substantive** dyeing method. However, these dyed textiles may not have had a very lasting colour. It was eventually discovered that different methods could be used to create stronger colours and to fix the colours so they didn't fade or wash out so quickly.

Some methods used **fermentation** to create a strong colour, as with Indigo, woad and madder. For example, the indigo plant isn't actually blue. The blue colour only comes from soaking the leaves to release the indican amino acid, which is then fermented by other plant enzymes – a process called *indoxyl*. It is left to dry in the air, which oxidises it, creating a blue colourant. An indigo dye bath looks green – it's only when the dyed material is brought into the air that it oxidises and turns blue before your eyes.

Dyes like Madder can also be turned into pigments by "laking" (hence the term "madder lake") – which means the dye is combined with a mineral salt to produce an oil-soluble substance that can be used like a paint pigment.

A **mordant,** which was often a type of mineral salt like sodium chloride (table salt), alum or copper vitriol, or another substance like vinegar, or even stale urine, was used to fix the dye so it wouldn't wash out of the fabric.

Many of these processes smell terrible!

Synthetic dyes changed the complex and labour-intensive methods of natural dyeing. Many synthetic dyes are made from petrochemical processes, or from other chemicals that can be manufactured in large quantities in industrial settings like factories, and are relatively inexpensive in comparison with some natural dyes. There are many types of synthetic dyes, such as reactive dyes, disperse dyes, base and acid dyes, sulphur dyes, aniline dyes, azo dyes etc. Different types of dyes and dyeing methods suit different types of materials.

Most dyeing processes today are for textile production. The three types of fibres that are commonly used for textiles today are:

- **Cellulose**: cotton, flax, linen, hemp, viscose/rayon/modal (made from bamboo or other plant fibres)
- **Protein**: wool, mohair, silk
- **Synthetic**: nylon, polyester, acrylic, acetate

Here are some of the common dyes and dye techniques used in industry today:

Reactive dyeing method

Fibre-reactive dyes are commonly used for fabrics made from cotton, linen, viscose wool and silk. This type of dye “reacts” with the fibre it is colouring because of a *chromophore* that creates a chemical link with the fibre, binding the colour to it. The colour then becomes part of the fibre. It usually has a good level of colour fastness. Cold water dyes like ***Procion*** dyes are fibre reactive and use soda ash in the dyeing process. They do not need mordants and are non-toxic.

Disperse dyeing method

This is a high-temperature dye made from fine, insoluble dye particles that are from a *suspension*. They are suited to hydrophobic fibres (they don’t absorb water) such as synthetics.

Direct dyeing method

Also called **Substantive** dye, this method is used for cotton, and although lightfast, washes out easily. It’s called “direct” because the dye is absorbed into the fibres without help from other chemicals, such as mordants.

Vat dyeing method

Vat dyeing is still used for some textiles. Natural Indigo is one of the original vat dyeing methods, where textiles are soaked in the vat until the right colour strength is achieved. This may require more than one soaking in the vat to deepen the colour.

Basic and acid dyes

Basic (alkaline) and acid dyes are water-soluble dyes. Basic dyes are used for acrylic fibres, and acid dyes are used for wool, silk and nylon fibres.

Sulfur dye

Sulfur dyes are used for cotton and other cellulose fibres, and also for blended fibres that contain cotton mixed with polyester or acrylic fibres.

Chrome dye

Chrome dyes were synthetic dyes developed in the early 20th Century and commonly used on wool for carpet manufacture, with the use of a chemical to allow the dye to penetrate the fibre. They have good light and colour fastness properties.

Azo dye

Azo dyes are synthetic dyes used in a variety of products, including textiles, leather, foods, cosmetics and carpets. Certain Azo dyes are considered harmful because they can break down into a carcinogenic compound called Aromatic Amines (including benzidine), and can trigger toxic effects such as allergic reactions, tumours, and endocrine disruptions. Although Azo dyes are banned in the UK and restricted in the USA, they are allowed in Australia., accessed 08/01/2023, https://www.productsafety.gov.au/products/chemicals/azo-dyes ">[1]

Learn more about the dangerous history of synthetic dyeing methods and processes from this video:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media Attribution: Fashion that SLAYED!? A History of Fabric Dyes (and all the damage early chemical dyes did), Emily Snee on YouTube

1. Australian Competition and Consumer Commission(ACCC), c.2021, "Azo Dyes", *Product Safety Australia*, <https://www.productsafety.gov.au/pro...icals/azo-dyes>, accessed 08/01/2023, https://www.productsafety.gov.au/products/chemicals/azo-dyes

Test yourself: is this a feature of pigments or dyes?

A multiple choice quiz to test your understanding of pigments and dyes

(5 minutes or less)

How did you go?

If you need to learn more about this topic, you can read this section again: 3.4 Colour systems: pigments and dyes

Colour dyes: synthetic colours and sustainability

Impact of synthetic colour development

Egyptian blue[1] was one of the first synthetically created pigments, made from crushed blue glass (silica and copper) over two thousand years ago. Although synthetic pigments and dyes have existed throughout history, it wasn't until the industrial era that there was a boom in chemical synthetic colours that were relatively cheap and easy to make and therefore used in industry for the mass production of paints and dyes, which were used in products like textiles, paper, plastics, and many other materials.

Prussian blue was the first chemical synthetic colour accidentally created by Johann Jacob Diesbach in 1704. One of the first synthetic dyes to be mass-produced was a mauve colour called **Mauveine** (also known as **Aniline purple** and **Perkin's mauve).** It was also accidentally discovered by William Henry Perkin in 1856 while he was trying to create the chemical ***quinine,*** which was used at that time for the treatment of malaria.

Mauvine
#8D029B

Many of the synthetic colours we now use in artist paints and industrial practices (Figure 3.45) are safer and cheaper options than the equivalent pigments from the past. Older colours like realgar, vermilion and emerald green are highly toxic due to their chemical compounds which include lead, mercury, arsenic or other dangerous materials that are harmful to human health. Many people became ill or died from the creation and use of pigments and dyes containing these toxic substances. Learn more about this in Special colours, controversial colours and interesting facts on the next page.

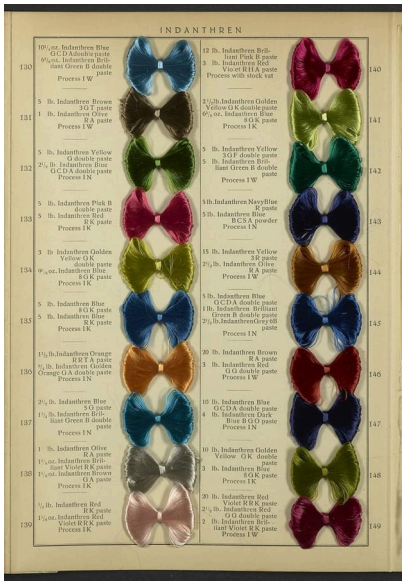


Figure 3.45. Indanthren Dyeings on Rayon (Viscose) Yarn by Science History Institute via Wikimedia Commons, in the public domain.

Hair dyes

People have been dyeing their hair for thousands of years too! Ancient cultures used natural dyes like Henna, Indigo, Tumeric, Senna, Walnut and Cochineal to dye their hair a range of colours, such as red, orange, yellow, black, brown, or even green. Some ancient people like the Celts also bleached their hair with lime or other substances that would strip the hair of colour.

Natural dyes can create unpredictable results because they may have different amounts of reactive substances and colourants, and they also tend to fade over time. Some products, like “black henna” (which is not actually henna), can cause extremely serious allergic reactions and are banned in many countries.

Synthetic hair dyes were first developed in the late 19th century. French company L’Oréal was the first company to manufacture synthetic hair dyes around 1907, and the German company Schwarzkopf was the first to create at-home hair dyes in 1947. Today, hair dye products are a huge industry and are available in a wide range of colours – in fact, all the colours of the spectrum (Figure 3.46), as well as natural colours and treatments that bleach or lighten the hair.

There are temporary and permanent dyes that can be used to colour hair (including facial hair). However, some colours are more lightfast than others, and even colours classed as “permanent” can still wash out or fade – especially colours like violets, blues and greens, which are more *fugitive* dye colours. You can also now get hair dyes that fluoresce in UV light – known as ***blacklight-reactive*** hair dyes.



Figure 3.46. Pink hair in Harajuku by Jacob Ehnmark via Wikimedia Commons, licensed under CC BY 2.0.

Sustainability, waste and pollution from making and using dyes

Dye production and usage (both natural and synthetic dye) has had a problematic history due to the use of petrochemicals to create synthetic colours, the use of water in the dyeing process, and the creation of wastewater from the washing process.

Since the advent of industrial and synthetic dye-making processes (Figure 3.47), and industrial use of dyes for producing textiles and other materials, industries working with dyes have caused a lot of pollution and used great quantities of clean water.

New methods are being developed that seek to reduce waste in dye production and usage, to create a more sustainable industry. This also impacts broader issues in the fashion industry relating to clothes wastage and sustainability.

These articles have more information on this topic:

- Paillié-Jiménez M E, Stincone P, Brandelli A 2020, "Natural Pigments of Microbial Origin", *Frontiers in Sustainable Food Systems*, Vol 4, 2020, viewed 07/12/2022, , DOI=10.3389/fsufs.2020.590439, accessed December 21, 2022
- Bealle, A. (2020) *Why clothes are so hard to recycle*, *BBC Future*. BBC. , accessed: January 3, 2023
- Lellis, B. Zani Fávaro-Polonio, C. Alencar Pamphile, J. Cesar Polonio, J, 2019, "Effects of textile dyes on health and the environment and bioremediation potential of living organisms", *Biotechnology Research and Innovation*, Vol 3, Issue 2, 2019, Pages 275-290,
  ISSN 2452-0721, https://doi.org/10.1016/j.biori.2019.09.001.<>, accessed 04/01/2023



Figure 3.47. Vats for dyeing silk cloth. New York Public Library via Wikimedia Commons, in the public domain.

1. Pradell, T., Salvado, N., Hatton,G.D., Tite, M.S., 2006, "Physical Processes Involved in Production of the Ancient Pigment, Egyptian Blue", *Journal of the American Ceramic Society*, Volume89, Issue4, April 2006, pp. 1426-1431, https://doi-org.ezproxy.lib.rmit.edu...6.2005.00904.x, https://ceramics.onlinelibrary.wiley.com/doi/abs/10.1111/j.1551-2916.2005.00904.x

Special colours, controversial colours and interesting facts

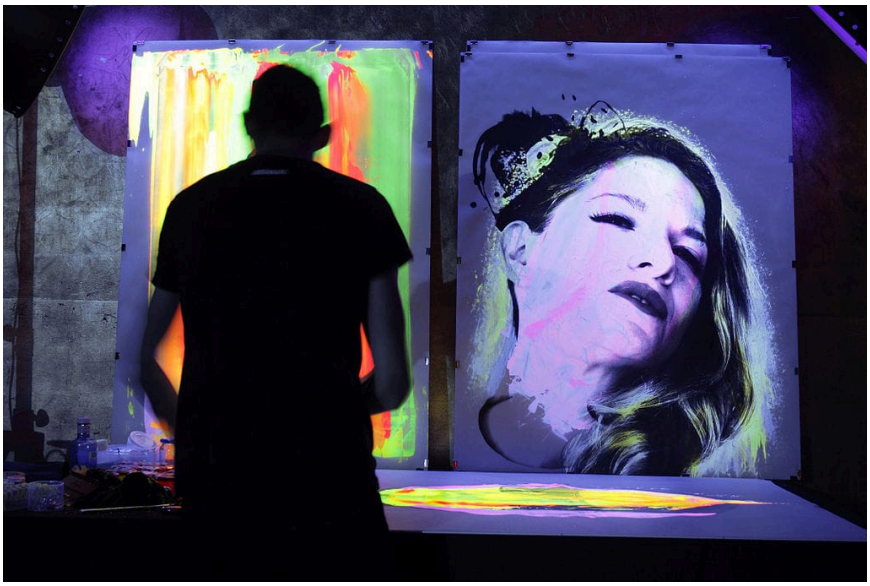


Figure 3.48. Painting with fluorescent colours which glow under black light. Beo Beyond via Wikimedia Commons, licensed under CC BY 3.0.

The history and stories of some pigments and dyes are curious, and sometimes controversial. Here are a selection of interesting colours and fun facts:

Topics covered

- Luminescent and special effects pigments and dyes
- Trademarked colours

Luminescent and special effects pigments and dyes

In Chapter 2, the page about Luminescence explains the chemistry of fluorescence and phosphorescence. But making fluorescent and phosphorescent pigments involves complex processes that involve both **chemistry** and **physics**. There are also special effects pigments that change colour under different conditions.

There are different kinds of fluorescent and phosphorescent colourants that can react with UV light as well as visible sunlight. Some can even react with infrared light waves. Capturing fluorescent or phosphorescent effects requires very specific treatment of the pigment particles. Theses types of pigments must be mixed with a stable medium that can be used as a paint or printing ink that will last.

Fluorescent pigments

Fluorescent pigments (See Figure 3.48 at the top of the page) can be made from organic or inorganic substances. The pigments don't fluoresce in their solid state, but if they are dissolved in a **thermoplastic** or **thermoset carrier resin** and then ground into a fine powder, they become fluorescent pigments [1].

Phosphorescent pigments

We are familiar with phosphorescent pigments that are used as "glow-in-the-dark" paints and pigments that can be mixed with plastics (Figure 3.49). These pigments are made from phosphors that capture light (photons) and store the energy, emitting it slowly as photons over a period of time after light exposure. An example of this would be a glow-in-the-dark toy that absorbs sunlight or even artificial light, and then releases it at night-time or when all lights are removed.

Copper-activated zinc sulfide, called ***GS phosphor***, is often used as the phosphor in toys, whereas a more powerful substance like strontium aluminate is used for road signs, road surface lines, and warning signs. Phosphorescent pigments can be mixed into paint mediums, waxes or plastics. They have many different uses.

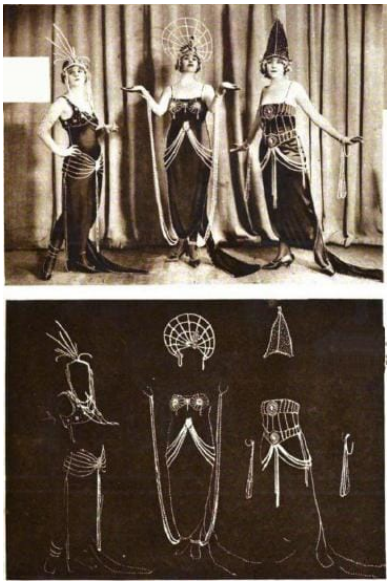


Figure 3.49. The "pearl scene", New York City, 1921.A dance troupe wears costumes covered with pearls covered with phosphorescent paint. The lights in the theatre are turned off, and the pearls glow. Eric A. Dime via Wikimedia Commons, in the public domain.

Photochromic and Thermochromic dyes and pigments

Photochromic pigments and dyes have a reversible (or sometimes irreversible) colour change when exposed to light rays. Some can go from transparent to coloured, as in optical lenses (transition lenses) that get darker when worn outside in sunlight, and become clear again when entering a darker space. Other common examples can be found in nanofibres in smart textiles, in toys, and as UV warnings for sunburn.

Photochromic pigments contain microencapsulated photochromic dye mixed into a synthetic resin. The colour change happens when light exposure triggers a chemical reaction that changes which light waves are reflected and absorbed, thus changing the colour. When the light is removed, the chemical reaction dissipates and the pigment goes back to its original colour.

Thermochromic pigments have a reversible (or sometimes irreversible) colour change when heat is applied to the pigment. Applied heat triggers a chemical reaction to occur that changes the light waves that are reflected and absorbed, thus changing the colour. Examples include textiles, objects like coffee cups, toys, and food packaging. Colour change labels can detect if food packages have been exposed to temperatures that might spoil the edible contents. Figure 3.50 shows a short video clip of a thermochromic coffee mug changing colour when boiling water is poured into it.

**** insert a coffee mug video **

Pearlescent and Interference pigments – structural colouration

Pearlescent and interference pigments are usually created with complex and multi-layered paints that appear to have different colours when viewed from different angles.

You might have noticed similar phenomena like oil slicks, soap bubbles and peacock tail feathers that appear to have rainbow colours or two or three different colours when moving. It's an optical phenomenon where surfaces appear to change colour depending on the angle they are viewed from.

Iridescence (also known as ***goniochromism*** – from the Greek **gonia** = angle, **chroma** = colour) is the name for this effect.

This example in Figure 3.51 is called *ChromaFlair* – it's a pigment for automotive paint. You can see in the image that the paint finish on this car appears to be different colours depending on the angle you are viewing the surface from. The curves of the car body show different colours because they are at different angles to the camera. This type of effect is also called Structural colouration .



Figure 3.51. TVR Tuscan Speed Six car painted with ChromaFlair interference pigment. Image attribution: Mytho88, TVR Tuscan 01, CC BY-SA 3.0 from Wikimedia commons

Trademarked colours

There are certain colour pigments that have been developed by individuals or organisations who have tried to limit the use of their colour with trademarking. Many companies have tried to trademark their logo colours or signature product colours, but this has only been partly successful. One successfully trademarked colour is Tiffany Blue , which is a colour developed by Pantone for the jewellery company Tiffany & Co. This colour can't be used by anyone except Tiffany for their packaging.

Yves Klein: International Klein Blue

Around 1960, French artist Yves Klein collaborated with artist paint maker Edouard Adam to develop a deep and vibrant blue pigment with a matte, powdery quality, which is similar in colour to a synthetic ultramarine. Klein called the pigment ***International Klein Blue (IKB)*** and he used the pigment mixed with resin in many monochromatic artworks – some abstract (Figure 3.52), and others figurative, often using naked female models covered in the paint who would then press their bodies onto canvas. Klein registered the pigment so that others couldn't use it. However, Adam still sells this pigment today under the name ***Médium Adam 25.***

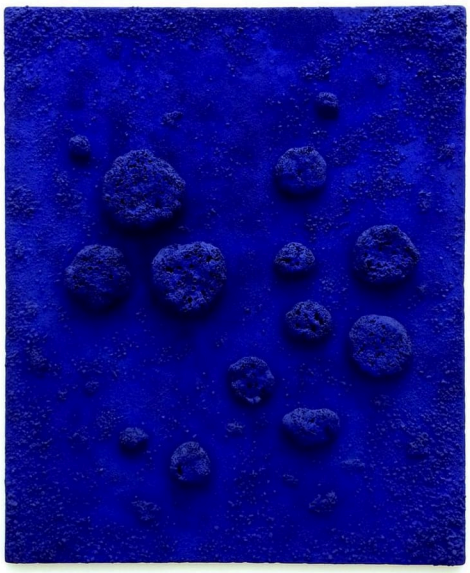


Figure 3.52. Artwork *L'accord Bleu* by Yves Klein, 1960, using International Klein Blue pigment. Image attribution: Jaredzimmerman (WMF), L'accord bleu (RE 10), 1960, CC BY-SA 3.0

Vantablack (Anish Kapoor controversy)

Sculptor Anish Kapoor bought exclusive rights to use the paint Vantablack, which was developed by Surrey NanoSystems in 2014 and originally created for use in military and astronautical industries. Vantablack was the "blackest" black pigment at that time, which could absorb up to 99.965% of light. This means that it barely reflects any light, so objects that are covered in this pigment look like a void or black hole (Figure 3.53).

Kapoor's actions caused controversy in the art world because a lot of artists and critics don't think that art materials should be restricted. Many believe materials like this should be available for anyone to use.



Figure 3.53. A sample of Vantablack pigment covering aluminium foil. Image attribution: Surrey NanoSystems, Vantablack 01, CC BY-SA 3.0

Stuart Semple's Pinkest Pink and other *liberated* colours

Multidisciplinary artist Stuart Semple has made it his mission to make quality artist pigments that are available to everyone. He dislikes the proprietary way that Kapoor and others attempt to limit who can access certain artist pigments. Semple's pigment PINK: ***The world's pinkest pink*** was initially created as a reaction to Kapoor's Vantablack. Semple's Pinkest Pink can be used by everyone except Anish Kapoor. You can purchase this pigment by agreeing to the following:

> **Note: By adding this product to your cart you confirm that you are not Anish Kapoor, you are in no way affiliated to[sic] Anish Kapoor, you are not purchasing this item on behalf of Anish Kapoor or an associate of Anish Kapoor. To the best of your knowledge, information and belief this paint will not make its way into that[sic] hands of Anish Kapoor.*

However, Kapoor did get access to the Pinkest Pink pigment and posted a photograph online with his middle finger covered in the pink powdered pigment. The feud continued with Semple creating Black 2.0 and then Black 3.0 pigments which rival Vantablack as the "blackest black", and more recently, he has created a range of pigments with sparkling, pearlescent or interference pigments which are freely available to purchase from his online store. He has also made a copy of International Klein Blue that he calls ***EASY KLEIN – IKB Incredibly Kleinish Blue*** , and a copy of Tiffany Blue called Tiff Blue.

Read this related article in The Collector online magazine .



Figure 3.54. Vibrant pink powdered pigment (not Pinkest Pink) by Honey Fangs via Unsplash, licensed under CC0.

MIT black and Musou black

In 2019, MIT produced a pigment that is even blacker than Vantablack, called MIT black . It can absorb even more light than Vantablack – 99.995% – and is also more durable. It's made from vertically aligned carbon nanotubes (CNTs), which are grown on aluminium.

Recently, another very black paint called **Musou Black** was developed in Japan. It absorbs 99.4% of light, making it the darkest black paint that is available on the market. This paint comes as a water-based acrylic, and anyone can purchase it online.

Watch this video to see what Musou black looks like in the real world (8 minutes):

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: I Painted My Entire Room With Musou Black—The World's Blackest Paint, by The Action Lab on YouTube

1. The Chemistry and Physics of Special-Effect Pigments and Colorants for Inks and Coatings, Paint and Coatings Industry, https://www.pcimag.com/articles/85016-the-chemistry-and-physics-of-special-effect-pigments-and-colorants-for-inks-and-coatings

Problematic colours

Some pigments and dyes have a problematic history due to how they were created and used, which was harmful to humans or animals, or because they contain toxic substances that poisoned people who were working with them, causing serious health problems and death.

The Library of Rare Colours

View this video to learn about a rare collection of pigments (including some problematic ones): the Forbes Pigment Collection at Harvard Art Museums in the USA (5 minutes)

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: The library of rare colours by Tom Scott on YouTube

Problematic and dangerous colours

Read on to learn about some problematic pigments and their stories...



Mummy brown

Also called *Mumia* or *Caput Mortuum* (Latin meaning *dead head*), Mummy brown was a rich brown pigment made from grinding up real mummified humans and animals. Eventually, the supply of mummified bodies declined, and people began realising how the pigment was made and found it distasteful, so it was no longer produced or used. The modern artists' pigment called Mummy brown is made from inorganic earthy substances.

Note: There is another colour known as Caput Mortuum Violet, which has a more purplish, mauve-brown colour, like dried blood. It was made from iron oxide and used by the Romans.

Read more about Mummy brown in this Harvard Museum article

Figure 3.55. Painting by Martin Drolling, 1815 showing use of Mummy brown pigment. Image attribution: Martin Drolling artist QS:P170,Q3295410, Martin Drolling – Interior of a Kitchen (detail) – WGA6679, marked as public domain, more details on Wikimedia Commons. Select image to enlarge.



Indian yellow

Indian yellow has a controversial history. It was claimed that the pigment was produced from the urine of cows that were fed only mango leaves, but this story was disputed by some sources. The story claims that cows were malnourished and sickly as a result of the diet and that this practice was outlawed in 1908 due to animal cruelty. Investigations into this story revealed no evidence to support it. However, more recent chemical analyses of pigment samples from the past, going back to 1400 CE, have shown that in some cases, the origin of this pigment was from cow's urine, so historically, the pigment *was* produced this way. Today Indian yellow (Figure 3.56) is made by synthetically producing euxanthic acid – which is the main component.

Learn more about Indian yellow

Figure 3.56. Indian Yellow Pigment. Image attribution: Shisha-Tom, Indisch-Gelb, CC BY-SA 3.0. Select image to enlarge.



Scheeler's green and emerald green (also known as Paris green – Figure 3.57)

These pigments are very toxic due to the main ingredient, which is arsenic. This type of green paint and dye became popular as wallpaper and as a textile colour for women's dresses and accessories in the Victorian era. It soon became clear that emerald green fabric and furnishings caused terrible health problems associated with arsenic poisoning, such as skin blisters and sores, nausea and vomiting, and death. Despite this, many still wore the colour, as it was so fashionable at the time.

Emerald green was also a popular artist-quality pigment used by Van Gogh, Cezanne and other Post-Impressionists around the late 1800s. After its toxic effects were discovered, the pigment was no longer used for making textiles and furnishings. However, it continued to be used as rat poison.

Learn more about dangerous fashion from this book: Matthews David, Alison. *Fashion Victims: The Dangers of Dress Past and Present*. London: Bloomsbury Publishing USA, 2017

Figure 3.57. Old tin of Paris Green paint. Image attribution: Chris goulet at English Wikipedia, Paris Green (Schweinfurter Grün), CC BY-SA 3.0. Select image to enlarge.



White Lead (or lead white)

This was a common pigment made from lead carbonate, and its use dates back at least as far as 300 BCE. It was created using what was called “the Dutch method”, where lead was exposed to vinegar for long periods of time, which would corrode the lead and turn it white (the smell was supposed to be terrible). This white substance would then be scraped off and ground into a powder. It was highly toxic because of the lead content.

White lead (Figure 3.58) was popular as an artist’s oil paint due to its opacity and smooth texture. It was also used in cosmetics as a face paint or powder. Both uses were dangerous, causing health issues and death for those who had ongoing contact with the pigment. Perhaps because of its toxicity, it was used in the 18th century to paint wooden ship hulls and floors because it helped to prevent infestation by shipworm – a pest that would eat the ship’s timber. Lead white pigment is now banned in most countries, although an artist’s material known as ***Flake white*** or ***Cremnitz white*** does still exist and can be purchased in some formats. Some artists still prefer lead white to zinc white or titanium white because it’s more translucent, not as flat, and mixes well with other coloured pigments. A lead-free flake white is now also available that contains a mixture of other kinds of white pigments.

Figure 3.58. Old tin of Dutch Boy white lead paint. Image attribution: Thester11, LeadPaint1, CC BY 3.0. Select image to enlarge



Vermilion/cinnabar

Also known as Sindoor, vermilion is a bright red pigment that is highly toxic because of its mercury content (mercury sulphide is its main element). Vermilion made from cinnabar was used across many cultures since prehistoric times in paintings and objects. It is well known as ***Chinese Red*** for the red lacquer paint applied to furniture and objects. It was a very popular artist’s pigment during the Middle Ages and Renaissance, although it was very expensive. It has also been used in cosmetics since ancient times, across Asia, Europe and the Middle East in products like lipstick and cheek rouge because of its vibrant red colour. Mining, working with, and wearing the pigment caused mercury poisoning.

As an artist’s pigment, it wasn’t very lightfast, so was prone to fading over time (see Figure 3.59). Today, it has been replaced by Cadmium red as a safer and more stable option.

Read this article on How Stuff Works to learn more about cinnabar toxicity.

Figure 3.59. Painting by Joshua Reynolds – the vermilion cloak has faded from a vibrant red to a pale pink over time. Image attribution: Joshua Reynolds artist QS:P170,Q194402, Charles Coote, 1st Earl of Bellamont, marked as public domain, more details on Wikimedia Commons. Select image to enlarge.



Cochineal

This is a scarlet-red dye or pigment made from cochineal beetles (Figure 3.60). While not toxic or unethically produced like the other pigments listed here (unless you are vegan), the failed attempt to create a cochineal industry in Australia in the late 1700s led to the imported prickly pear plant *Opuntia* running wild and becoming a restricted and prohibited weed (it was brought to Australia as a food source for the beetles).

Eventually, in the early 1900s, another insect, the *cactoblastis* moth, was brought to Australia as part of a prickly pear reduction program. These moth larvae were very successful in destroying the plant, which had an enormous impact on the land and enabled settlement of areas previously infested with prickly pear. It is still regarded as one of the most successful weed eradication programs using biological means instead of harmful chemicals. Learn more about the prickly pear story here .

There is some controversy over the use of cochineal as a food colouring, which, if not specifically disclosed, is a problem for vegans, vegetarians, Muslims and other people who choose not to eat insect-based products.

Figure 3.60. Cochineal pigment production. Image attribution: Thelmadatter, GutierrezWorkshopTeotitlan055, CC BY-SA 4.0. Select image to enlarge.



Indigo

Indigo is not a toxic dye, but indigo plantations have an unethical historical association with the African slave trade in North America and elsewhere around the world. Many people were forced to work in indigo plantations under terrible conditions with cruel mistreatment by plantation owners and managers. Other crops like cotton, tobacco, sugar and coffee have similar histories.

The development of synthetic indigo meant the end of indigo plantations. However, there is a return to more sustainable and environmentally friendly methods of dye production that don't use petrochemicals. Natural indigo (Figure 3.61) may yet have a resurgence in popularity, although with more ethical and sustainable production processes.

Learn more about the history of indigo in this article: The Dark History of Indigo, Slavery's Other Cash Crop by Jesslyn Shields, HowStuffWorks.com, Feb 7, 2020

Figure 3.61. Indigo plant *(Indigofera tinctoria)* Image attribution: Kurt Stüber, Indigofera tinctoria1, CC BY-SA 3.0. Select image to enlarge.



Luminous radium paint

Known as the **Radium Girls,** many girls and women in the early 20th century were poisoned by working with luminous paint that contained radium (which glowed in the dark), to create watch, clock and instrumentation dials (Figure 3.62). The women engaged in this factory work were encouraged to lick the tips of their brushes to create a fine point, thereby ingesting the radium, which caused terrible health conditions, including dental problems, fertility problems, necrosis of the jaw, anaemia and cancer.

Figure 3.62. Photograph of a factory scene from 1922, United States Radium Corporation showing women and girls using radium paint with no protection or warnings. Image attribution: Unknown author, All women or girls using radium paint with no protection or warnings in 1922, from- USRadiumGirls-Argonne1,ca1922-23-150dpi (cropped), marked as public domain, more details on Wikimedia Commons. Select image to enlarge.

Further reading

You can find more information about the topics on this page by reading:

Coles, David, and Adrian Lander. *Chromatopia : an Illustrated History of Colour*. Port Melbourne, Vic: Thames & Hudson, 2018,

or visit this website: Pigments Through the Ages.

This page titled 3.5: Colour Systems- Pigments and Dyes is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.6: Colour Wheels and Relationships

Interactive colour wheel and colour relationships

Instructions for using this colour wheel (Figure 3.64)

1. Choose a colour **scheme** from the drop-down list and drag the circles around the colour wheel to create your own palette of colour relationships.
2. You can change the **saturation** or intensity of a **hue** by moving the circles closer to or further from the centre of the circle.
3. You can also change the **shade** of the colour with the sliders at the bottom of the wheel to create a darker **value** of the same hue.
4. Colours are shown as **Hexadecimal** values in this wheel. You can use these values in most image editing software applications.

**** blank figure***

Colour relationships and schemes

The interactive colour wheel in Figure 3.64 has a selection of colour schemes that you can use to create harmonious and vibrant colour relationships and palettes.

Here are definitions of these schemes:



Monochrome

A monochromatic colour scheme contains a single colour **hue** with varying **shades** and **tints**, which are darker and lighter colours of the same hue (see **Properties of colour** in this resource for more about shades, tints and tones)

Figure 3.65. Colour wheel diagram showing monochrome colours. Image attribution: *see attribution at the bottom of this page*.



Analogous

An analogous colour scheme contains one main **hue (colour)** with the colours on either side of it on the colour wheel. For a five-colour scheme, it may also contain the two adjacent colours on the colour wheel.

Colour **Bias** is also related to analogous colour. This term refers to the way that a colour may be ***biased*** towards another adjacent colour on the colour wheel – for example, you may have a red hue that has an orange colour bias or a purple colour bias and is not a pure "red" colour. In fact, many pigments we think of as primary or "pure" colours actually have a colour bias and are not pure spectrum colours.

Figure 3.66. Colour wheel diagram showing analogous colour hues. Image attribution: *see attribution at the bottom of this page.*



Complementary

A complementary colour scheme contains the two colour **hues** directly opposite each other on the colour wheel.

Figure 3.67. Colour wheel diagram showing complementary colour hues. Image attribution: *see attribution at the bottom of this page.*



Split-complementary

A split-complementary scheme includes one dominant colour **hue** and two hues on either side of the dominant colour's complementary hue.

Figure 3.68. Colour wheel diagram showing split-complementary colour hues. Image attribution: *see attribution at the bottom of this page*



Triadic

A triadic colour scheme has three colour **hues** that are equally spaced around the colour wheel, forming a triangle shape.

Figure 3.69. Colour wheel diagram showing triadic colour hues. Image attribution: *see attribution at the bottom of this page.*



Tetradic

A tetradic colour scheme has four hues that form a rectangle within the colour wheel. There is also a **quadratic** scheme where the four hues form a square that is more evenly spaced than the tetradic rectangle, which could be any rectangular shape.

Figure 3.70. Colour wheel diagram showing tetradic colour hues. Image attribution: *see attribution at the bottom of this page.*

See Colour trends and palettes in this resource for a selection of colour palette generators.

The Dimensions of Colour Today: ICD 2022 (David Briggs)

This video is a recording of a talk by David Briggs, who is an Australian authority on colour theory. He bases the talk on content from his website *The Dimensions of Colour* , highlighting some developments in how we understand colour and colour relationships. He gives an overview of the alternative frameworks available today for visualising colour relationships. It is an academic video, but the imagery and diagrams make these complex concepts easier to understand. The YouTube page also contains links to all the resources and tools he references in the video. (34 minutes)

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Media attribution: ICD 2022: The Dimensions of Colour Today (David Briggs), Colour Society of Australia NSW Division on YouTube

Image attributions for this page: Colour wheel images on this page (figures 3.65 to 3.70) by RMIT, CC BY-NC 4.0.

Properties of colours

This page contains simple definitions of the basic properties or attributes of colours of objects and colours of light, which are useful to understand if you are working with colour applications and developing colour relationships or palettes. For further information, refer to *The Elements of Colour* by DJC Briggs[1], which provides a detailed illustrated account of these attributes including their scientific definitions.

Hue

Hue is a term that we use to classify colours of objects and colours of light into families that vary in other colour properties. The hue of any colour is the most similar pure colour around the colour wheel, such as red, or magenta, or greenish yellow. ("Pure" in this context means lacking perceived white, black, or grey content, as described in Tints, Shades and Tones below). So, for example, we might say that the hue of a brown wooden table is orange or yellow orange.



Figure 3.71. Hue colour wheel by RMIT, CC BY-NC 4.0

For a light, Hue is our perception of the dominant part or parts of the visible spectrum. For an object, Hue is our perception of the dominant *spectral reflectance* of the object.
(For "spectral reflectance", see Why are things different colours?).

When we describe a light or an object as being "coloured", we generally mean that it exhibits hue, and yet we may include black, white and grey, which lack hue, as "colours" in a practical sense – for example, when referring to paints or fabrics. Black, white, and grey are classified scientifically as "achromatic colours" [2], as opposed to "chromatic colours", which exhibit hue.

Chroma and Saturation

Many people use Chroma and Saturation to mean the same thing, but according to the CIE *International Lighting Vocabulary* [3] they have different definitions that correspond to different aspects of colour intensity.



Figure 3.72. Saturation colour wheel by RMIT, CC BY-NC 4.0. The colours decrease in both Saturation and Chroma towards the centre of the circle. (Compare Figure 3.75 below, the shades colour wheel, where the colours decrease in Chroma towards the centre but stay high in Saturation).

Chroma applies specifically to colours perceived as belonging to objects, and is the absolute intensity of an object's colour, that is, the amount of difference from a grey of the same Value. In Figure 3.A, Chroma is represented by increasing distance to the right, beginning at zero for black, white and grey. In a colour wheel like Figure 3.72 the relatively "pure" colours on the circumference have the highest Chroma for their hue. However, the possible maximum Chroma varies greatly for different paints, inks and digital colours, and is not the same for different hues, and so distance from the centre in a symmetrical colour wheel like this normally shows relative rather than absolute Chroma.

Saturation on the other hand applies both to colours of light and colours of objects and is the intensity of colour (called Colourfulness; see below) of a light *relative to its Brightness*, or the intensity of colour (Chroma) of an object *relative to its Value*. An achromatic light or object exhibits zero saturation, a light exhibiting high saturation is perceived to consist of a relatively high proportion of coloured light to white light, and an object exhibiting high saturation is perceived to reflect/ transmit light of this character to the eye. The colours on the circumference of Figure 3.72 exhibit high Saturation (as well as Chroma), but so do darker colours that are high in Chroma for their Value (seen in Figure 3.75 below). "For an object to have high chroma it must reflect/ transmit saturated light in relatively large amounts." [4].

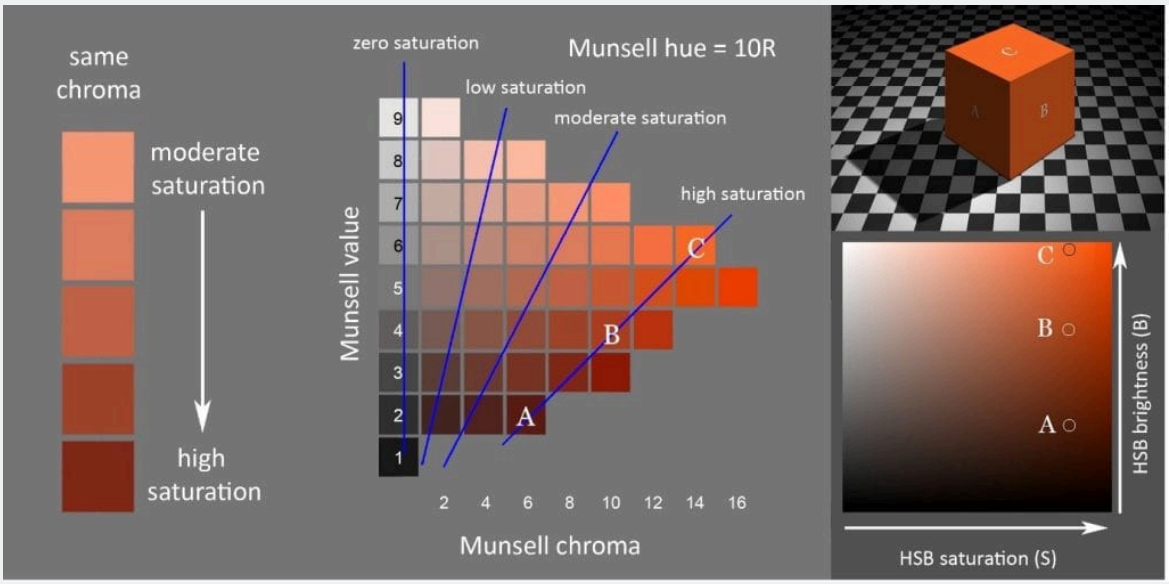


Figure 3.72a. Left swatches in a column from a Munsell hue page exhibit uniform chroma but increasing Saturation going down the column. Middle: swatches exhibiting uniform Saturation, including those similar to image areas A, B and C in the image of the cube to the right, are arranged along lines that radiate from near (actually one value step below) zero on the value scale. Right: areas A to C are depicted using digital colours of uniform hue angle H and “Saturation” S in the colour space HSB. Image provided courtesy of D.J.C Briggs, 2017 CC BY-NC 4.0.

Value/lightness and value/greyscale

Value, greyscale value and lightness are alternative names for the same property of colour. The Value of a colour is the most similar or least contrasting grey on a scale between black and white (Figure 3.73). In Figure 3.A, Value is represented by horizontal level within the diagram.

Like Chroma, Value applies specifically to colours perceived as belonging to objects. Value is our perception of the proportion of the light falling on an object that the object reflects. For example, a dark green object reflects less light and therefore has a lower value than a pale green object.

In a painting or a photograph, Value helps us greatly to identify objects as three-dimensional by representing the variations in light and shade on objects.

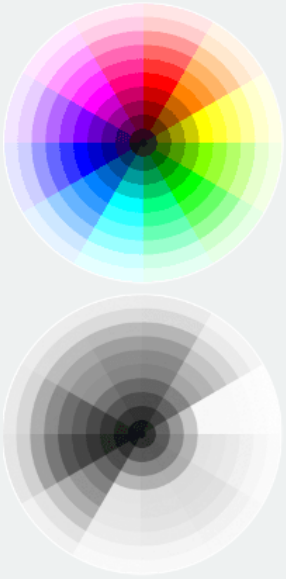


Figure 3.73. Value colour wheel and same wheel converted to greyscale with the same values, by RMIT, CC BY-NC 4.0.

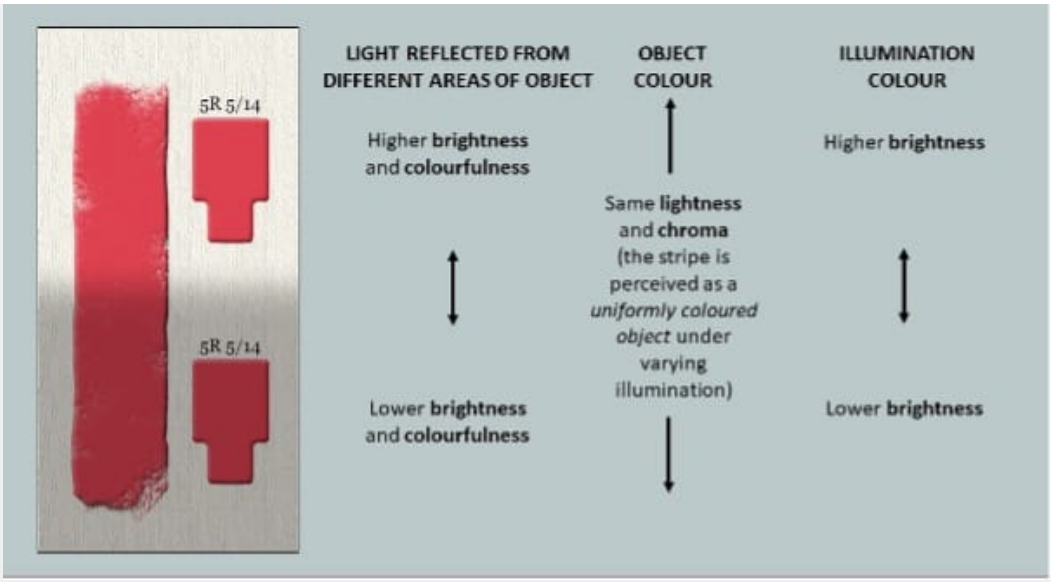


Figure 3.73a Digital painting of a stripe of red paint passing between different intensities of the same illumination, showing relationship of attributes of the colour perceived as belonging to the red stripe, and attributes of the colours of the light reaching our eyes from different areas of the stripe and of the light perceived to be falling on the stripe (the illumination)[5], from David Briggs' presentation "Colours of objects and Colours of Light". Image provided courtesy of D.J.C. Briggs, 2017 CC BY-NC 4.0.

Brightness and Colourfulness

Brightness and Colourfulness are properties of colours we perceive as belonging to light, including the light reflected, transmitted or emitted to our eyes by objects, and the light falling on objects (the illumination). Brightness is our perception of the amount of light, and colourfulness is our perception of its intensity of colour. In contrast to colours of objects, which we saw can be described in terms of Hue, Value and Chroma (Chroma can often be called "Saturation"), colours of light can be described in terms of Hue, Brightness, and either Saturation in the scientific sense described above or Colourfulness.

A uniform object under varying intensities of the same illumination will normally be perceived as having a uniform colour belonging to it (uniform Hue, Value and Chroma), while the light reaching our eyes from different areas of the object varies in Brightness and Colourfulness (Figure 3.73a). These variations in Brightness and Colourfulness are perceived as being imposed by the illumination rather than as belonging to the object itself. Illumination can also be perceived to exhibit Hue, Brightness and Colourfulness/Saturation, though the illumination in Figure 3.73a is perceived to be achromatic (white), varying only in Brightness.

Blackness, Chromaticness and Brilliance

A different way to classify colours of objects, besides Hue, Value and Chroma, is according to their degree of resemblance to a pure black, a pure white and a pure colour. This is the basis of the Scandinavian *Natural Colour System* (NCS), in which these resemblances are taken to add up to 100 and plotted on a triangular diagram for each hue (Figure 3.Z, left), and colours of objects are specified by their resemblances to pure black and pure colour, called Blackness and Chromaticness respectively.

Colours of zero blackness, between a perceptually pure colour and white, lie near the approximate upper limit of commonly encountered colours of objects. As swatches increase in brightness beyond this limit, they take on the appearance of physical fluorescence, called Fluorence, and ultimately appear as self-luminous Illuminant colours. The scale of colour appearance from black through decreasing Blackness to zero Blackness, followed by Fluorence and then Luminosity is called "Brilliance"[6].

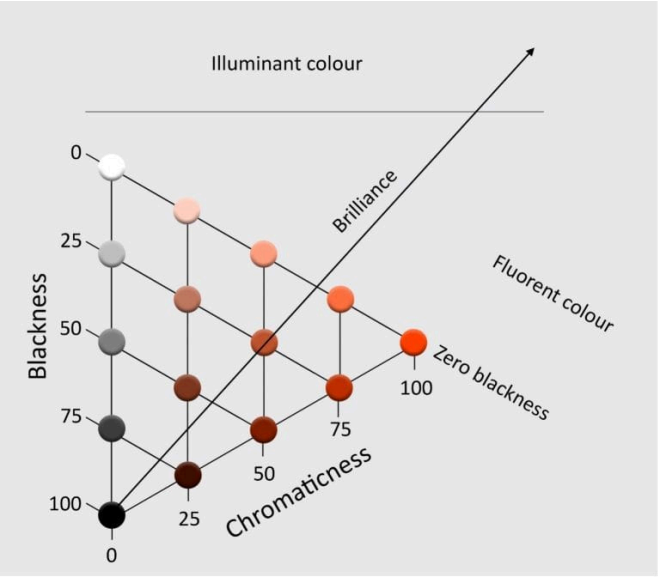


Figure 3.73b Diagrammatic subdivision of a hue page according to Blackness and Chromaticness (degree of resemblance to pure black and to pure chromatic colour respectively), showing relationship to Fluorent and Illuminant colours, and the scale of Brilliance [7]. Image provided courtesy of D.J.C. Briggs, 2017 CC BY-NC 4.0.

Tint

In traditional colour theory, the term “Tint” may be used for colours between a pure colour or “Hue” and white, or for physical mixtures of a coloured paint and white paint. In the first sense a Tint has the same hue as the pure colour and is between that colour and white in Value and Chroma. In the second sense, Tints may shift in Hue and pass through higher Chromas than the coloured paint.



Figure 3.74. Tints colour wheel by RMIT, CC BY-NC 4.0.

Shade

In traditional colour theory, the term “Shade” may be used for colours between a pure colour or “Hue” and black, or for physical mixtures of a coloured paint and black paint. In the first sense a Shade has the same Hue as the pure colour and is between that colour and black in Value and Chroma. In the second sense, Shades may shift in Hue compared to the coloured paint.



Figure 3.75. Shades colour wheel by RMIT, CC BY-NC 4.0.

Tone

In traditional colour theory, the term “Tone” may be used for colours between a pure colour or “Hue” and grey, or for physical mixtures of a coloured paint and grey paint. In the first sense a Tone has the same Hue as the pure colour and is between that colour and black in Chroma. In the second sense, Shades may shift in Hue compared to the coloured paint. The term “Tone” is also used in some countries as an alternative name for Value/Lightness.



Figure 3.76. Tones colour wheel by RMIT, CC BY-NC 4.0.

1. 1. Briggs, D.J.C., 2023. “The Elements of Colour”, Part One, https://aic-color.org/resources/Documents/jaic_v33_06.pdf and Part Two, https://aic-color.org/resources/Documents/jaic_v33_07.pdf. For additional illustrations and animations please see the related video presentations “The Elements of Colour”, https://www.youtube.com/watch?v=AtrRpGb-7FU, and “Colours of Objects and Colours of Light”, https://www.youtube.com/watch?v=ii9dWIG9nOY. accessed 03/01/2023
2. CIE, 2022, achromatic colour definition - also known as "perceived colour devoid of hue", https://cie.co.at/eilvterm/17-22-049
3. CIE 2023, *International Lighting Vocabulary* http://www.cie.co.at/ accessed 05/11/2023
4. Briggs, D.J.C., 2018. “The Difference Between Chroma and Saturation", Munsell Color, https://munsell.com/color-blog/difference-chroma-saturation/ , accessed 03/01/2023

5. 4. Briggs, D.J.C., 2017. “The Dimensions of Colour: Brightness and Colourfulness” http://www.huevaluechroma.com/016.php
6. Op. Cit. Briggs 2023, p.110
7. Op. Cit. Briggs 2023, Part Two, Figure 10

Test yourself: colour wheels and relationships

A multiple choice quiz to test your understanding of colour wheels and relationships

(5 minutes or less)

Interactive Content

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this Interactive Content online

Colour properties: tints, shades and tones – learning activity

This interactive learning activity is a simple drag-and-drop exercise that covers what you have learned in this chapter.

Drag the colour swatches onto the boxes in the correct order for tints, shades and tones, and check to see if your guesses are correct.

Colour properties: light to dark – learning activity

This interactive learning activity is a simple drag-and-drop exercise that covers what you have learned in this chapter.

Drag the colour swatches onto the boxes in the correct order and check to see if your guess is correct.

Colour properties: monochrome (greyscale) – learning activity

This interactive learning activity is a simple drag-and-drop exercise that covers what you have learned in this chapter.

Drag the colour swatches onto the boxes in the correct order for greyscale from light to dark, and check to see if your guess is correct.

Interactive Content

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this Interactive Content online

Colour relationships: bias colour scale – learning activity

This interactive learning activity is a simple drag-and-drop exercise that covers what you have learned in this chapter.

Drag the colour swatches onto the boxes in the correct order for the colour bias scale from teal to yellow-green, and check to see if your guess is correct.

Colour charts – Pantone and Munsell systems

The colour systems currently used in creative and design industries for selecting and matching colours with a high degree of accuracy are produced by **Pantone** and **Munsell.**

Pantone colour is a dual system that displays charts or “guides” of proprietary colours that are described with different information, such as CMYK values and Pantone spot colour identifying codes.

The Munsell colour system is different to Pantone – it is a way of classifying visible colours with a number system. A colour could be classified in both the Munsell system and in a Pantone colour guide.

This resource cannot display more than a few selected images, as both of these systems are under the copyright of their companies. Their websites and related links provided on this page, however, do have detailed information about how these systems work, and how you can use them in your creative practice.

Pantone colour

The image in Figure 3.77 displays a sample taken from a Pantone colour guide. The whole digital chart would be too large to display here. You can find more complete examples on the Pantone website.

This online resource also has a web version of the Pantone PSM colour chart . Keep in mind that any digital Pantone chart will not necessarily show the exact colour you will see when printed. The reason hard-copy swatch books are used in the design industry is that they show the exact physical colour of a Pantone pigment. It is also advised that swatch books are updated regularly, as some pigments may fade or change over time and not show accurate colours.



Figure 3.77. Pantone colour guide, via Wikimedia Commons, licensed under CC BY-SA 3.0.

Munsell colour system

The image in Figure 3.78 is a sample of the twenty basic hues in the Munsell colour system. Each of these **hues** has a colour chart showing the different **value** (lightness or darkness), **chroma** (saturation or brilliance) and relationships between the colours. Learn more about the Munsell colour system from the ***Munsell Color* website**

Andrew Werth has created a ***Virtual Munsell Colour Wheel*** that allows you to browse Munsell colour notations – a useful tool for designers. Each colour in this tool has the Munsell colour notation, plus RGB and Hex values.

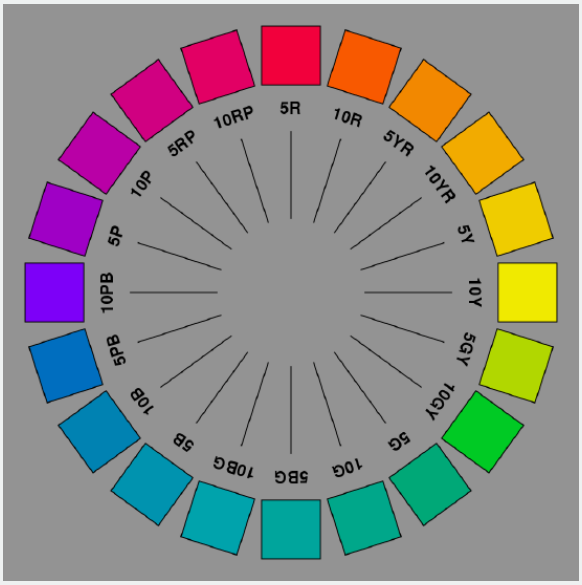


Figure 3.78. Twenty hues of the Munsell colour system at maximum chroma in the sRGB gamut. Image attribution: Thenoizz, MunsellColorWheel, CC BY 3.0

This page titled 3.6: Colour Wheels and Relationships is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

3.7: Color Terms

Introduction

The following terms will be used throughout the course in your readings and assignments.

- **Achromatic Grays**: Grays without hue or saturation, only value. Achromatic means “without color”.
- **Additive Color**: Color seen as light. Additive primaries are red, green, and blue. When they are combined the result is white light.
- **Analogous**: Hues are next to each other on the spectrum and the color wheel.
- **Bridge Tones**: Tones that provide a transition between two different colors. This is achieved by gradually mixing the second color with the first.
- **Color Structure**: Three factors influence the appearance of color: hue, value, and saturation.
- **Chromatic Darks**: Dark chromatic grays that have discernible temperature and hue.
- **Chromatic Grays**: Chromatic grays have relatively low saturation, but still have discernible hue and temperature.
- **Color Harmony**: The character of the interrelations in groups of colors. Harmonious colors are highly unified. Inharmonious or discordant colors are in disagreement with each other.
- **Color Interaction**: Quality of a color depends upon its context. An identical color can appear different from a different context to another.
- **Color Temperature**: Division of warm and cool zones on the color wheel.
  - **Warm colors**: Red-violet, red, orange, yellow, yellow-green.
  - **Cool colors**: Violet, blue-violet, blue, blue-green, green.
- **Color Wheel**: Circular graphic display of the spectrum, usually in 12 major hues that include primary, secondary and tertiary colors.
- **CMYK**: Colors used in four color printing: cyan, magenta, yellow and black.
- **Complementary Hues**: Complements are any two hues that are directly opposite each other on a color wheel. When complements are mixed, the resulting color is darker and duller than both of the two parent colors.
- **Earth Tone Primary**: A triad of earth tones: burnt sienna, yellow ochre, and Payne’s gray (a blue gray mixture of ultramarine blue & black).
- **Gamut**: A range of hues available to a particular color mode, such as the visible spectrum, RGB (computer screen) and CMYK (four color printing).
- **Grayscale**: Representation of the value continuum broken down into distinct and evenly progressing achromatic grays.
- **High Key**: Values in a color image are predominantly light.
- **Hue**: One of three structural factors of color (along with value and saturation). The name given to a color to describe its location on the color spectrum.
- **Keyed**: Color groupings are keyed when they are brought together in either hue, value, saturation, or combinations thereof.
- **Low Key**: Values are “keyed” predominantly dark in an image.
- **Luminosity**: Light reflected from a surface. The lighter the color the more luminous it is.
- **Median Transparency**: An illusion of transparency created by overlapping two colors diverse in value. The overlapping area of the two colors appears to be an equal blend of the two adjacent colors.
- **Monochromatic**: Color schemes that are limited to one hue and variations thereof. There may a broad range of value and saturation levels.
- **Muted Colors**: Muted colors are softer than prismatic colors, but still retain a sense of hue identity.
- **Optical mixing**: Small color fragments next to each other are fused into seamless transitions by the eye. Used in tapestry, mosaic, four color printing and Pointillism (see artist Georges Seurat).
- **Primary colors**: Red, yellow, blue - cannot be obtained by mixing.
- **Primary triad**: Primary red, yellow and blue triangle on the color wheel. In theory, all colors can be mixed from the three primary colors.
- **RGB**: Red, green, blue. Colors used in additive or lighting color.
- **Saturation**: The relative purity of hue in a color. Highly saturated colors are vivid and rich in hue. Low saturation colors are dull and show a weak hue presence. Three levels of saturation: prismatic color, muted color and chromatic gray.
- **Secondary (triad) colors**: Green, orange and violet. Each of these colors are created by mixing two primary colors.
- **Shade**: The result of mixing any color with black.
- **Simultaneous Contrast**: Simultaneous contrast is the optical effect that two neighboring colors have upon each other as their afterimages interact along a shared border. This is most evident when highly saturated exact complements are placed

side by side.

- **Spectrum**: A phenomenon of light that can be seen in a rainbow or through a prism. The spectrum contains the full range of hues present in sunlight.
- **Subtractive color**: Color from reflected light, rather than direct light. Subtractive color primaries are red, yellow and blue which, produce a dark dull tone when intermixed.
- **Tertiary colors**: Also called “intermediate colors are yellow-orange, red-orange, blue-green, yellow-green, blue-violet and red-violet. They are produced by mixing one primary color with one secondary color.
- **Tint**: A tint results when any color is mixed with white.
- **Tones**: A generic term that refers to any color but a prismatic color. All muted colors and chromatic grays are tones, as are all tints and shades.
- **Value**: The relative quality of lightness or darkness in a color. It is the only structural factor visible in achromatic images, as in black and white photography. Value means luminosity.

Works Cited

Hornung, David. *Color: A Workshop for Artists and Designers*. 2nd ed. London: Laurence King, 2012.

This page titled 3.7: Color Terms is shared under a CC BY-NC 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

- 1.2: Color Terms by Marcelle Wiggins is licensed CC BY 4.0.

4: PART 4- COLOR IN MODERN AND CONTEMPORARY ART

4.1: Impressionism

4.2: Post-Impressionism

4.3: Fauvism + Expressionism

4.4: Mark Rothko

4.4.1: No. 210/No. 211 (Orange), 1960

4.4.2: No. 3/No. 13

4.4.3: The Case for Mark Rothko

4.4.4: Mark Rothko (at MoMA)

4.4.5: Restoring Rothko

4.5: Color Field (1950s-1960s)

4.6: Barnett Newman

4.6.1: Onement, I

4.6.2: Barnett Newman at MoMA

4.6.3: The Painting Techniques of Barnett Newman

4.6.4: Representation and abstraction- looking at Millais and Newman

4.7: Op Art (1960s – 1970s)

4.8: Tessellations

4.8.1: Exercises

4.9: Kinetic Art (1950s – 1960s)

4.10: Global Concerns

4.10.1: Global cultures (1980 - now)

4.10.1.1: A beginner's guide

4.10.1.2: Appropriation and ideological critique

4.10.1.3: Identity and the body

4.10.1.4: Banality and Kitsch

4.10.1.5: Ritual, spirituality, and transcendence

4.10.1.6: Histories, real and imagined

4.11: Yayoi Kusama

4.11.1: Narcissus Garden

4.11.2: Yayoi Kusama (Tate)

This page titled 4: PART 4- Color in Modern and Contemporary Art is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

4.1: Impressionism

Impressionism

These artists broke new ground with sketchy, light-filled canvases shown in independent exhibitions.

c. 1874 - 1886

Impressionism: A beginner's guide

The Impressionists are now widely appreciated, but they originally struggled for recognition.

c. 1874 - 1886

Impressionism, an introduction

by DR. BETH GERSH-NESIC

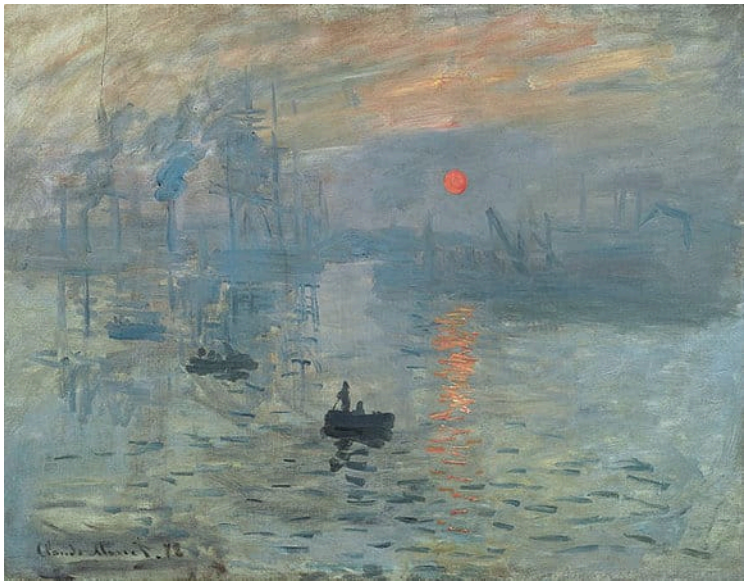


Figure 4.1.1: Claude Monet, *Impression Sunrise*, 1872, oil on canvas, 48 x 63 cm (Musée Marmottan Monet, Paris). This painting was exhibited at the first Impressionist exhibition in 1874.

Apart from the salon

The group of artists who became known as the Impressionists did something ground-breaking in addition to painting their sketchy, light-filled canvases: they established their own exhibition. This may not seem like much in an era like ours, when art galleries are everywhere in major cities, but in Paris at this time, there was one official, state-sponsored exhibition—called the Salon—and very few art galleries devoted to the work of living artists. For most of the nineteenth century then, the Salon was the only way to exhibit your work (and therefore the only way to establish your reputation and make a living as an artist). The works exhibited at the Salon were chosen by a jury—which could often be quite arbitrary. The artists we know today as Impressionists—Claude Monet, August Renoir, Edgar Degas, Berthe Morisot, Alfred Sisley (and several others)—could not afford to wait for France to accept their work. They all had experienced rejection by the Salon jury in recent years and felt that waiting an entire year between exhibitions was too long. They needed to show their work and they wanted to sell it.



Figure 4.1.2: Edgar Degas, *The Ballet Class*, 1871-1874, oil on canvas, 75 x 85 cm (Musée d'Orsay, Paris)

The artists pooled their money, rented a studio that belonged to the photographer Nadar, and set a date for their first collective exhibition. They called themselves the Anonymous Society of Painters, Sculptors, and Printmakers and their first show opened at about the same time as the annual Salon in May 1874. The Impressionists held eight exhibitions from 1874 through 1886.



Figure 4.1.3: Pierre-Auguste Renoir, *Bal du moulin de la Galette*, 1876, oil on canvas, 131 x 175 cm (Musée d'Orsay, Paris)

The impressionists regarded Manet as their inspiration and leader in their spirit of revolution, but Manet had no desire to join their cooperative venture into independent exhibitions. Manet had set up his own pavilion during the 1867 World's Fair, but he was not interested in giving up on the Salon jury. He wanted Paris to come to him and accept him—even if he had to endure their ridicule in the process.

Lack of finish

Monet, Renoir, Degas, and Sisley had met through classes. Berthe Morisot was a friend of both Degas and Manet (she would marry Édouard Manet's brother Eugène by the end of 1874). She had been accepted to the Salon, but her work had become more experimental since then. Degas invited Morisot to join their risky effort. The first exhibition did not repay the artists monetarily but it did draw the critics, some of whom decided their art was abominable. What they saw wasn't finished in their eyes; these were mere "impressions." This was not a compliment.



Figure 4.1.4: Berte Morisot, *The Cradle*, 1872, oil on canvas, 56 x 46 cm (Musée d'Orsay, Paris)

The paintings of Neoclassical and Romantic artists had a finished appearance. The Impressionists' completed works looked like sketches, fast and preliminary "impressions" that artists would dash off to preserve an idea of what to paint more carefully at a later date. Normally, an artist's "impressions" were not meant to be sold, but were meant to be aids for the memory—to take these ideas back to the studio for the masterpiece on canvas. The critics thought it was absurd to sell paintings that looked like slap-dash impressions and to present these paintings as finished works.

Landscape and contemporary life

Courbet, Manet and the Impressionists also challenged the Academy's category codes. The Academy deemed that only "history painting" was great painting. These young Realists and Impressionists questioned the long established hierarchy of subject matter. They believed that landscapes and genres scenes (scenes of contemporary life) were worthy and important.



Figure 4.1.5: Claude Monet, *Coquelicots, La promenade (Poppies)*, 1873, 50 x 65 cm (Musée d'Orsay, Paris)

Light and color

In their landscapes and genre scenes, the Impressionist tried to arrest a particular moment in time by pinpointing specific

atmospheric conditions—light flickering on water, moving clouds, a burst of rain. Their technique tried to capture what they saw. They painted small commas of pure color one next to another. When viewer stood at a reasonable distance their eyes would see a mix of individual marks; colors that had blended optically. This method created more vibrant colors than colors mixed as physical paint on a palette.

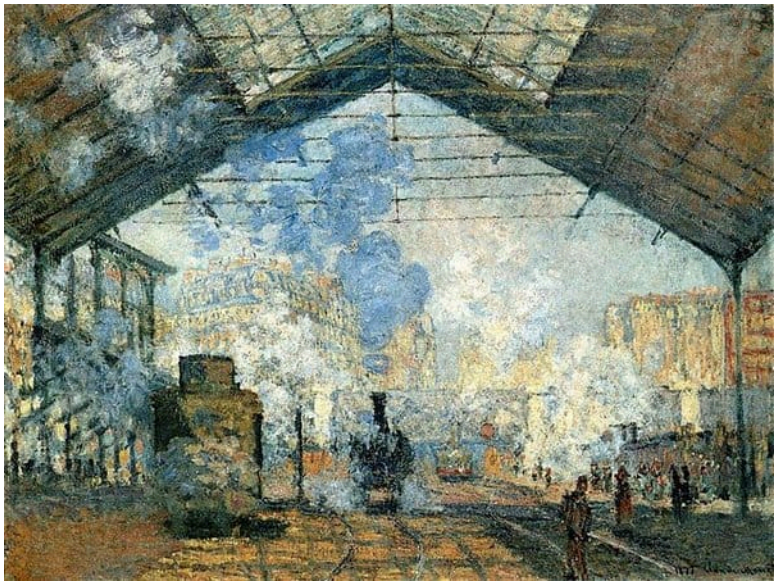


Figure 4.1.6: Claude Monet, *La Gare Saint-Lazare*, 1877, oil on canvas, 75 x 104 cm (Musée d'Orsay, Paris)

An important aspect of the Impressionist painting was the appearance of quickly shifting light on the surface of forms and the representation changing atmospheric conditions. The Impressionists wanted to create an art that was modern by capturing the rapid pace of contemporary life and the fleeting conditions of light. They painted outdoors (*en plein air*) to capture the appearance of the light as it flickered and faded while they worked.

Reception

By the 1880s, the Impressionists accepted the name the critics gave them, though their reception in France did not improve quickly. Other artists, such as Mary Cassatt, recognized the value of the Impressionist movement and were invited to join. American and other non-French collectors purchased numerous works by the Impressionists. Today, a large share of Impressionist work remains outside French collections.

Additional resources:

Art Institute of Chicago's Exploring Impressionism at the Google Art Project

Impressionism: Art and Modernity at The Metropolitan Museum of Art's Timeline of Art History

Guide to Impressionism from The National Gallery, London

The salon of 1874

Smarthistory images for teaching and learning:

















Figure 4.1.7: More Smarthistory images...

What does “Impressionism” mean?

by DR. CHARLES CRAMER and DR. KIM GRANT

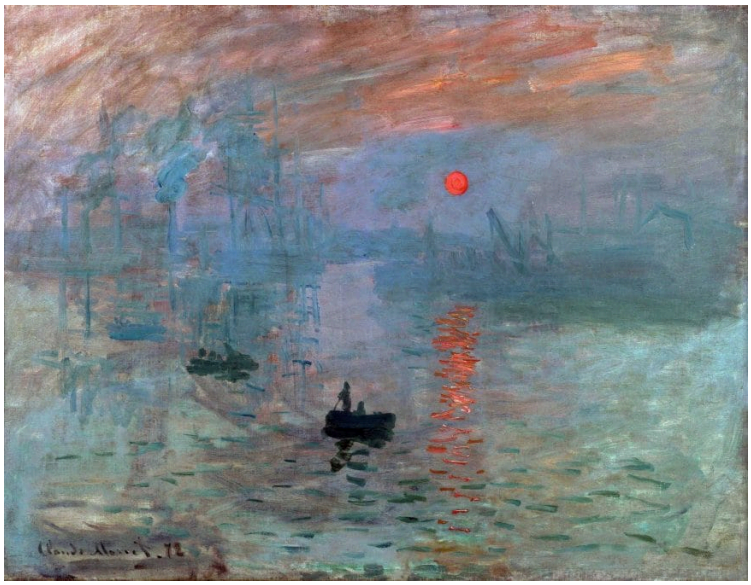


Figure 4.1.8: Claude Monet, *Impression, Sunrise*, 1874, oil on canvas, 50 × 65 cm (Musée Marmottan, Paris)

Brushwork, light, and atmosphere

Claude Monet's *Impression: Sunrise* is an exemplary Impressionist painting in several ways, not least of which is its title. It depicts a misty harbor scene at Le Havre (a port city in Northern France) in which boats and figures are reduced to flat, shadowy silhouettes, while the red light of the sun reflected on the water takes on tangible form in highly visible brushstrokes.

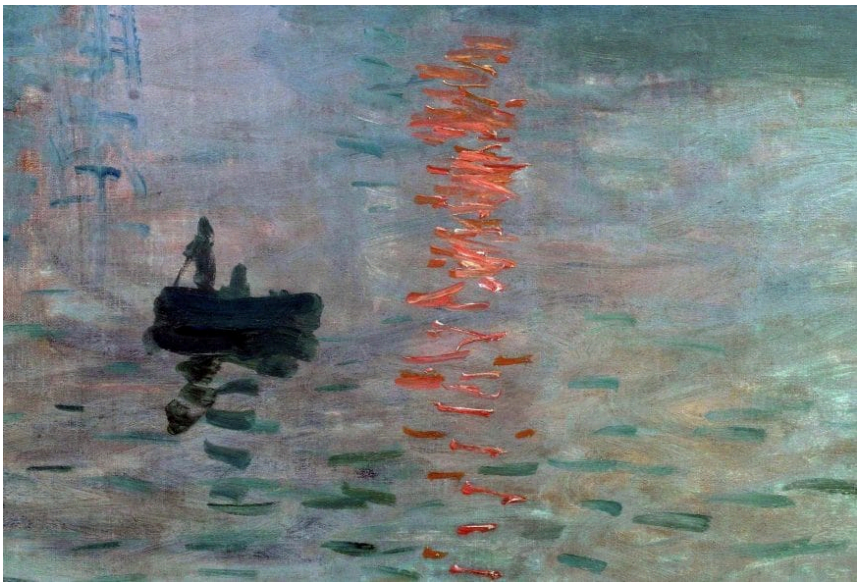


Figure 4.1.9: Claude Monet, *Impression, Sunrise* (detail), 1874, oil on canvas, 50 × 65 cm (Musée Marmottan, Paris)

What we see when we look at the painting is unquestionably *painted*; Monet made no effort to develop his suggestive image into a more detailed and finished rendering of the scene. The loosely sketched silhouettes of boats exemplify the difficulty of seeing objects in the mist with the sun rising behind them. Monet embraced this difficulty, using it as an occasion to display a painterly rendering that says more about the momentary light and atmospheric conditions than it does about the objects in the scene.

Ask yourself: is there anything in the painting that tells you this is Le Havre? In an interview Monet acknowledged the failure of the painting to depict a recognizable place. When he was asked for the title of the painting for the catalog of what later became known as the first Impressionist exhibition he said: "I couldn't very well call it a view of Le Havre. So I said: 'Put *Impression*." With this decision Monet unwittingly named an art movement, and this work's emphasis on brushwork, light, and atmosphere at the expense of the clear representation of objects became a hallmark of the Impressionist style.

Impressionism was not always so well-loved

It may be surprising to know that an art movement so well-loved today—highly successful at auction, the subject of numerous blockbuster exhibits, and a vast number of popular publications—was subjected to a good deal of scorn and ridicule in its early years. Even the term "Impressionism" was first used pejoratively in relation to the new art first exhibited in 1874 by the *Société anonyme cooperative d'artistes peintres, sculpteurs, etc.* (Anonymous cooperative society of artists, painters, sculptors, etc.). These artists used the term "anonymous" quite intentionally—they wanted to avoid imposing a restrictive label or common agenda on their group, whose members employed a variety of styles and painting techniques. Ultimately, they staged eight exhibitions between 1874 and 1886.

The group included a number of artists who became the most famous Impressionists: Gustave Caillebotte, Mary Cassatt, Edgar Degas, Claude Monet, Berthe Morisot, Camille Pissarro, Pierre Renoir, and Alfred Sisley, as well as many other artists (some of whom are now associated with later modern art movements such as Post-Impressionism or Symbolism). Despite their eclecticism, contemporary viewers and the critics who reviewed the Société anonyme's exhibitions expected the group to share common goals and characteristics, and the label "Impressionism" soon came to identify a new artistic movement, with some of the artists of the Société anonyme at its core.

A mere impression



Figure 4.1.10: Camille Pissarro: *Hoarfrost (White Frost)*, 1873, oil on canvas, 65 s 93 cm (Musée d'Orsay, Paris)

The critic Louis Leroy was the first to emphasize the term "impression" in relation to the new painting, adopting it from Monet's *Impression: Sunrise* in a satirical dialogue entitled "Exhibition of the Impressionists" that was published in the popular illustrated magazine *Le Charivari*. Leroy found Monet's use of "Impression" in his painting's title particularly appropriate because it suggested that the work was unfinished according to Academic conventions of representation; that is, it represented a mere impression of the scene, rather than a fully structured and completed work of art. Leroy repeatedly emphasized the term "impression" in the dialogue and described many of the paintings by Monet and his fellow exhibitors as sloppy and slapdash, going so far as to compare Monet's *Impression: Sunrise* to embryonic wallpaper and Pissarro's *Hoarfrost* to paint scraped off of a dirty palette.

Despite this prominent early critical association of the term "impression" with sloppiness, two years later "Impressionism" and "Impressionist" were being widely used to label the new art by its supporters as well as its detractors. It was undoubtedly the flexibility of the term that allowed it to be so widely adopted, but with that flexibility came a certain amount of confusion about the aims of the movement.

Leroy's usage suggests a hasty and inaccurate "first impression," but the term also has a very precise and technical connotation as a scientific word designating the stimulation of the optical or other sensory nerves. This scientific definition implies a project of careful observation and objective documentation, but the term is also used for a more subjective and individual response, as when one gives one's own "impressions" of a person, place, or thing. Hasty generalization or precise observation? Objective documentation or subjective interpretation? All of these contradictory qualities have been associated with the Impressionist

movement.

How useful is the term “Impressionism”?

The complex significance of Impressionism expands further when we examine the characteristics emphasized in scholarly and popular writings about the movement. Two quite different artistic projects and sets of characteristics are commonly associated with Impressionism:

First, a painting is called Impressionist if it exhibits a certain style, consisting of patchy brushwork and a light pastel color scheme that aims to capture transient effects of atmospheric lighting, as can be seen in Sisley’s *Autumn: Banks of the Seine near Bougival*.

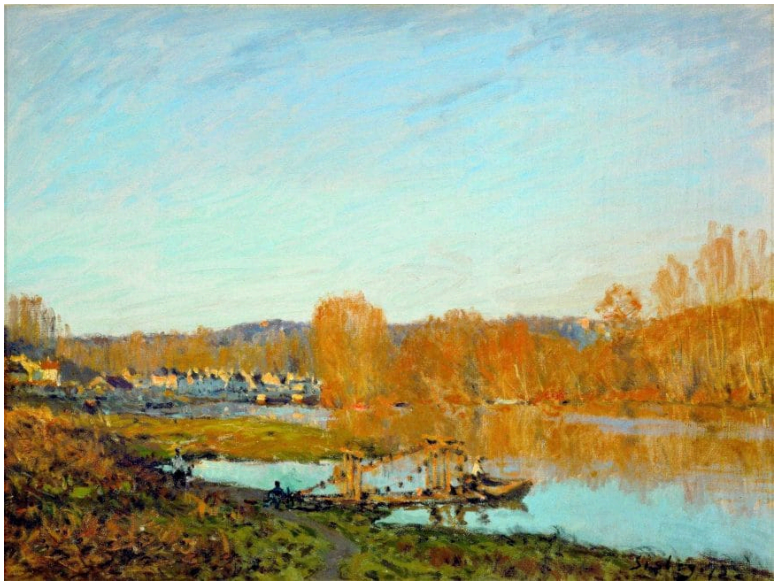


Figure 4.1.11: Alfred Sisley, *Autumn: Banks of the Seine near Bougival*, 1873, oil on canvas, 46.3 x 61.8 cm (The Montreal Museum of Fine Arts)

Second, a painting is called Impressionist if it exhibits a certain type of subject matter, typically *plein-air* (painted out-of-doors) scenes of middle-class men and women at leisure: drinking in cafés, boating, swimming, attending horse races, promenading in gardens, and similar activities.

Berthe Morisot’s painting*The Harbor at Lorient,* which was shown in the first exhibition of the Société anonyme, exemplifies this second characteristic. We see a very well-dressed bourgeoise woman resting while out for a stroll in the town of Lorient in France. The figure’s white dress and parasol appear somewhat incongruous on the dirty stone wall overlooking a working harbor.



Figure 4.1.12: Berthe Morisot, *The Harbor at Lorient*, 1869, oil on canvas, 43.5 x 73 cm (National Gallery of Art, Washington D.C.)

However, not all of the art works shown by members of the Société anonyme exhibit both of these characteristics; in fact, some exhibited neither. The works of Camille Pissarro are typically in the Impressionist style, but as his painting *Hoarfrost* indicates, he frequently painted the working class at labor rather than the middle classes at leisure. Edgar Degas and Gustave Caillebotte frequently painted the middle classes at leisure, but did not employ the characteristic Impressionist style.

This terminological confusion has led some historians to wish to discard the term Impressionism altogether, but whatever label or labels are attached to them, these two projects—capturing the evanescent effects of atmospheric lighting, and depicting scenes of contemporary middle-class leisure—were significant artistic tendencies in Paris and, slightly later, in the wider Euro-American scene starting in the 1860s and 70s. Rather than attempt to limit the definition of the Impressionist project, we embrace the flexibility of the term.

Additional resources:

Impressionism: Art and Modernity on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Primary source: Louis Leroy, "Exhibition of the Impressionists, *Le Charivari* (April 25, 1874)

"About Impressionism," from the J. Paul Getty Museum

Smarthistory images for teaching and learning:







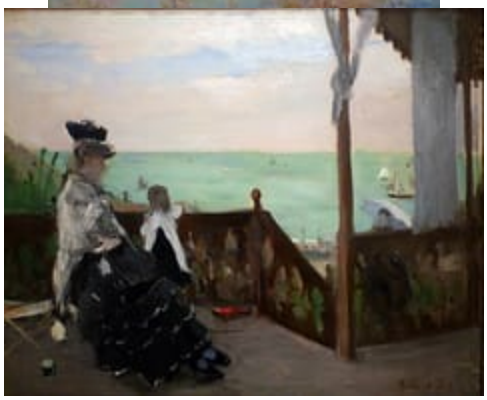






















Figure 4.1.13: More Smarthistory images...

How the Impressionists got their name

by DR. BETH HARRIS and DR. STEVEN ZUCKER

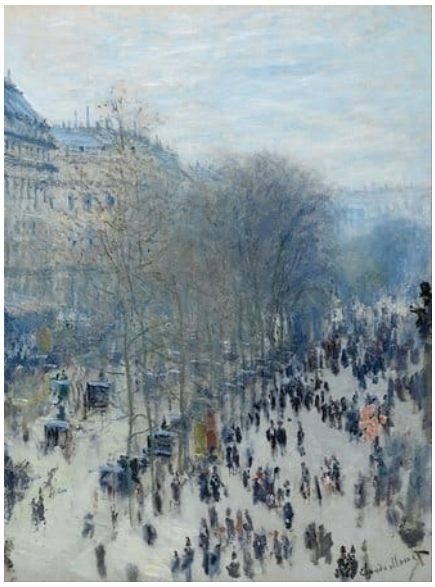


Figure 4.1.14: Claude Monet, *Boulevard des Capucines*, 1873-74, oil on canvas, 80.3 x 60.3 cm (Nelson Atkins Museum of Art, Kansas City, Missouri)

The First Impressionist Exhibition, 1874

Although the idea originated with Claude Monet, Degas is largely responsible for organizing the very first Impressionist exhibition. After much debate, the artists—including Degas, Monet, Renoir, Morisot, Pissarro, Sisley, Boudin, and even the young Cézanne—along with many other lesser-known figures, chose to call themselves the Société Anonyme des Artistes. This group included painters, sculptors, printmakers, and others.

The exhibition opened in Paris on April 15, 1874. It was held at 35 Boulevard des Capucines, on the top floor and former studio of the photographer, Gaspard-Félix Tournachon, better known as Nadar. He was a friend of several of the artists and well-known for his portraits of the Parisian literati.



Figure 4.1.15: 35 Boulevard des Capucines, workshop of Nadar and location of the first Impressionist exhibition in 1874

Serious criticism or tongue-in-cheek?

Although the first Impressionist exhibition was well attended, the critics were merciless. Trained to expect the polished illusions of the Salon painters, they were shocked by the raw, unblended, ill-defined paint used by Degas, Renoir, Monet and company. The satirical magazine, *Le Charivari* published an account of a visit with Joseph Vincent, an accomplished and conservative painter:

Upon entering the first room, Joseph Vincent received an initial shock in front of the *Dancer* by M. Renoir.

'What a pity,' he said to me, 'that the painter, who has a certain understanding of color, doesn't draw better; his dancer's legs are as cottony as the gauze of her skirts.'...

Unfortunately, I was imprudent enough to leave him [Joseph Vincent] in front of the "Boulevard des Capucines," by [Monet].

'Ah-ha! he sneered.... Is that brilliant enough, now!' 'There's impression, or I don't know what it means.' 'Only be so good as to tell me what those innumerable black tongue-lickings in the lower part of the picture represent?'

'Why, those are people walking along,' I replied.

'Then do I look like that when I'm walking along the Boulevard Capucines?' 'Blood and Thunder!' 'So you're making fun of me!' '...What does that painting depict?' 'Look at the Catalogue.' 'Impression Sunrise.' 'Impression–I was certain of it. I was just telling myself that, since I was impressed, there had to be some impression in it...and what freedom, what ease of workmanship! Wallpaper in its embryonic state is more finished than that seascape!'"[1]

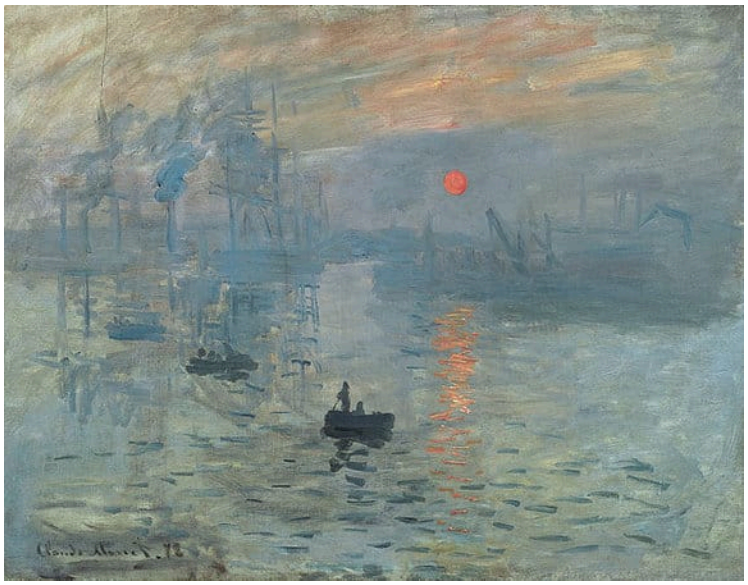


Figure 4.1.16: Claude Monet, *Impression, Sunrise*, 1872, oil on canvas, 48 x 63 cm (Musée Marmottan Monet, Paris)

And on it goes, ever more sarcastically. The article was titled, “Exhibition of the Impressionists,” and the term stuck. From then on, these artists were called Impressionists.

1. Linda Nochlin, *Impressionism and Post-Impressionism, 1874-1904: Sources and Documents* (Englewood Cliffs: Prentice-Hall, 1966), pp. 10-13.

Additional resources:

Impressionism: Art and Modernity from The Metropolitan Museum of Art’s Timeline of Art History

Martha Ward, “Impressionist Installations andn Private Exhibitions,” Art Bulletin, vol. 73 no. 4 (1991) pp. 599-622 (JSTOR)

Smarthistory images for teaching and learning:







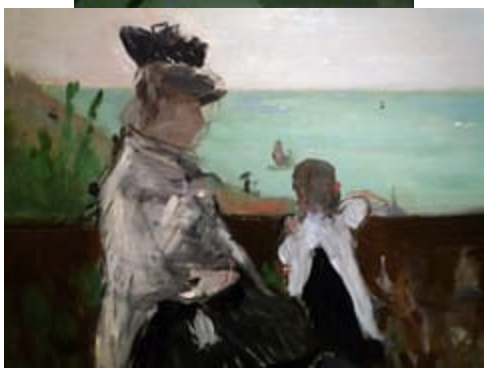










Figure 4.1.17: More Smarthistory images...

Impressionism: painting modern life

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.1.18: Claude Monet, *The Railroad Bridge in Argenteuil (Le pont du chemin de fer à Argenteuil)*, 1873-74, oil on canvas, 54 x 71 cm (**Musée d'Orsay, Paris**)

Aggressively modern

This is one of many paintings by Monet of the railroad bridge leading to Argenteuil, a small town on the outskirts of Paris where the artist lived in the 1870s. The painting demonstrates the Impressionists' well-known interest in depicting nature and the effects of weather and light, seen here in the expanse of white clouds in blue sky and the reflections in the rippling surface of the river. Highly textured dark green bushes and grass are built up with visible brushstrokes and anchor the painting's composition on left and right. The subject of the painting, however, is not a timeless rural scene (these were popular with the public — see, for example, **this painting** by Corot), but an aggressively modern one of a railroad bridge with a train heading over the river.

The bridge was rebuilt at the beginning of the decade after its predecessor was destroyed in the Franco-Prussian war, and its parts were forged at the local ironworks. The steam engine racing across the bridge creates its own billowing gray steam clouds, competing with the natural ones. The sweeping perspective of the bridge suggests the speed and dynamism of modern transportation technology, but Monet also shows that technology as integrally connected to the natural world. The rickety wooden fence in the foreground creates a contrast between old construction materials and the massive concrete and iron pylons supporting the new bridge. Old and new strain to integrate in the modern landscape.



Figure 4.1.19: Claude Monet, *Boulevard des Capucines*, 1873-74, oil on canvas, 80.3 x 60.3 cm (**Nelson-Atkins Museum of Art, Kansas City**)

Subjects that matter

Until the last decades of the twentieth century the scholarship on Impressionism paid relatively little attention to the subject matter chosen by the artists. Before then, art historians mostly concentrated on the style of the works and the way Impressionist innovations in form heralded or consolidated what seemed to them to be the most significant feature of modern art: the liberation of the artist from the constraints of convention, and the "evolution" of art toward flatness and abstraction. In recent decades, however, art historians have seriously considered the subject matter represented in Impressionist paintings and how this subject matter would have been understood by contemporary viewers.

Painting modern life

The Impressionist style can, of course, be applied to any subject matter, but Impressionist artists concentrated on a surprisingly limited range of subjects: typically, middle-class leisure in modern urban or suburban environments such as the Paris boulevard depicted in Monet's *Boulevard des Capucines* or *Railroad Bridge at Argenteuil*. In one sense, the Impressionists continued the tradition of earlier nineteenth-century **Realists** like Jean-François Millet (for example in his painting *L'Angélus*) in their insistence on painting scenes from contemporary life. They rejected historical, mythological, and other exotic subjects and took as their dictum, "*Il faut être de son temps,*" "one must be of one's own time."



Figure 4.1.20: Jean-François Millet, *L'Angélus*, c. 1857-1859, oil on canvas, 21 x 26 (53.3 × 66.0 cm) (Musée d'Orsay, Paris)

However, for the Impressionists, unlike the Realists, contemporary subjects typically did not mean rural or provincial scenes, which often suggested timeless forms of life and labor (as in Millet's *L'Angélus*), but rather urban and suburban subjects that were changing rapidly. In this they are among the first artists to examine an important change in human geography that had significantly transformed the human experience: the shift of populations from primarily rural to urban areas that accompanied the Industrial Revolution and its large-scale economic shift from agricultural to industrial production.

In 1863, the poet and art critic Charles Baudelaire wrote an influential essay titled "The Painter of Modern Life" that called for an artist who would stroll through the new spaces of the city, keenly observing the actions of its inhabitants and viewing the streets and crowds as though they constituted a sort of improvised theater put on for his observation. Monet's *Boulevard des Capucines* presents a characteristically modern scene of the **broad, tree-lined boulevards** that were cut across the older, less regular streets and alleys of Paris, offering a sweeping perspective that was not previously available in the city.



Figure 4.1.21: Édouard Manet, *A Bar at the Folies-Bergère*, oil on canvas, 1882 (Courtauld Gallery, London)

Although they did not insist upon technological subjects as much as later modern art movements such as **Italian Futurism** or **American Precisionism** did, the Impressionists had a recognizable predilection for painting the spaces of Paris as it had been transformed within the past few decades. Along with the more stereotypical *plein-air* garden and landscape subjects, the Impressionists also frequently turned to scenes of contemporary urban experience. They painted Parisian cafés and beer halls; they painted the large theaters, opera houses, and cabarets of the city's night-life, illuminated by the eerie green glow of the

new gas lighting; they painted the bridges and grand boulevards of modern urban planning; they painted the new train stations, glass-and-iron cathedrals to modern technology and its promise of rapid movement of goods and ease of travel; and they painted the suburban restaurants, racetracks, beach resorts, and parks where the rising middle classes spent their leisure hours. These subjects may appear charmingly quaint to our eyes, but at the time they were as aggressively contemporary as paintings of skyscrapers, airports, highway rest areas, and office parks would be today.



Figure 4.1.22: Gustave Caillebotte, *Paris Street; Rainy Day*, 1877, oil on canvas, 212.2 x 276.2 cm (**The Art Institute of Chicago**)

Middle-class leisure

Also unlike the Realists, the Impressionists tended to paint *middle class leisure* rather than *lower class labor*. This is a somewhat surprising limitation. Living alongside affluent urban professionals and moving through the same streets were thousands of poor manual laborers. But when we examine a panoramic street scene such as Gustave Caillebotte's *Paris Street; Rainy Day*—another view of a modern boulevard—it is surprising to note there is only one person on the street whose dress marks him as lower class and whose occupation signals active labor: a distant man carrying a ladder, easily overlooked just to the right of the foreground man's head. The exceptions to this general rule that the Impressionists painted bourgeois leisure rather than lower-class labor actually help to prove the rule. Impressionist paintings that show lower-class labor tend to depict the support industries of middle-class leisure: café waiters, beer-hall waitresses, cabaret singers, ballet dancers, laundresses, milliners, and prostitutes (and not the labor necessary to maintain the infrastructure of the city and the basic needs of its inhabitants). Even the paintings of lower class labor are fundamentally about middle class leisure.

Additional resources:

Margaret Samu, "Impressionism: Art and Modernity" on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

T.J. Clark, *The Painting of Modern Life: Paris in the Art of Manet and his Followers* (Princeton University Press, 1999).

Robert Herbert, *Impressionism: Art, Leisure, and Parisian Society* (Yale University Press, 1991).

Impressionist color

by DR. KIM GRANT and DR. CHARLES CRAMER



Figure 4.1.23: Pierre Auguste Renoir, *Study: Torso, effect of sun*, 1875-76, oil on canvas, 81 x 65 cm (Musée d'Orsay, Paris)

Yellow, blue-gray, and violet skin

Renoir's *Study: Torso, effect of sun* depicts a relatively traditional subject in a conventional three-quarters pose, but the color and brushwork is highly unusual by the standards of traditional naturalism. In addition to flesh tones, the model's skin exhibits a striking range of colors, from peaches and yellows to pinks, blue-grays, and even violets; and the bit of white drapery covering her lap includes hastily brushed passages of blue and rose.

The critic Albert Wolff disparaged the use of color in this painting in graphic terms: "Try to explain to Renoir that a woman's torso is not a mass of decomposing flesh with the purplish-green splotches that denote the final stages of putrefaction in a corpse!"

Wolff's criticism stems from a common assumption that the use of color in painting can only be "local"—the actual color of the object as it would appear in neutral white light. Local color is the approach to color used in traditional art since the Renaissance.

Local color versus the color we perceive

In an earlier work of much the same subject (*Bather with a Griffon Dog*), Renoir's approach to color is more in line with this tradition. The flesh of this nude is rendered in the peachy-orange flesh tones characteristic of ethnic Europeans, modeled in a smoothly gradated chiaroscuro from light to dark in order to define the volumes of the torso, limbs, and head. The other objects in the painting are also rendered in what we easily recognize as their local colors: the grass is green, the water is blue, the dress is white with dark stripes. All the objects are modeled in lighter and darker tones of their local colors in order to show volume and the direction and intensity of the light illuminating the scene.



Figure 4.1.24: Pierre Auguste Renoir, *Bather with a Griffon Dog – Lise on the Bank of the Seine*, 1870, oil on canvas, 111.5 x 183.5 cm (Museu de Arte de São Paulo)

Renoir's radical change in color usage in the later painting is related to the Impressionists' interest in the divergence between the local color of the object and the color actually perceived by the eye under specific lighting and atmospheric conditions. Compare two identical pieces of white paper, one lit by a "soft white" light bulb (2700 Kelvin) and the other by a "daylight" light bulb (5000-6000K). The local color of the two pieces of paper is the same, but the perceived color is very different: the first will appear much more warm and yellow and the second more cool and blue-green because what is called the "color temperature" of the two sources of light is different. Newer LED lightbulbs are often labeled with how "warm" or "cool" (yellow-orange or blue-green) the light is, but this is not a novel technological phenomenon. The color temperature of light coming from the sun changes constantly during the day, in different seasons, and in different weather conditions, because of the angle of the sun and the amount and quality of atmosphere that the light is passing through.

The effect of lighting on the color of objects is sometimes very counter-intuitive. We would expect the shadow cast on a white object to be rendered in a shade of gray, since gray is a darker tone of the local color white. Renoir adheres to this expectation in rendering the shadows in the folds and pleats of the woman's dress in his earlier painting. But in fact shadows cast on white objects are frequently blue.

This effect is particularly noticeable when we observe fresh snow on a sunny day, but it is also clearly evident in Renoir's *The Swing* (1876). Not only are the shadows on the woman's white dress distinctly bluish in hue, but the path behind her in the dappled sunlight is rendered in hues of blue and orange so intense that you wouldn't believe they could work. But they do because, in fact, our eyes are used to perceiving such odd effects: it is just that our brains typically ignore them. Once such variations come to our attention, it is easy to see them, and it would be inaccurate to suggest that the Impressionists were the first to notice these effects. However, where most previous artists had muted or rejected the effects of lighting on the color of objects as trivial accidents that did not contribute anything significant to the painting, many of the Impressionists—Monet and Renoir foremost among them—chose to seek out and emphasize such phenomena.



Figure 4.1.25: Pierre Auguste Renoir, *The Swing (La balançoire)*, 1876, oil on canvas, 92 x 73 cm (Musée d'Orsay, Paris)

New techniques

This attention to the counter-intuitive, but observable, effects of different qualities of light on objects led the Impressionists to some novel technical practices that are clearly visible in their paintings:

First, they tended to paint *en plein air*, in the open air, rather than in the studio, because they needed to be able to observe colors outside the artificial setting of the studio. While earlier nineteenth-century landscape artists had established a practice of making sketches and even color studies outdoors, the Impressionists made this practice central to their work. Monet even famously asserted that he had no studio at all.

Second, where Academic artists tended to begin their paintings by covering the entire canvas with a medium-dark reddish-brown undercoating or "ground," against which they would work up to lighter tones and down to darker ones, the Impressionists tended to paint on a light-colored ground. Because oil paint is semi-transparent, this light underpainting helped to intensify the brightness of the colors, allowing the Impressionists to produce works that look saturated in light.

Third, although color usage varies considerably among the Impressionists, it is generally true that they tended to avoid the dark earth colors such as umbers, siennas, and lamp black that had dominated the color palettes of traditional painting. They chose instead to render entire scenes in hues closer to the colors of the light spectrum: violet, indigo, blue, green, yellow, orange, and red, mixed with generous amounts of white. Walking chronologically through a museum, it is surprising how much more intense and colorful paintings become with Impressionism, after the very earthy colors found in so much Renaissance and Baroque art.

Fourth, the Impressionists tended to use what are called "complementary colors" next to one another, rather than mixing them. Complementary colors are opposite one another on a color wheel, such as red and green, violet and yellow, and blue and orange. If two complementary colors are mixed, they produce a dull brown or gray color. If, however, they are placed adjacent, they have the effect of intensifying one another: next to orange, blue appears brighter and more intense, and vice-versa. In his *Autumn Effect at Argenteuil,* Monet relies heavily on a complementary color scheme to create the intense luminosity of a clear fall day. Like painting on a light-colored ground, the use of complementary colors helped the Impressionists to increase the apparent brightness of their paintings.



Figure 4.1.26: Claude Monet, *Autumn Effect at Argenteuil*, 1873, oil on canvas, 55 × 74.5 cm (The Courtauld Gallery, London)

These technical innovations made Impressionist paintings look significantly different from the traditional naturalistic representations to which the public and critics were accustomed, hence the great suspicion with which the works were greeted when they were first exhibited. Nevertheless, contemporary art critics sympathetic to the Impressionists justified the artists' use of color, like their rendering of space (see "**Impressionist Pictorial Space**"), as a more accurate representation of reality than the conventional naturalistic style that had hitherto been understood as objectively correct.

If it's different, then it's bad

In a salute to the realism of the new art, Theodore Duret castigated the public and critics of his day for clinging to false conventions, and praised the Impressionists for their meticulous and truthful observation of colors under specific lighting and atmospheric conditions:

> **The Impressionist sits on the river bank and depending on the condition of the sky, the angle of vision, the hour of the day, the calm or agitation of the atmosphere, the water takes on all colors. Unhesitatingly, he paints water with all these colors. . .the sun sets and darts its rays into the water, to fix these effects the Impressionist covers his canvas with yellow and red. Then the public starts to laugh.**
>
> **Winter comes, the Impressionist paints snow. He sees that in sunlight the shadows cast on the snow are blue; unhesitatingly, he paints blue shadows. Now the public laughs harder. . . .Under the summer sun, in the reflections of green foliage, skin and clothing take on a violet hue, the Impressionist paints people under violet woods. Then the public flies into a complete rage; the critics shake their fists and call the painter "communist" and villain.**
>
> **The poor Impressionist vainly protests his complete sincerity, declares that he only reproduces what he sees, that he remains faithful to nature; the public and critics condemn him. . . .For them only one thing matters: what the Impressionists put on their canvases does not correspond to what is on the canvases of previous painters. If it's different, then it's bad. [1]**

In this passage, Duret refers to "blue" snow and "violet" tinted flesh, which sounds ridiculous when we think of the local color of those things. He justifies the Impressionists' use of those seemingly inappropriate colors by asserting that the specific lighting conditions at the time transformed their appearances. It is not the Impressionists but the traditional critics and public who are at fault, for they have mistaken the conventions of past paintings for the truth of nature.

Notes:

[1] As quoted in Joel Isaacson, Claude Monet, observation and reflection (Phaidon, 1978), p. 11.

Additional resources:

Laura Anne Kalba, *Color in the Age of Impressionism: Commerce, Technology, and Art* (Penn State University Press, 2017)

Impressionist pictorial space

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.1.27: Monet, *Boulevard des Capucines*, 1873-74, oil on canvas, 80.3 x 60.3 cm, Nelson-Atkins Museum of Art, Kansas City

Modern Paris

Monet's *Boulevard des Capucines* depicts one of the grand boulevards of Paris. The boulevard was designed by **Baron Haussmann** in the mid-19th century to cut through the tightly packed medieval center of the city. The unusually high viewpoint of the painting is taken from one of the new multistory, mixed-use commercial and apartment buildings that lined these boulevards. The painting is modern in the very simple sense that its subject would not have been possible fifty years earlier.



Figure 4.1.28: Edgar Degas, *Café-Concert at Les Ambassadeurs*, pastel on monotype, 37 x 26 cm (Musée des Beaux-Arts de Lyon)

Similarly, Degas's *Café-Concert aux Ambassadeurs* shows a scene in one of the new nightclubs for which Paris became famous in the late nineteenth century. Starting as occasional musical acts in what were called *café-concerts*, these nightclubs quickly evolved into massive cabarets, often with multiple stages, that included dance revues and acrobatics as well as large orchestras. Degas situates us in the crowded pit of one of these cabarets, looking through a forest of fancy hats and musical instruments at the performers on stage, who glow in the modern gas footlights. Both of these works typify the Impressionists' exploration of the new spaces of Paris, as well as the new vantage points and ways of seeing that these spaces allowed.

A change in pictorial space

The Impressionists' treatment of pictorial space was also often unusual. Traditional Academic artists tended to favor centered, closed, and balanced compositions such as David's *Oath of the Horatii*, in which the action is carefully staged for the viewer at a measured distance back from the picture plane.



Figure 4.1.29: Jacques-Louis David, *Oath of the Horatii,* 1784, oil on canvas, 3.3 x 4.25 m, painted in Rome, exhibited at the salon of 1785 (Musée du Louvre)

Although we can infer our viewpoint in Monet's *Boulevard des Capucines*, it is unusual in that the artist gives us no clear place to stand in the work, and the orthogonal lines of the boulevard sweep off the right-hand side of the canvas, as though we were leaning perilously out a window or over a balcony railing. Similarly, Degas's *Le Café-Concert aux Ambassadeurs* is remarkable for its failure to use any perspectival techniques to create space for its thicket of bodies, which emphasizes the sense of being jostled in the middle of a crowd.



Figure 4.1.30: Edgar Degas, *At the Races in the Countryside* (detail), 1869, oil on canvas, 36.5 x 55.9 cm (Museum of Fine Arts, Boston)

Even more unusual is Degas's treatment of pictorial space in his painting *At the Races in the Countryside*, a scene set at one of the racetracks situated on the outskirts of Paris. The main focus of the work is obvious: the wet nurse and child, who are framed by the carriage door below and by a yellow parasol above, and who are the focus of attention of the child's mother, the driver of the carriage (Paul Valpinçon, the child's father), and their dog. This focal point is placed at the exact horizontal center of the canvas, as we might expect, but Degas appears to have achieved this placement at considerable cost to the rest of the composition. The work is egregiously unbalanced, the right hand side being crowded with heavy, dark shapes and the left hand side relatively light and empty. Furthermore, one of the horses is cropped awkwardly at the nose; the legs of both horses and the wheels of the carriage are abruptly truncated; and the carriage on the left, which is already leaning perilously to the right, has had its left supporting wheel cut off by the edge of the canvas. The work has the appearance of an amateur photographic snapshot, where subjects are frequently centered but little attention is paid to what is happening at the edges of the composition.



Figure 4.1.31: Edgar Degas, *At the Races in the Countryside* (detail), 1869, oil on canvas, 36.5 x 55.9 cm (Museum of Fine Arts, Boston)

Unlike a photograph, however, a painting cannot be executed in a fraction of a second, and it would have been remarkably careless if Degas had trapped himself into this unbalanced composition and these odd truncations of the figures by beginning his work in the wrong place or at the wrong scale—or if, when he saw what was happening, he did not correct it. We must conclude that Degas actively sought the effects of imbalance and seemingly arbitrary cropping, no matter how unusual or awkward they may seem. Why? In a review of the second exhibition of the **Société anonyme** (1876), the critic Edmond Duranty justified these and similar violations of conventional pictorial space and carefully organized compositions by asserting their greater truth to lived

visual experience:

> **People and things have a thousand ways of being unexpected in reality. Our point of view is not always in the middle of a room with two side walls receding toward the back wall; it does not always arrange the lines and angles of cornices with mathematical symmetry. . . .[One's viewpoint] is sometimes very high, sometimes very low, sometimes it misses the ceiling, views objects from their undersides, unexpectedly cuts off the furniture. . . .**
>
> **A man in a room or on a street is not always standing in a straight line at an equal distance from two parallel objects; he is likely to be situated on one side of the space. He is never in the center of the canvas or in the center of the setting. He is not always shown as a whole; sometimes he appears cut off at mid-leg, or half-length, or sliced longitudinally. Sometimes, one sees him very close-up, at full size, while very tiny, far back in the the distance appears a crowd in the street or groups assembled in a public place. [1]**

Old systems fall apart and new ones take their place

Notice that Duranty justified the radical spatial and compositional effects of Impressionism by describing the new artists' paintings as more accurate than the established conventions of academic painting. Our views as we move through the world are not always centered and balanced; nor does space always recede with the mathematical regularity typical of traditional academic paintings. The systematic perspectival techniques that had dominated Western art since the Italian Renaissance, and which had been formulated to help make paintings look more true to life, are revealed to be mere artifices. The type of argument Duranty employed becomes a commonplace not only of Impressionism but of other movements as well: surprising new pictorial effects, which at first sight appear to be errors, are justified as being more accurate than the established conventions of past art. In this way modern art can sometimes remind us that what we think of as "realistic" or "natural" really only describes the social and artistic conventions to which we are so habituated that we accept them without question.

Notes:

[1] As quoted in Linda Nochlin, *Impressionism and Post-Impressionism, 1874-1904: Sources and Documents* (Prentice Hall, 1966), p. 6.

Additional resources:

Margaret Samu, "Impressionism: Art and Modernity" on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

T.J. Clark, *The Painting of Modern Life: Paris in the Art of Manet and his Followers* (Princeton University Press, 1999).

Robert Herbert, *Impressionism: Art, Leisure, and Parisian Society* (Yale University Press, 1991).

Mary Tompkins Lewis, ed., *Critical Readings in Impressionism and Post-Impressionism: An Anthology* (University of California Press, 2007).

Japonisme

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.1.32: Left: James McNeil Whistler, *Caprice in Purple and Gold: The Golden Screen*, 1864, oil on wood, 50.1 x 68.5 cm (**National Museum of Asian Art**, Washington, DC); Right: Utagawa Hiroshige, *Osumi Sakurajima*, from *Famous Views of Sixty-odd Provinces*, 1856, woodblock print, 36.8 x 23.5 cm (**The Art Institute of Chicago**)

James McNeill Whistler's *Caprice in Purple and Gold* is an early example of Japonisme, a term coined by the French art critic Philippe Burty in 1872. It refers to the fashion for Japanese art in the West and the Japanese influence on Western art and design following the opening of formerly isolated Japan to world trade in 1853. In Whistler's painting, a European woman sits on the floor wearing richly embroidered silks like those of a Japanese courtesan while she studies a set of woodblock prints by the Japanese artist Hiroshige. Decorative objects from both Japan and China surround her, including a large gold Japanese folding screen.

A decorative art fashion



Figure 4.1.33: Cover of *Le Japon Artistique*, July 1888

The late-nineteenth century Western fascination with Japanese art directly followed earlier European fashions for Chinese and Middle Eastern decorative arts, known respectively as Chinoiserie and Turquerie. The art dealer Siegfried Bing was one of the earliest importers of Japanese decorative arts in Paris. He sold them in his shop La Porte Chinoise, as well as promoting them in his lavish magazine *Le Japon Artistique*, published from 1888-1891. Bing was also a major supporter of **Art Nouveau**, a fin-de-siècle decorative style greatly influenced by Japonisme.



Figure 4.1.34: Left: Edouard Manet, *Emile Zola*, 1868, oil on canvas, 146.5 x 115 cm (**Musée d'Orsay**, Paris); Right: Claude Monet, *La Japonaise*, 1876, oil on canvas, 91 1/4 x 56 inches (**Museum of Fine Arts**, Boston)

Works by prominent artists associated with Impressionism and Post-Impressionism bear witness to the late 19th-century fashion for Japanese art and decorative objects. In Manet's portrait of Emile Zola the novelist and art critic sits at his overflowing desk. Immediately noticeable among the artworks surrounding him are a Japanese woodblock print of a wrestler and a Japanese gold screen. Monet portrayed his wife Camille dressed in a Japanese kimono surrounded by Japanese fans, and his water garden at Giverny was inspired by Japanese gardens depicted in prints and included a Japanese-style wooden bridge. In addition to painting copies of several Japanese woodblock prints, such as *Bridge in the Rain (After Hiroshige)*, **Vincent van Gogh** depicted them in the background of several portraits.

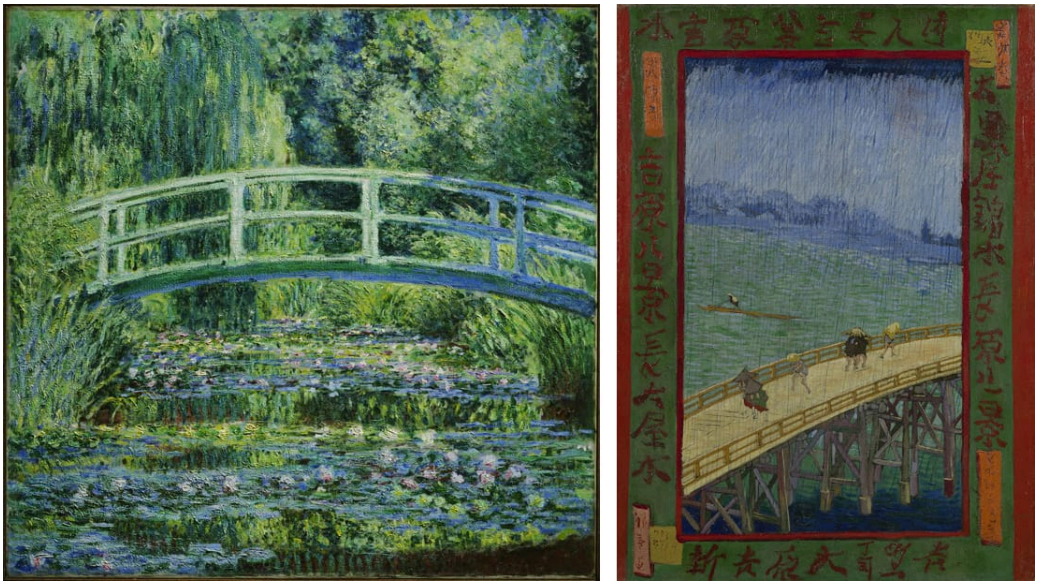


Figure 4.1.35: Left: Claude Monet, *Water Lilies and Japanese Bridge*, 1899, oil on canvas, 90.5 x 89.7 cm (**Princeton Art Museum**); Right: Vincent van Gogh, *Bridge in the Rain (After Hiroshige)*, 1889, oil on canvas, 73.3. x 53.8 cm (**Van Gogh Museum**, Amsterdam)

A source for modern artists

Japonisme coincided with modern art's radical upending of the Western artistic tradition and had significant effects on Western painting and printmaking. In this regard, Japanese art affected modern art in much the same way that **encounters with African and Oceanic art** and artifacts did a few decades later. Many late-19th century modern artists not only admired and collected Japanese prints, they derived and adopted both compositional and stylistic approaches from them.

Japanese woodblock prints called **ukiyo-e**, or "pictures of the floating world," were a cheap popular art form in Japan during the **Edo Period** (1615-1868). They were associated with urban entertainment districts (the so-called floating world) in Japan and typically portrayed famous actors, courtesans, and wrestlers, as well as landscape views of well-known sites. Ukiyo-e prints first appeared in Europe as packaging material used to protect valuable imported porcelain objects, but they attracted the interest of European artists and art collectors and were soon imported for their own sake.



Figure 4.1.36: Left: James McNeill Whistler, *Nocturne: Blue and Gold – Old Battersea Bridge*, 1872-5, oil on canvas, 68.3 x 51.2 cm (**Tate Britain**, London); Right: Utagawa Hiroshige, *Bamboo Yards, Kyobashi Bridge* from *One Hundred Views of Edo*, 1857, woodblock print, 36 x 23.5 cm (**Brooklyn Museum**)

In addition to depicting Japanese decorative objects, Whistler used both subjects and compositional strategies derived from Hiroshige's prints of notable views in Japan. One of his most innovative and well-known paintings, *Nocturne in Blue and Gold: Battersea Bridge*, echoes Hiroshige's *Kyobashi Bridge* in both its nighttime subject and the abruptly cropped view of the bridge in the foreground. The large areas of flat colors typical of Japanese woodblock prints may also have influenced Whistler's simplified forms and reduced color range.

Impressionism



Figure 4.1.37: Left: Mary Cassatt, *The Letter*, 1890-91, drypoint and aquatint on paper (**National Gallery of Art**, Washington DC); Right: Kitagawa Utamaro, *Seyama of the Matsubaya, Kamuro Iroka and Kukari*, from *Six Jewel Rivers*, 1793, woodblock print, 15 ¼ x 9 15/16 inches (**Museum of Fine Arts**, Boston)

The Impressionists were also interested in Japanese prints. After visiting an 1890 exhibition of ukiyo-e prints in Paris, Mary Cassatt employed similar decorative patterns, flattened spaces and simplified figures in a series of color **etchings** that includes *The Letter*. Cassatt's favored subjects, women in domestic interiors playing with children or grooming themselves, were common in ukiyo-e prints, a fact that undoubtedly contributed to her interest in them.

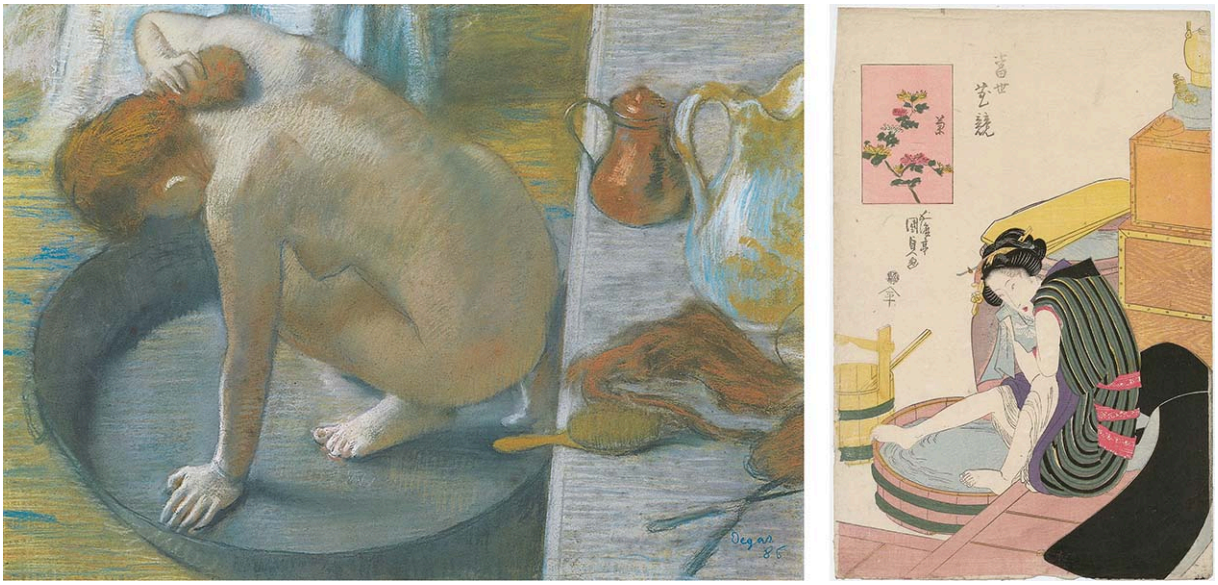


Figure 4.1.38: Left: Edgar Degas, *The Tub*, 1886, pastel on card, 60 x 83 cm (**Musée d'Orsay**, Paris); Right: Utagawa Kunisada I, *Chrysanthemum* from *Contest of Modern Flowers*, c. 1820, woodblock print, 39.2 x 26 cm (**Museum of Fine Arts**, Boston)

Cassatt's friend Edgar Degas used Japanese compositional devices to depict women bathing. In *The Tub* a woman sponging her neck is shown from an elevated vantage point that emphasizes the flat shapes and patterns created by her body and the surrounding objects. The curve of the tub is continued in the woman's back, while the vertical of her left arm parallels the edge of the shelf on the right side of the painting. Thus, although Degas uses traditional chiaroscuro shading to define three-dimensional forms, abstract pattern and surface design dominate the image, flattening the space and rendering it ambiguous.

Like Degas' *The Tub*, Kunisada's *Chrysanthemum* shows a bathing woman surrounded by ordinary household objects — note the water heater and scrub brush in the upper right corner. Although the viewing angle is not as high as that in Degas' work, we see the woman from above, and Kunisada uses the space and objects surrounding her to construct a visual frame for the figure rather than clearly defining an interior space. The repetition of colors and simplified shapes creates a strong surface pattern, as does the lack of chiaroscuro shading.

Post-Impressionism



Figure 4.1.39: Vincent van Gogh, *Portrait of Père Tanguy*, 1887, oil on canvas, 65 x 51 cm (**Musée Rodin**, Paris)

Among the Post-Impressionists, van Gogh was especially passionate about Japanese art and traditions, although his understanding of Japanese culture was limited and often **more personal fantasy** than based on real knowledge. He amassed a collection of hundreds of Japanese prints, and they influenced the development of his style, notably his vivid colors, simplified planar forms, and use of decorative surface patterns. In 1888 he wrote his brother Theo, "All my work is based to some extent on Japanese art . . .."



Figure 4.1.40: Paul Gauguin, *Vision after the Sermon (or Jacob Wrestling with the Angel)*, 1888, oil on canvas, 72.20 x 91.00 cm (**National Gallery of Scotland**, Edinburgh)

Gauguin borrowed directly from Japanese art early in his eclectic and wide-ranging embrace of non-Western cultures and art forms. The bright colors and flat forms of his **cloisonnist paintings** were greatly indebted to Japanese prints. In ***Vision after the Sermon*** Gauguin used two specific Japanese sources. The figures of Jacob and the angel in the upper right are derived from Hokusai's prints of sumo wrestlers, while the overall composition with its flat red ground and abruptly arcing tree branch echoes Hiroshige's woodblock print of a blossoming plum tree, a print van Gogh also copied.



Figure 4.1.41: Right: Katsushika Hokusai, *Hokusai Manga*, 1817, woodblock print (**Pulverer Collection**, Smithsonian Institution); Left: Utagawa Hiroshige, *Plum Garden at Kameido*, 1857, woodblock print, 36 x 23.5 cm (**Brooklyn Museum**)

Decorative approaches

Like many artists associated with Art Nouveau, Henri de Toulouse-Lautrec was greatly affected by Japanese art and design. His posters, such as the one for a café-concert club called Divan Japonais, show the strong influence of Japanese prints of Kabuki actors in their flat forms, powerful contour design, and dramatic use of black shapes. Unlike the paintings we have looked at thus far in this essay, Toulouse-Lautrec's posters served a similar role to that of the Japanese woodblock prints; they were a cheap, mass-produced form of publicity for the entertainment industry.



Figure 4.1.42: Left: Henri de Toulouse-Lautrec, *Divan Japonais*,1892-3, color lithograph, 80.8 x 60.8 cm (**The Metropolitan Museum of Art**, New York); Right: Toshusai Sharaku, *Kabuki Actor Otani Oniji*, 1794, woodblock print, 38.1 x 35.1 cm (**The Metropolitan Museum of Art**, New York)

The Nabis, a group of French Post-Impressionist artists affiliated with both **Pont-Aven** and Symbolism, were great admirers of Japanese art. They were dedicated to the decorative arts and closely associated with Siegfried Bing's gallery Maison de l'Art Nouveau. In addition to creating paintings, they designed many decorative objects including folding screens and stained glass windows.



Figure 4.1.43: Pierre Bonnard, *Women in the Garden*, 1891, distemper on canvas, 160 x 48 cm (Musée d'Orsay, Paris)

Pierre Bonnard, the most Japanese-influenced of the group, painted a set of four narrow vertical panels, initially intended to be part of a Japanese-style folding screen, showing women in stylized garden settings. The subject as well as the detailed patterns and flat decorative forms were directly inspired by Japanese prints and painted screens. His later paper lithograph screen, *Nannies' Promenade*, is even more noticeably influenced by Japanese design in its diagonal composition and its use of a restricted color range and patterned silhouettes on an expanse of white paper.



Figure 4.1.44: Pierre Bonnard, *Nannies' Promenade, Frieze of Carriages*, 1899, color lithograph, each panel 137.2 x 47.6 cm (**MoMA**)

Japanese art had significant effects on both Western decorative arts and the evolution of new artistic styles associated with Modern art. The distinctive qualities of Japanese art — decorative use of color, surface patterning, and asymmetrical compositions — offered striking new approaches to modern artists developing alternatives to the Western tradition of naturalistic representation.

Additional resources:

Read more about Monet and Japanese prints

Read more about van Gogh and Japanese art

Looking east: how Japan inspired Monet, Van Gogh and other Western artists

by ASIAN ART MUSEUM

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.1: Video from the **Asian Art Museum**.

Edgar Degas

Edgar Degas, *The Bellelli Family*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.2: Edgar Degas, *The Bellelli Family*, 1858-67, oil on canvas, 78-3/4 x 98-1/2″, 200 x 250 cm (Musée d'Orsay, Paris)

Degas was in his mid-twenties when he painted this canvas. It depicts, from left to right, the ten-year-old Giovanna; her mother (and the artist's paternal aunt) Laura; her younger daughter, Giula, age 7; and the Baron Gennaro Bellelli. Preperatory sketches for the painting may have been made in Florence where the family was living—the Baron had been exiled from Naples. The picture may have been completed in Paris.

Smarthistory images for teaching and learning:

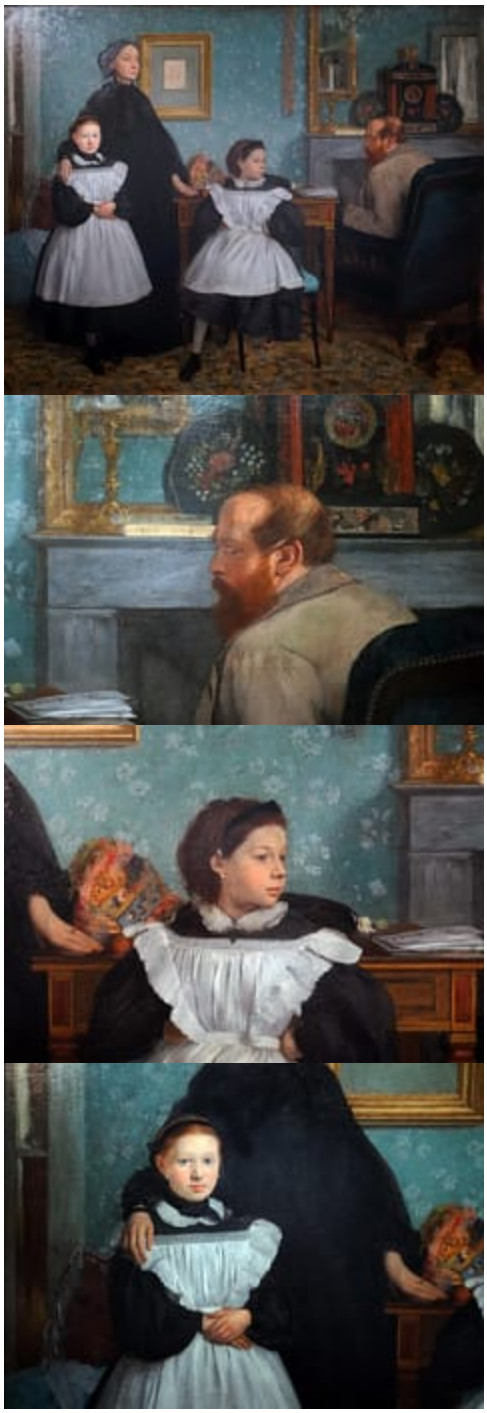




Figure 4.1.45: More Smarthistory images...

Edgar Degas, *At the Races in the Countryside*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.3: Edgar Degas, *At the Races in the Countryside*, 1869, oil on canvas, 36.5 x 55.9 cm / 14-3/8 x 22 inches (Museum of Fine Arts, Boston)

Smarthistory images for teaching and learning:













Figure 4.1.46: More Smarthistory images...

Edgar Degas, *The Dance Class*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.4: Edgar Degas, *The Dance Class*,, 1874, oil on canvas, (Metropolitan Museum of Art, New York)

Smarthistory images for teaching and learning:



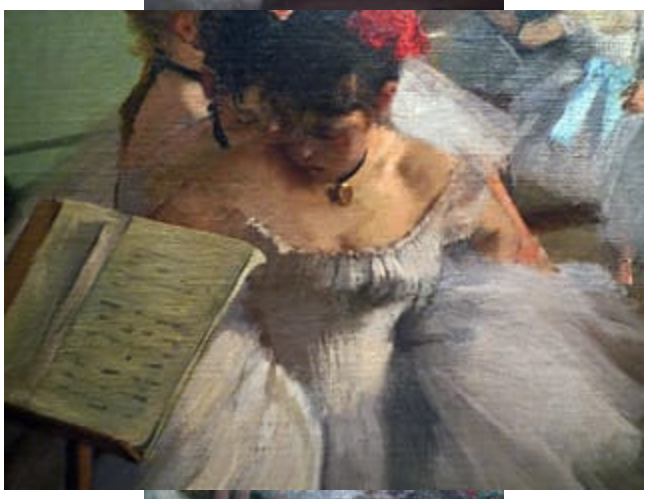






Figure 4.1.47: More Smarthistory images...

Edgar Degas, *Visit to a Museum*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.5: Edgar Degas, *Visit to a Museum*, c. 1879–90, oil on canvas, 91.8 x 68 cm / 36-1/8 x 26-3/4″ (Museum of Fine Arts, Boston)

Smarthistory images for teaching and learning:



Figure 4.1.48: More Smarthistory images...

Gustave Caillebotte

Gustave Caillebotte, *The Floor Scrapers (Les raboteurs de parquet)*

by DR. PARME GIUNTINI and DR. ROBERT SUMMERS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.6: Gustave Caillebotte, *The Floor Scrapers (Les raboteurs de parquet)*, 1875, oil on canvas, 102 x 146.5 cm (Musée d'Orsay, Paris). This video was made in cooperation with Otis College of Art and Design.

Smarthistory images for teaching and learning:



Figure 4.1.49: More Smarthistory images...

Gustave Caillebotte, *Paris Street; Rainy Day*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.7: Gustave Caillebotte, *Paris Street; Rainy Day*, 1877, oil on canvas 83-1/2 x 108-3/4 inches (212.2 x 276.2 cm) (The Art Institute of Chicago)

Smarthistory images for teaching and learning:





Figure 4.1.50: More Smarthistory images...

Gustave Caillebotte, *Man at his Bath*

by DR. PARME GIUNTINI and DR. ROBERT SUMMERS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.8: Gustave Caillebotte, *Man at his Bath*, 1884, oil on canvas, 57 x 45″ / 144.8 x 114.3 cm, (Private Collection, on loan to the National Gallery, London). This video was produced in cooperation with Otis College of Art and Design.

Berthe Morisot

Berthe Morisot, *The Cradle*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.9: Berthe Morisot, *The Cradle*, 1872, oil on canvas, 56 x 46 cm (Musée d'Orsay, Paris)

Smarthistory images for teaching and learning:





Figure 4.1.51: More Smarthistory images...

A summer day in Paris: Berthe Morisot's *Hunting Butterflies*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.10: Berthe Morisot, *Hunting Butterflies*, 1874, oil on canvas, 46 x 56 cm (Musée d'Orsay, Paris).

Smarthistory images for teaching and learning:



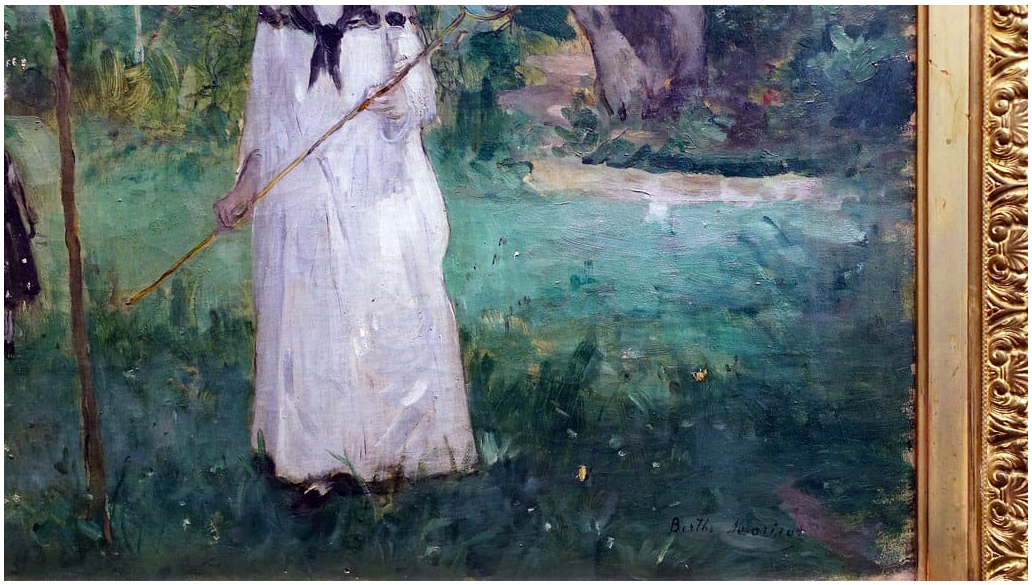


Figure 4.1.52: More Smarthistory images...

Pierre-Auguste Renoir

How to recognize Renoir: *The Swing*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

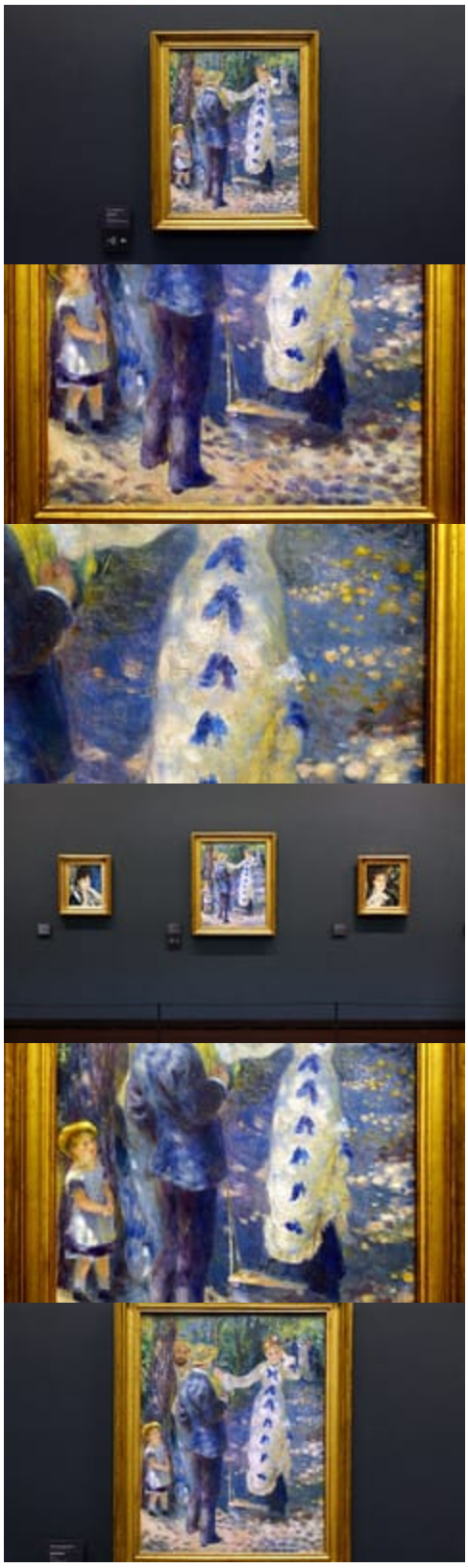
YouTube Video

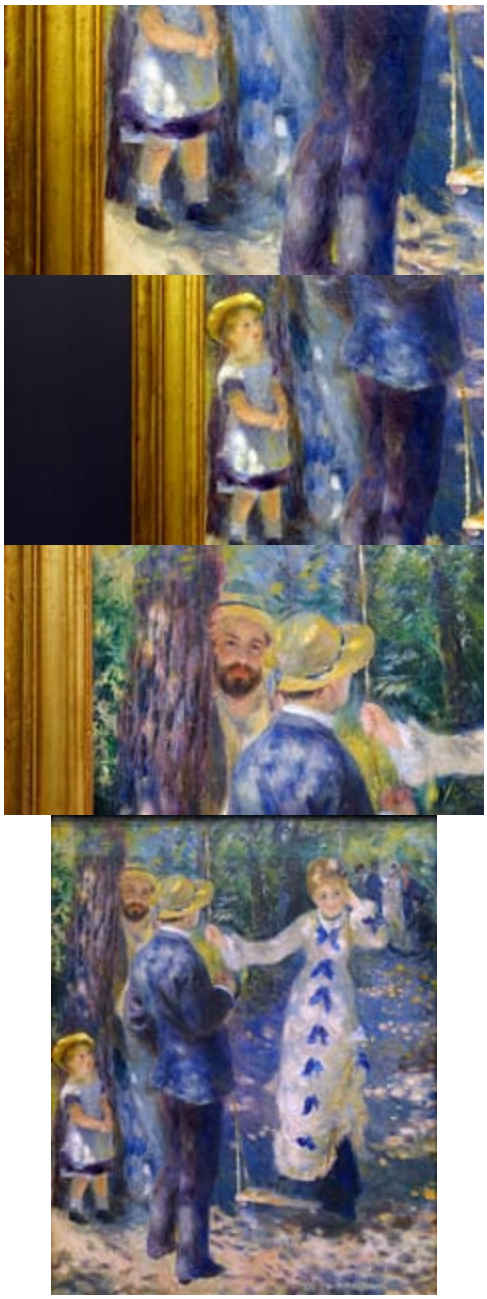
This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.11: Pierre Auguste Renoir, *The Swing (La balançoire)*, 1876, oil on canvas, 92 x 73 cm (Musée d'Orsay, Paris)
Speakers: Dr. Beth Harris and Dr. Steven Zucker

Smarthistory images for teaching and learning:





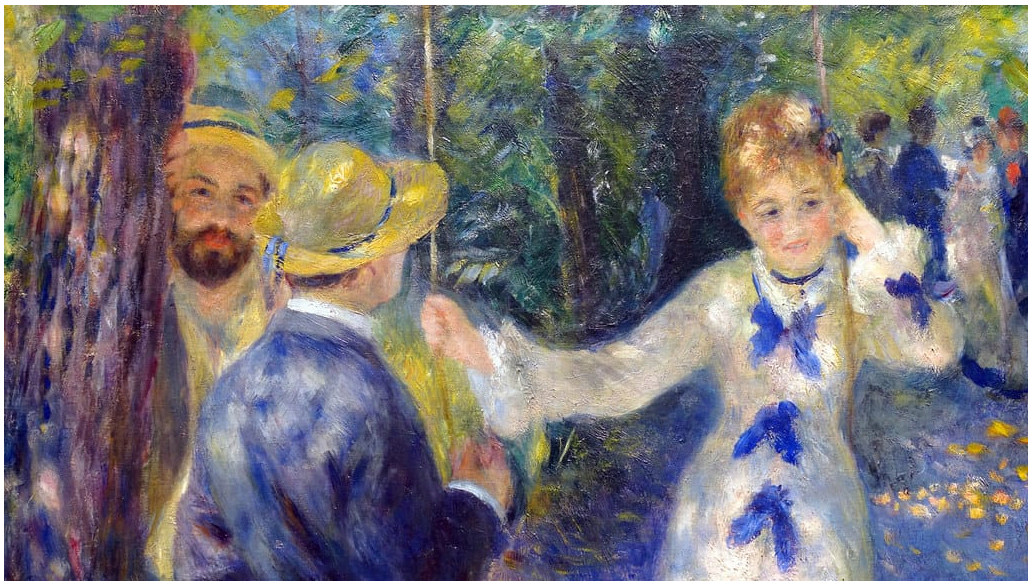


Figure 4.1.53: More Smarthistory images...

Auguste Renoir, *La Loge*

by DR. BETH HARRIS and RACHEL ROPEIK

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.12: Auguste Renoir, *La Loge,* 1874, oil on canvas, 31 1/2 x 24 5/8″ / 80 x 63.5 cm (Courtauld Gallery, London)

This painting was exhibited by Renoir at the first Impressionist exhibition in Paris (1874).

Smarthistory images for teaching and learning:

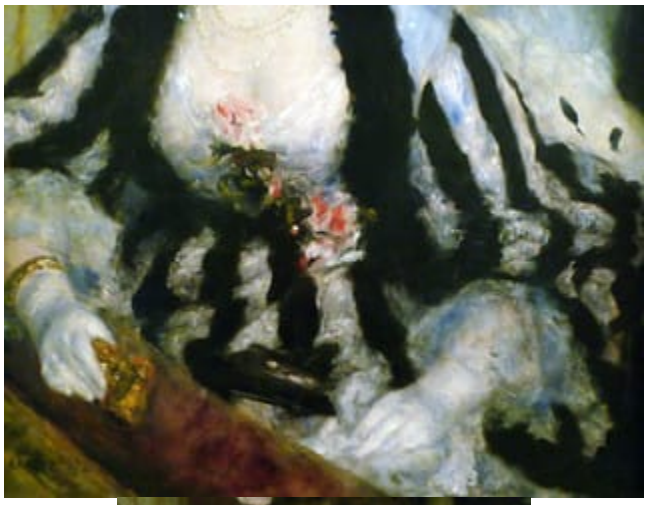






Figure 4.1.54: More Smarthistory images...

Auguste Renoir, *The Grands Boulevards*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.13: Auguste Renoir, *The Grands Boulevards*, 1875, oil on canvas, 20-1/2 x 25″ / 52.1 x 63.5 cm (Philadelphia Museum of Art)

Smarthistory images for teaching and learning:





Figure 4.1.55: More Smarthistory images...

Auguste Renoir, *Moulin de la Galette*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.14: Pierre-Auguste Renoir, *Moulin de la Galette,* 1876, oil on canvas, 51 1/2 x 68 7/8 in. (131 x 175 cm), (Musée d'Orsay, Paris)

Smarthistory images for teaching and learning:







Figure 4.1.56: More Smarthistory images...

Pierre-Auguste Renoir, *Portrait of Madame Charpentier and Her Children*

by DR. INGRID E. MIDA



Figure 4.1.57: Pierre-Auguste Renoir, *Madame Georges Charpentier (Marguérite-Louise Lemonnier) and Her Children, Georgette-Berthe and Paul-Émile-Charles*, 1878, oil on canvas (153.7 x 190.2 cm) (The Metropolitan Museum of Art)

What do clothes reveal about the wearer?

When artists like Pierre-Auguste Renoir painted portraits of real people, their work became embedded with clues about cultural beliefs at a particular moment in time — including notions of beauty, propriety, status, and gender. In this portrait by Renoir, the artist captured the likeness of Madame Charpentier with her two children in an intimate setting within the family's elegant Parisian townhouse.

This work is one of several commissioned by Georges Charpentier, an influential publisher and an early collector of Renoir's work. In this portrait, Renoir depicts Marguérite Charpentier seated on a richly patterned settee alongside her two children and the family's large Newfoundland dog in a small room filled with precious objects including Japanese screens, crystal and porcelain. Renoir's palette is lush and his brushwork confident; the careful composition with its strong diagonals invites the viewer into this private space.

Gender and status

This large-scale work received favorable reviews when it was exhibited in a prominent position at the Salon of 1879 in Paris, and Renoir later acknowledged the efforts of Madame Charpentier in helping him gain subsequent portrait commissions. However, in the decades after its initial reception, viewers have often been surprised to learn that one of the children is a boy, since both children are dressed alike. This essay analyzes the garments and accessories worn by Madame Charpentier and her children as markers of status and gender at that time in history. Gender —the cultural construction of identity that distinguishes man from woman and boy from girl —is typically represented through the fashioning of the body, including the clothing and accessories, the styling of the hair and the wearing of makeup or other body modifications.

The fashionable Parisienne



Figure 4.1.58: Pierre-Auguste Renoir, detail, *Madame Georges Charpentier (Marguérite-Louise Lemonnier) and Her Children, Georgette-Berthe and Paul-Émile-Charles*, 1878

In this portrait, Madame Charpentier is dressed in a long-sleeved black silk afternoon dress expansively trimmed with lace. Each element of her dress is indicative of her stature as the wife of a wealthy man.

Her close-fitting dress is floor length, with a train that pools on the floor beside her to reveal her white ruffled underskirt. The dress has no bustle, but rather is flat-backed; this style of dress was in fashion for a brief interval of two or three years towards the end of this decade, and this small detail marks the wearer as a close follower of fashion.

Marguerite has added several pieces of jewelry to her ensemble to signal the family's wealth, including pearl earrings, a daisy brooch pinned to her left shoulder, two heavy gold bangles on both wrists, and several rings on her fingers.

The color of the dress signals chic, rather than mourning; black was a fashionable color for an elegant afternoon dress that would be worn to receive visitors or go visiting in one's social circle. Madame Charpentier was known for her sophisticated literary salons in which she entertained writers like Flaubert and Zola, and this formal daywear dress would be suitable for just such a gathering. Similar dresses from 1878 can be found in museum collections, and an example is shown below.



Figure 4.1.59: Afternoon dress, 1876–78 (The Metropolitan Museum of Art)

Dressing children in the nineteenth century

In Renoir's portrait, the children — Georgette, age six, and Paul, age three — are dressed in identical sleeveless, open-neckline, dropped-waist short dresses made of pale blue moiré silk trimmed with white silk. Both children have similar hairstyles with shoulder-length wavy hair. The only discernible difference in their attire is their footwear; Georgette wears shoes with a small heel, while Paul wears flat shoes with a mid-foot strap. These children, dressed alike in their expensive and elegantly trimmed silk frocks, are fashionable accessories for their elegant mother.



Figure 4.1.60: Pierre-Auguste Renoir, detail, *Madame Georges Charpentier (Marguérite-Louise Lemonnier) and Her Children, Georgette-Berthe and Paul-Émile-Charles*, 1878

The identical dresses worn by the Charpentier children in this painting reveal a little-known aspect of nineteenth-century western dress codes in which infants and young children were dressed alike in dresses or petticoats until about age four or five. At this time in history, when doing laundry was a tedious and lengthy process, having young children wear petticoats or frocks until they were toilet-trained made sense from a practical standpoint. As well, infants and young children were seen as asexual beings and for this reason were dressed alike. For example, in the fashion plate shown below, the child is dressed in a jacket and skirt that could be worn by either boy or girl.



Figure 4.1.61: Fashion Plate, *Journal Des Demoiselles*, 1878 (The Metropolitan Museum of Art)

Photographs from the time also capture many young boys dressed in petticoats or a tunic and skirt, including this undated photo

of two young boys. The younger boy is wearing a checked ensemble consisting of a tunic and a skirt trimmed in velvet while his older brother wears a wool suit consisting of a jacket worn with knickerbockers.



Figure 4.1.62: Carte de visite photograph of two young boys, c. 1870s (photographer M.E. Robb, author's collection)

The transition from petticoats and dresses into short pants and then trousers took on symbolic importance as a rite of passage for a boy, but the age at which this occurred was a matter of individual choice,

> **...as every mother is desirous that her little ones should be seen at their best, it will be her pride and pleasure to exercise her taste and judgement in this direction.*As quoted by Clare Rose, "Age-related clothing codes for boys in Britain, 1850-1900," Critical Studies in Men's Fashion, vol. 2 (2015), pp.139.***

Tailoring guides from this time reveal an age-related progression of attire for boys from petticoats indicated before age 3; jackets with skirts suggested for ages 3 to 6; tunic over trousers for boys aged 6-12; short wool jackets and trousers for ages 12-15; and suits for boys over age 15.

With the emergence of department stores and mass-production methods for clothing in the latter part of the nineteenth century, the options for boys expanded, but there was also a significant shift in ideals of masculinity that resulted in a marked restriction in the types of clothing and the colors available for boys. As historians including Jo Paoletti have observed, by about 1920, it was seen as highly inappropriate for boys to wear dresses, lace, ruffles, and other feminine-coded garments details or colors.

Our own biases

Renoir's portrait of the Charpentier family reminds us that the dress codes that signal gender are linked to culture as well as a specific time and place in history. The idea that boys do not wear dresses dates back only about a century. Gender is a culturally specific notion — something that is learned rather than innate. Interpreting a painting such as this one by Renoir requires careful observation and reflection of the inherent biases of our own standpoint in culture.

Additional resources:

Colin B. Bailey, *Renoir's Portraits: Impressions of an Age* (Yale University Press: New Haven and London in association with National Gallery of Canada, Ottawa, 1997).

Anne Buck, *Clothes and the Child* (New York: Holmes & Meier, 1996).

Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (New York and London: Routledge, 2007 [1990]).

Ingrid E. Mida, *Reading Fashion in Art* (London and New York: Bloomsbury Academic, forthcoming 2020).

Jo B. Paoletti, *Pink and Blue: Telling the Boys from the Girls in America* (Bloomington: Indiana University Press, 2012).

Clare Rose, "Age-related clothing codes for boys in Britain, 1850-1900." *Critical Studies in Men's Fashion*, vol. 2 (2015), pp.127-142.

Valerie Steele, *Paris Fashion: A Cultural History* (New York: Bloomsbury, 2017).

Barbara Ehrlich White, *Renoir: An Intimate Biography* (New York: Thames & Hudson, 2017).

Auguste Renoir, *Luncheon of the Boating Party*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.15: Auguste Renoir, *Luncheon of the Boating Party*, 1880-81, oil on canvas, 130.2 x 175.6 cm (Phillips Collection, Washington, D.C.)

Smarthistory images for teaching and learning:





Figure 4.1.63: More Smarthistory images...

Auguste Renoir, *The Large Bathers*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.16: Auguste Renoir, *The Large Bathers*, 1884-87, oil on canvas, 46-3/8 x 67-1/4″ / 117.8 x 170.8 cm (Philadelphia Museum of Art)

Smarthistory images for teaching and learning:



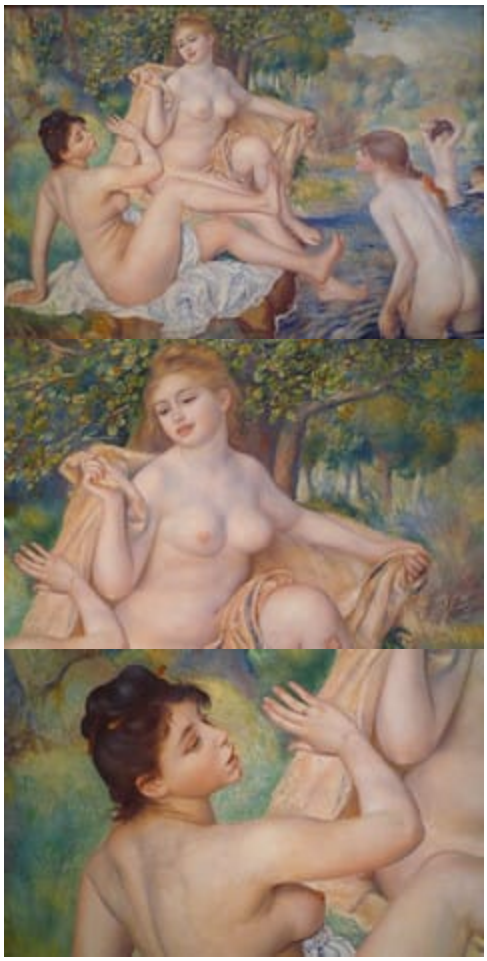


Figure 4.1.64: More Smarthistory images...

Claude Monet

Impressionism as optical realism: Monet

by DR. CHARLES CRAMER and DR. KIM GRANT

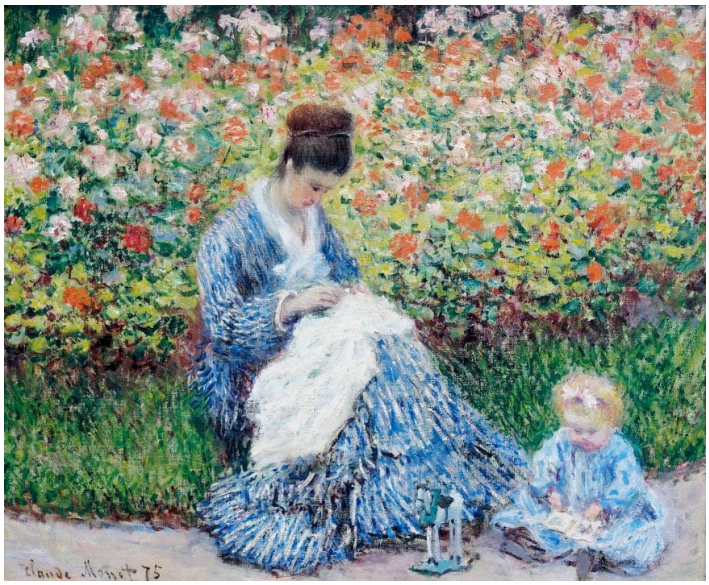


Figure 4.1.65: Claude Monet, *Camille Monet and a Child in the Artist's Garden at Argenteuil*, 1875, oil on canvas, 55.3 x 64.7 cm (**Museum of Fine Arts, Boston**)

More realistic?

The subject of Monet's 1875 painting of his wife *Camille Monet and a Child in the Artist's Garden at Argenteuil* is immediately recognizable. Both figures are clad in blue striped garments and are absorbed by an activity: Camille sews, the child gazes down at a book. A toy horse stands in the foreground, and a virtual wall of green foliage and blooming red and pink flowers rises behind them.

The viewer is given enough visual information to recognize the main components of the scene, but rather than supplying fine details that would provide more specifics, Monet emphasizes his brightly colored brushstrokes. If we want to know what kind of fabric the garments depicted are made of, what kind of flowers are blooming, or even the texture of the figures' skin, we can't find out by looking closely. Close study of the painting will only teach us more about Monet's brushwork, not more about the depicted scene.

As a result, if we evaluate the painting's truth to nature in terms of the careful representation of details, it is not very realistic. However, Impressionist paintings like this one were often described by sympathetic critics as realistic representations, and sometimes even as *more* realistic than traditional academic paintings with meticulously detailed figures and scenes. How so?

Truth to reality

Impressionism raises complex and interesting questions about realistic representation. Although we tend to have powerful reflexive judgments about what is realistic in art and what is not, the basis for such judgments is frequently unclear. Supporters of Impressionist painting subtly but substantially shifted the criteria for judging truth to reality in painting. In traditional Renaissance and Academic naturalism, truth to reality entailed the inclusion not only of what we *see*, but also prominent visible evidence of properties of *touch* and *space*: the mass of objects, their textures, and the three-dimensional terrain in which they are located. Because paintings cannot literally reproduce space, mass, and texture, they must give an illusion of those qualities—and they frequently exaggerate the visual evidence that contributes to that illusion.



Figure 4.1.66: Jacques-Louis David, *Oath of the Horatii*, 1784, oil on canvas, 3.3 x 4.25 m, painted in Rome, exhibited at the salon of 1785 (Musée du Louvre)

The more **orthogonal lines** are included in a painting, the more convincingly the ground in a painting appears to recede like a floor, rather than standing upright like a wall—hence the French Academic painter Jacques-Louis David includes a tile floor and masonry walls with many orthogonal lines in ***The Oath of the Horatii***. Effects of **chiaroscuro** in traditional naturalism are also frequently exaggerated relative to what we actually see in order to assert the tangible volume of what are actually only two-dimensional renderings. The dramatic contrast created by the starkly lit figures against the very dark shadows and background in David's painting heightens the illusion of three dimensional forms in space.

Only what we see, not what we know

The relation of figures to space in Monet's *Camille Monet and a Child in the Artist's Garden* is markedly different. There is no use of chiaroscuro to define the forms of the figures or linear perspective to define the space in which they are situated. The figures sit directly in front of the foliage, creating a very shallow space, which is further flattened by the prominent textured brushstrokes throughout the entire painting. The light source is diffused, and there is very little modeling of the figures, only a few dark areas in the clothing that distinguish the arms from the torsos.



Figure 4.1.67: Claude Monet, *Camille Monet and a Child in the Artist's Garden at Argenteuil* (detail), 1875, oil on canvas, 55.3 x 64.7 cm (Museum of Fine Arts, Boston)

The Impressionist style as exemplified here by Monet consists in rendering *only optical* data, reproducing only what we see, not what we know about space, mass, and the other physical details of the world. In 1883, the critic Jules Laforgue suggested, "The Impressionist sees and renders nature as it is—that is, wholly in terms of color vibrations. No drawing, no light, no modeling, no perspective, no chiaroscuro, none of those puerile classifications: all these become vibrations of color and must be represented on the canvas by means of color vibrations." There is some sleight-of-hand in this appeal to the greater truth of Impressionism, of course. Laforgue states that the Impressionist "renders nature *as it is* [telle qu'elle est]," but he should perhaps more accurately say that the Impressionist concentrates on rendering nature as it *appears to the eyes*. In this sense, the Impressionists both limited the project of painting to a narrower goal than that pursued by traditional naturalism, and increased its accuracy with regard to that goal.



Figure 4.1.68: Lilla Cabot Perry, *A Stream Beneath Poplars*, c. 1890-1900, oil on canvas, 65.4 x 81.3 cm (**Hunter Museum of American Art**)

Shifting patterns of color

The full import of this notion for the Impressionist approach to painting is clear in the American artist Lilla Cabot Perry's recollection of Monet's advice to her:

> **"When you go out to paint, try to forget what objects you have before you—a tree, a house, a field, or whatever. Merely think, Here is a little square of blue, here an oblong of pink, here a streak of yellow, and paint it just as it looks to you, the exact color and shape, until it gives your own naïve impression of the scene before you...." [Monet] said he wished he had been born blind and then had suddenly gained his sight so that he could have begun to paint in this way without knowing what the objects were that he saw before him.**
>
> ***Lilla Cabot Perry, "Reminiscences of Claude Monet from 1889 -1909," The American Magazine of Art, vol. 18, no. 3 (1927), p. 120.***

Monet here expresses a desire for an impossible separation of the immediate sensation of his vision from the subsequent processing of visual data by his mind. Imagine a baby's first visual experience. She does not know that the color patterns she is experiencing correspond to substantial objects out there in a tangible world; nor does she know where one object ends and another begins; nor the distinction between near or far. An infant or a blind person suddenly gaining their sight would see only a *shifting pattern of color*. Accordingly, Monet advises Perry not to think about the objects that she is painting, but to see only a pattern of color: a "square of blue," an "oblong of pink," a "streak of yellow."

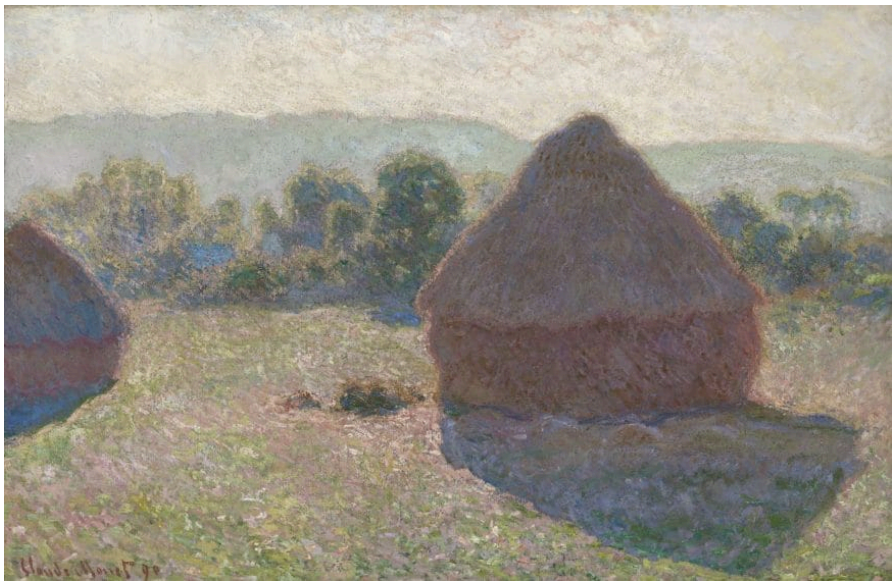


Figure 4.1.69: Claude Monet, *Haystacks, Midday*, 1890, oil on canvas, 65.6 x 100.6 cm (**National Gallery of Australia, Canberra**)

Painting light

Monet's advice to Perry also begins to account for the radical brushwork of the Impressionists, which disturbed many critics. Impressionist artists constructed their paintings in color patches in the way Monet described, as though painting the optical world as they experienced it on the surface of their retinas, rather than attempting to create an illusion of the space, mass, and textures of the tactile world. Critics also observed that the patchy brushwork of the Impressionist style simulated flickering patterns of light and color. The apparent rapidity of the brushwork indicated the rapidly shifting lighting conditions, which changed before the artist had time to smooth the surface of the work with a traditional Academic finish.



Figure 4.1.70: Claude Monet, *Poplars*, 1891, oil on canvas, 93 x 74.1 cm (**Philadelphia Museum of Art**)

Monet's series paintings of the 1880s and 1890s represent the culmination of this optical-scientific aspect of Impressionism. In these series Monet recorded the changing appearance of a single subject—haystacks in Giverny, **Rouen cathedral**, a **bank of poplars**—at different times of day, in different weather, and in different seasons. Since the quality of light changed rapidly, Monet could work on a given canvas for a limited time, taking it up again only when lighting conditions were similar. Perry reported that one particular light effect in the *Poplars* series lasted only seven minutes, until the sunlight hit a certain leaf.



Figure 4.1.71: Left: Claude Monet, *Rouen Cathedral (The Portal and the Tour d'Albane in full Sunlight)* also called *Harmony in Blue and Gold*, 1893 (dated 1894), oil on canvas, 107 x 73 cm (**Musée d'Orsay**); Right: Claude Monet, *Rouen Cathedral, Portal, Morning Sun*, 1893, oil on canvas, 92.2 x 63.0 (**Musée d'Orsay**)

Although the subject matter is identical, the radically different colors used in the approximately thirty views that Monet painted of Rouen Cathedral in 1893-94 demonstrate the changes in the appearance of the scene over the course of time. Within the nominally grayish-tan local color of the masonry, Monet finds a surprising variety of colors. The first work records a painting time around noon on a sunny day, and the dominant color is bright yellow, with flickers of blue for the shadows around the carved façade. The second records an early morning observation, with the entire façade cast in shade and rendered in blues, violets, and pinks. In both works reflected light bounces up from the ground in front of the cathedral onto the underside of the deeply-carved arches of the portals, which are rendered in bright orange—very far indeed from the local color of the stone. (For an explanation of the terms "local color'" and "perceived color," see **Impressionist color.**)

Living up to its name

For supporters of the movement, the name Impressionism is singularly apt, even though it was **originally applied as a term of derision**. "Impression" can be used as a scientific term for the stimulation of the sensory nerves, as for example the effect on the retinal nerves of light reflecting off objects. Strictly speaking, the term isolates this purely physical stimulus from any subsequent mental or emotional reaction to it. The retinal impression consists only of a pattern of colors, before the mind interprets what it is seeing and deduces information about mass, space, and texture, and before the viewer reacts emotionally. For some of its critics and practitioners, Impressionism had the aura of an objective scientific project, informed by and contributing to a wealth of contemporary discoveries in the science of light and color.

Additional resources:

"The Transformation of Landscape Painting in France" from The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

How to recognize Monet: *The Basin at Argenteuil*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.17: Claude Monet, *The Basin at Argenteuil*, c. 1872, oil on canvas, 60 x 80.5 cm (Musee d'Orsay, Paris). Speakers: Dr. Steven Zucker and Dr. Beth Harris

The town of Argenteuil lies on the banks of the Seine eleven kilometers to the northwest of Paris, a fifteen-minute train ride from the capital's Gare Saint-Lazare. With its railway line and factories, residences and river walks, it is in many ways typical of the suburban towns on the outskirts of Paris. Yet the contribution it made to the evolution of modern French painting sets it apart from neighboring villages. During the 1870s and 1880s Argenteuil became an important source of inspiration for the impressionist artists, who immortalized its river views, bridges, streets, and gardens in their groundbreaking paintings.

(from The National Gallery of Art)

Additional resources:

Claude Monet on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Paul Hayes Tucker, *Monet at Argenteuil* (Yale University Press, 1984)

Smarthistory images for teaching and learning:





Figure 4.1.72: More Smarthistory images...

Claude Monet, *The Argenteuil Bridge*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.18: Claude Monet, *The Argenteuil Bridge,* 1874, oil on canvas, 60.5 x 80 cm (Musée d'Orsay, Paris)

Please note that there is significant background chatter in this video. The Musée d'Orsay is happily a very busy museum and this painting is hung in a relatively small room.

Smarthistory images for teaching and learning:

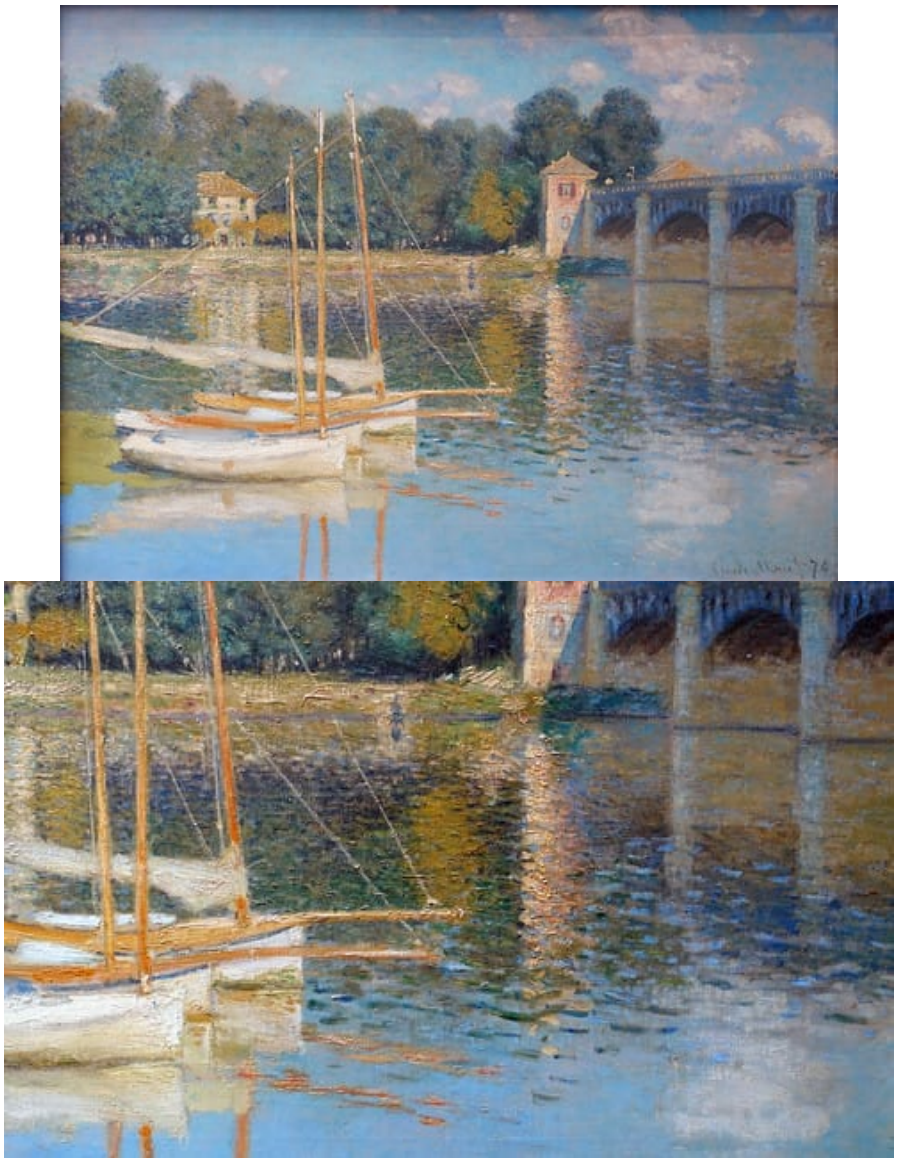


Figure 4.1.73: More Smarthistory images...

Monet, *The Gare Saint-Lazare*

by DR. TYLER E. OSTERGAARD

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.19: Speakers: Dr. Steven Zucker and Dr. Beth Harris



Figure 4.1.74: Claude Monet, *The Gare Saint-Lazare* (or *Interior View of the Gare Saint-Lazare, the Auteuil Line*), 1877, oil on canvas, 75 x 104 cm (Musée d'Orsay)

Monet's painting, *The Gare Saint-Lazare,* overwhelms the viewer not though its scale (a modest 29 ½ by 41 inches), but through the deep sea of steam and smoke that envelops the canvas. Indeed, as one contemporary reviewer remarked somewhat sarcastically, "Unfortunately thick smoke escaping from the canvas prevented our seeing the six paintings dedicated to this study."[1]

The Gare Saint-Lazare (also known as *Interior View of the Gare Saint-Lazare, the Auteuil Line*), depicts one of the passenger platforms of the Gare Saint-Lazare, one of Paris's largest and busiest train terminals. The painting is not so much a single view of a train platform, it is rather a component in larger project of a dozen canvases which attempts to portray all facets of the Gare Saint-Lazare. The paintings all have similar themes—including the play of light filtered through the smoke of the train shed, the billowing clouds of steam, and the locomotives that dominate the site. Of these twelve linked paintings, Monet exhibited between six and eight of them at the third Impressionist exhibition of 1877, where they were among the most discussed paintings exhibited by any of the artists.



Figure 4.1.75: Claude Monet, *The Gare Saint-Lazare: Arrival of a Train*, 1877, oil on canvas, 83 x 101.3 cm (Harvard Art Museums)

Light and steam

Light—the dominant formal element in so many Impressionist paintings—is given particularly close attention in *The Gare Saint-Lazare, the Auteuil Line*. Here, as in many of the Impressionists' most celebrated paintings, Monet shows a bright day and labors to reproduce the closely observed effects of pure sunlight. The billowing clouds of steam add to the effect, creating layers of light that fill the canvas. Here however, we must pause as *The Gare Saint-Lazare, the Auteuil Line* is an exception within the full group—it is one of only two paintings of the train station shown on a bright bright, sunny, day. In contrast, the other ten paintings (for example the one at the Harvard Art Museums, above) show dark, hazy views of the Gare Saint-Lazare. Though an exception and anomaly in terms of its interest in sunlight, *The Gare Saint-Lazare, the Auteuil Line* shares a great deal in common with the other paintings at least in terms of subject and view.



Figure 4.1.76: Apartment buildings in the distance (detail), Claude Monet, *The Gare Saint-Lazare* (or *Interior View of the Gare Saint-Lazare, the Auteuil Line*), 1877, oil on canvas, 75 x 104 cm (Musée d'Orsay)

Monet's achievement is extraordinary, and *The Gare Saint-Lazare, the Auteuil Line* has rightfully been singled out as among the most impressive paintings of Impressionism. Monet renders the steam with a range of blues, pinks, violets, tans, grays, whites, blacks, and yellows. He depicts not just the steam and light—which fill the canvas—but also their effect on the site—the large distant apartments, the Pont de l'Europe (a bridge that overlooked the train station), and the many locomotives—all of which peak through, and dematerialize into a thick industrial haze.

Train and shed as subject

Against the bright background, Monet represents the station's vast iron roof in copper and tan tones that stand out against *The Gare Saint-Lazare, the Auteuil Line*'s low key palette, with its swirling blue, gray and purple background. The trains—here represented by no less than three locomotives and a large box car—are shown as both the source of the steam and distinct from it. However, in 1877, a number of critics were worried the smoke would completely engulf them. Gorges Maillard, writing in the conservative journal *Le Pays*, made just this point, describing the paintings as "the rails, lanterns, switchers, wagons, above all, always these flakes, these mists, clouds of white steam, are so thick they sometimes hide everything else."[2]



Figure 4.1.77: Locomotives and tracks (detail), Claude Monet, *The Gare Saint-Lazare* (or *Interior View of the Gare Saint-Lazare, the Auteuil Line*), 1877, oil on canvas, 75 x 104 cm (Musée d'Orsay)

The Gare Saint-Lazare, the Auteuil Line and the other paintings of the Gare Saint-Lazare by Monet are hardly an isolated moment in the artist's oeuvre. In the 1870s Monet—along with most of the other major Impressionists including, Caillebotte, Pissarro, Renoir, Degas, Guillaumin, Raffaëlli, and even Manet—had shown a steady interest in the railroad as a subject within their paintings of modern of life. In fact, the six to eight paintings Monet exhibited at the Third Impressionist Exhibition were shown along with Caillebotte's monumental *Le Pont de l'Europe* (below) that likewise shows the train yards of the Gare Saint-Lazare. Caillebotte's painting though shows the site from the great iron bridge that crossed over the yards—the Pont de l'Europe. Interestingly, Caillebotte's painting of genteel strollers set in the bourgeois world of Paris's grand boulevards drew praise, while Monet's paintings of trains, steam and industrial activity were severely criticized.



Figure 4.1.78: Gustave Caillebotte, *Le pont de l'Europe*, c. 1876, oil on canvas (Musée du Petit Palais, Geneva)

Perhaps the criticism is due to the fact that Monet shows the locomotives as the main subject, rather than as background elements. He shows them unapologetically, in their natural element, among the steam, workers and activity of the bustling train station. Four paintings in the set of twelve, including *The Gare Saint-Lazare, the Auteuil Line,* show the large and distinctive cast iron spans that covered the platforms. However, the other paintings show the exterior, the yards, workers, tunnels, switches, sheds, and engines of the station. Indeed, even in *The Gare Saint-Lazare, the Auteuil Line* and the other so-called interiors of the of the train shed, Monet includes workers, steam, and industrial machines. In fact, what he does not show is the grand hotel, lavish entrance or sculpture of the station's impressive façade. Even in the interiors, the paintings are very much the business end of

the station.

A series?

These common subjects—train, steam, and industrial activity—raise the question of whether the works should be regarded as series. Though scholars have frequently discussed the works, and particularly the four interiors, as part of series, only two of the works show a repeated (or serial) view. When taken as a whole the group does not seem to be the manifestation of an interest in serial painting or an exploration of subtle changes only evident in repeated views (as Monet will later do with his series of grain stacks) bur rather as an effort to capture the varied aspects of the station by rendering its many faces in paint.

In *The Gare Saint-Lazare, the Auteuil Line* Monet shows his keen interest in light, color, and paint handling, yet *The Gare Saint-Lazare, the Auteuil Line* cannot be divorced from its subject—the locomotives, the steam, and the yard of the Gare Saint-Lazare. In this bright scene Monet gives us a new vision of modern life that does not shy away from its industrial side.

[1] Descubes, A. “L’Exposition des impressionnistes” *Gazette des lettres, des sciences et des arts,* vol. 1, no. 12 (20 April 1877), pp. 185-188.

[2] Maillard, “Chronique: Les Impressionnistes” *Le Pays* (April 9, 1877), pp. 2-3.

Additional resources:

This painting at the Musée d’Orsay

Monet, *Gare St. Lazare* at the Harvard Art Museums

Monet, *Gare St. Lazare* at the Art Institute of Chicago

Monet, *Gare St. Lazare* at The National Gallery

Smarthistory images for teaching and learning:



Figure 4.1.79

Claude Monet, *Cliff Walk at Pourville*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.20: Claude Monet, *Cliff Walk at Pourville*, 1882, oil on canvas, 26-1/8 x 32-7/16 inches (66.5 x 82.3 cm) (Art Institute of Chicago)

Smarthistory images for teaching and learning:





Figure 4.1.80: More Smarthistory images...

Claude Monet, *Poplars*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.21: Claude Monet, *Poplars,* 1891, oil on canvas, 36-5/8 x 29-3/16″ / 93 x 74.1 cm (Philadelphia Museum of Art)

Smarthistory images for teaching and learning:





Figure 4.1.81: More Smarthistory images...

Claude Monet, *Rouen Cathedral* Series

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.1.22: Claude Monet, *Rouen Cathedral (The Portal, Grey Weather),* 1894, oil on canvas, 100 x 65 cm; *Rouen Cathedral (The Portal and the Tour d'Albane, Morning Effect)*, 1894, oil on canvas, 106 x 73 cm; *Rouen Cathedral (The Portal, Harmony in Blue)*, 1894, oil on canvas, 91 x 63 cm ; *Rouen Cathedral (The Portal and the Tour d'Albane in the Sunlight)*, 1894, oil on canvas, 107 x 73 cm (Musée D'Orsay, Paris)

Claude Monet painted more than 30 canvases depicting Rouen cathedral between 1892 and 1894. This video discusses four paintings in the collection of the Musée d'Orsay in Paris.

Smarthistory images for teaching and learning:

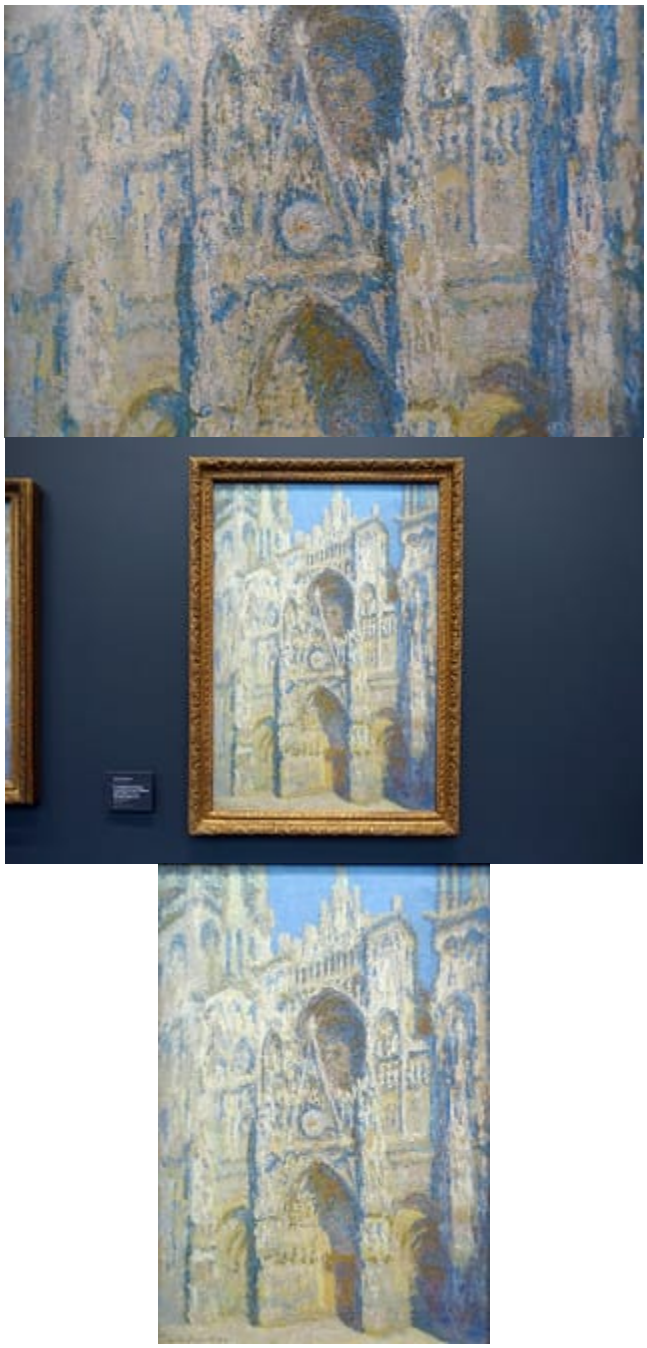


Figure 4.1.82: More Smarthistory images...

Claude Monet, *Les Nymphéas (The Water Lilies)*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Clouds, oil on three canvas panels, 200 x 1275 cm, c. 1918-26 *Green Highlights*, oil on two canvas panels, 200 x 850 cm, c. 1918-26 *Sunset,* oil on canvas, 200 x 600 cm, c. 1918-26 Room 2: *Reflection of Trees*, oil on two canvas panels, 200 x 850 cm, c. 1918-26 *The Morning Light*, *the Willows*, oil on three canvas panels, 200 x 1275 cm, c. 1918-26 *The Morning Willows*, oil on three canvas panels, 200 x 1275 cm, c. 1918-26 *The Two Willows*, oil on four canvas panels, 200 x 1700 cm, c. 1918-26

Smarthistory images for teaching and learning:

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Figure 4.1.83: More Smarthistory images...

This page titled 4.1: Impressionism is shared under a Public Domain license and was authored, remixed, and/or curated by Lisa Cianci.

- 8.7: Impressionism by Smarthistory is licensed CC BY-NC-SA 4.0.

4.2: Post-Impressionism

Post-Impressionism

Cézanne, Seurat, Van Gogh, and Gauguin are all Post-Impressionists, though their styles vary widely.

c. 1880 - 1900

A beginner's guide

Introduction to Neo-Impressionism, Part I

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.2.1: Georges Seurat, *A Sunday on La Grande Jatte*, 1884-86, oil on canvas, 207.5 x 308.1 cm (Art Institute of Chicago)

Just a dozen years after the debut of Impressionism, the art critic Félix Fénéon christened Georges Seurat as the leader of a new group of "Neo-Impressionists." He did not mean to suggest the revival of a defunct style — Impressionism was still going strong in the mid-1880s — but rather a significant modification of Impressionist techniques that demanded a new label.

Fénéon identified greater scientific rigor as the key difference between Neo-Impressionism and its predecessor. Where the Impressionists were "arbitrary" in their techniques, the Neo-Impressionists had developed a "conscious and scientific" method through a careful study of contemporary color theorists such as Michel Chevreul and Ogden Rood. [1]

A scientific method



Figure 4.2.2: Pierre-Auguste Renoir, *Bal du Moulin de la Galette*, 1876, oil on canvas, 131 x 175 cm (Musée d'Orsay)

This greater scientific rigor is immediately visible if we compare Seurat's Neo-Impressionist ***Grande Jatte*** with Renoir's Impressionist ***Moulin de la Galette***. The subject matter is similar: an outdoor scene of people at leisure, lounging in a park by a river or dancing and drinking on a café terrace. The overall goal is similar as well. Both artists are trying to capture the effect of dappled light on a sunny afternoon. However, Renoir's scene appears to have been composed and painted spontaneously, with the figures captured in mid-gesture. Renoir's loose, painterly technique reinforces this effect, giving the impression that the scene was painted quickly, before the light changed.

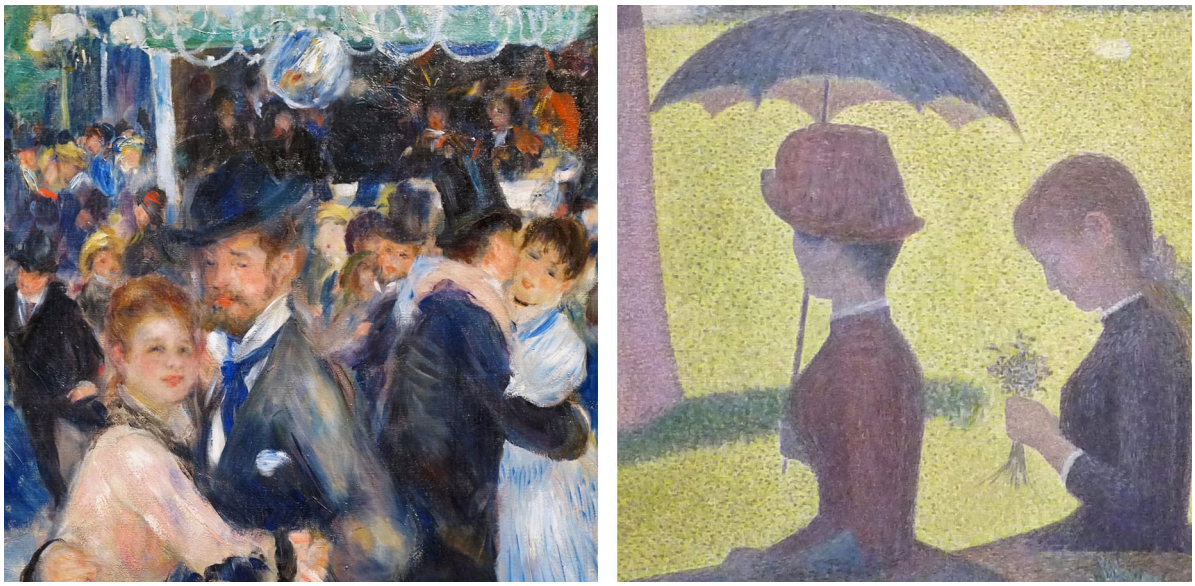


Figure 4.2.3: Left: Pierre-Auguste Renoir, *Bal du Moulin de la Galette*, detail, 1876, oil on canvas, 131 x 175 cm (Musée d'Orsay); Right: Georges Seurat, *A Sunday on La Grande Jatte*, detail, 1884-86, oil on canvas, 207.5 x 308.1 cm (Art Institute of Chicago)

By contrast, the figures in La Grande Jatte are preternaturally still, and the brushwork has also been systematized into a painstaking mosaic of tiny dots and dashes, unlike Renoir's haphazard strokes and smears. Neo-Impressionist painters employed rules and a method, unlike the Impressionists, who tended to rely on "instinct and the inspiration of the moment." [2]

Pointillism and optical mixture



Figure 4.2.4: The color wheel

One of these rules was to use only the “pure” colors of the spectrum: violet, blue, green, yellow, orange, and red. These colors could be mixed only with white or with a color adjacent on the color wheel (called “analogous colors”), for example to make lighter, yellower greens or darker, redder violets. Above all, the Neo-Impressionists would not mix colors opposite on the color wheel (“complementary colors”), because doing so results in muddy browns and dull grays.

More subtle color variations were produced by “optical mixture” rather than mixing paint on the palette. For example, examine the grass in the sun. Seurat intersperses the overall field of yellow greens with flecks of warm cream, olive greens, and yellow ochre (actually discolored chrome yellow). Viewed from a distance these flecks blend together to help lighten and warm the green, as we would expect when grass is struck by the yellow-orange light of the afternoon sun. It was this technique of painting in tiny dots (“points” in French) that gave Neo-Impressionism the popular nickname”Pointillism” although the artists generally avoided that term since it suggested a stylistic gimmick.



Figure 4.2.5: Georges Seurat, *A Sunday on La Grande Jatte*, detail, 1884-86, oil on canvas, 207.5 x 308.1 cm (Art Institute of Chicago)

For the grass in the shadows, Seurat uses darker greens intermixed with flecks of pure blue and even some orange and maroon. These are very unexpected colors for grass, but when we stand back the colors blend optically, resulting in a cooler, darker, and duller green in the shadows. This green is, however, more vibrant than if Seurat had mixed those colors on the palette and applied

them in a uniform swath.

Similarly, look at the number of colors that make up the little girl's legs! They include not only the expected pinks and oranges of Caucasian flesh, but also creams, blues, maroons, and even greens. Stand back again, though, and "optical mixture" blends them into a convincing and luminous flesh color, modeled in warm light and shaded by her white dress. (For more technical information on this topic, see **Neo-Impressionist color theory**).

Compositional rigor



Figure 4.2.6: Georges Seurat, Study for *A Sunday on La Grande Jatte*, 1884, oil on canvas, 70.5 x 104.1 cm (The Metropolitan Museum of Art)

The Neo-Impressionists also applied scientific rigor to composition and design. Seurat's friend and fellow painter Paul Signac asserted,

> **The Neo-Impressionist ... will not begin a canvas before he has determined the layout ... Guided by tradition and science, he will ... adopt the lines (directions and angles), the chiaroscuro (tones), [and] the colors (tints) to the expression he wishes to make dominant.*Paul Signac, Delacroix to Neo-Impressionism, in Nochlin, ed., p. 121.***

Numerous studies for *La Grande Jatte* testify to how carefully Seurat decided on each figure's pose and arranged them to create a rhythmic recession into the background. This practice is very different from the Impressionists, who emphasized momentary views (impressions) by creating intentionally haphazard-seeming compositions, such as Renoir's *Moulin de la Galette*.



Figure 4.2.7: Georges Seurat, *Parade de cirque*, 1887-88, oil on canvas, 99.7 x 149.9 cm (The Metropolitan Museum of Art)

Seurat's *Parade de cirque* is even more rigorously geometrical. It is dominated by horizontal and vertical lines, and the just slightly off-rhythmic spacing of the figures and architectural structure creates a syncopated grid. Scholars have debated whether the composition is based on the Golden Section, a geometric ratio that was identified by ancient Greek mathematicians as being inherently harmonious.

Systematized expression

The Neo-Impressionists also attempted to systematize the emotional qualities conveyed by their paintings. Seurat defined three main expressive tools at the painter's disposal: color (the hues of the spectrum, from warm to cool), tone (the value of those colors, from light to dark), and line (horizontal, vertical, ascending, or descending). Each has a specific emotional effect:

> **Gaiety of tone is given by the dominance of light; of color, by the dominance of warmth; of line, by lines above the horizontal. Calmness of tone is given by an equivalence of light and dark; of color by an equivalence of warm and cold; and of line, by horizontals. Sadness of tone is given by the dominance of dark; of color, by the dominance of cold colors; and of line, by downward directions.**
>
> ***Georges Seurat, Letter to Maurice Beaubourg, August 28, 1890, in Nochlin, ed., p. 114 (translation modified for clarity).***

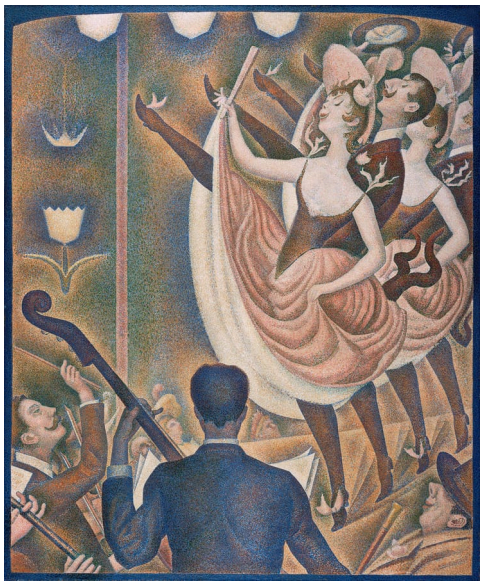


Figure 4.2.8: Georges Seurat, *Le Chahut*, 1889-90, oil on canvas, 170 x 141 cm (Kröller-Müller Museum)

Seurat's *Chahut* (Can-Can) seems designed to exemplify these rules, employing mostly warm, light colors and ascending lines to convey a mood of gaiety appropriate to the dance.

The Neo-Impressionist style had a relatively brief heyday; very few artists carried on the project into the 20th century. However, a great many artists experimented with it and took portions of its method into their own practice, from van Gogh to Henri Matisse. More broadly, the Neo-Impressionist desire to conform art-making to universal laws of perception, color, and expression echoes throughout Modernism, in movements as diverse as Symbolism, **Purism**, **De Stijl**, and the **Bauhaus**.

So far we have concentrated on the style of Neo-Impressionism. In **Part 2**, we will examine the subject matter favored by the artists, and discuss its relation to the social and political context of the late-nineteenth century.

Notes:

1. Félix Fénéon, "Les Impressionnistes en 1886," as translated in Linda Nochlin, ed., *Impressionism and Post-Impressionism, 1874-1904: Sources and Documents* (Englewood Cliffs, N.J.: Prentice-Hall, 1966), p. 108.
2. Paul Signac, *From Eugène Delacroix to Neo-Impressionism* (1899), as translated in Nochlin, ed., p. 122.

Introduction to Neo-Impressionism, Part II

by DR. CHARLES CRAMER and DR. KIM GRANT

In **Part 1** of this introduction to Neo-Impressionism we examine the style of the movement, concentrating on the artists' attempt to systematize a method for painting according to scientific laws of perception, color, composition, and expression. Here, we will turn to the kind of subject matter typically chosen by the Neo-Impressionists and discuss its relation to late-nineteenth century social and political history.

Scenes of leisure



Figure 4.2.9: Georges Seurat, *The Circus*, 1890-91, oil on canvas, 186 x 152 cm (Musée d'Orsay)

For the most part, the Neo-Impressionists continued to depict the kinds of subjects preferred by the Impressionists: landscapes and leisure scenes. In addition to his famous painting of people lounging in the park on the island of La Grande Jatte, many of Georges Seurat's paintings portrayed entertainments such as the circuses and music halls that contributed to Paris's reputation for mass spectacles in the late nineteenth century.

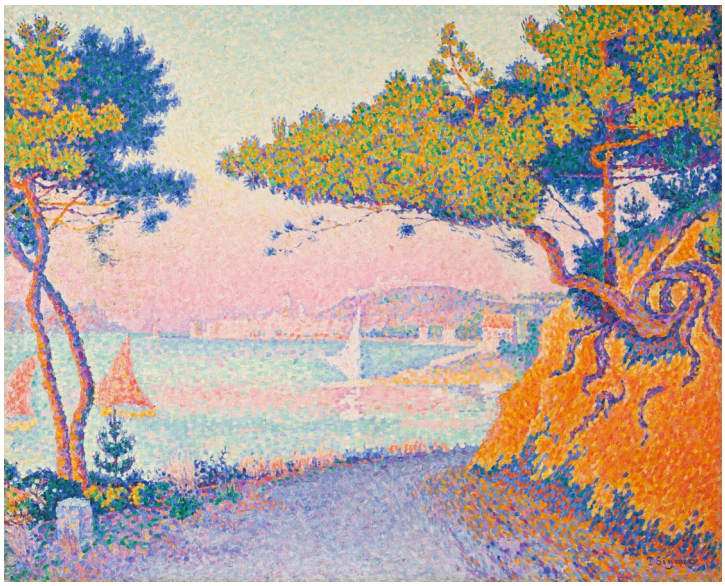


Figure 4.2.10: Paul Signac, *Golfe Juan*, 1896, oil on canvas, 65.4 x 81.3 cm (Worcester Art Museum)

Paul Signac's landscape paintings similarly reveal a concentration on leisure scenes. A sailor himself, Signac painted dozens of harbor scenes dominated by the sails and masts of small pleasure craft. The Mediterranean coast of France, where Signac spent his summers, had a reputation both for the quality of its light — a **key interest** of the Neo-Impressionists generally — and for a laid-back, sun-filled lifestyle. In Signac's canvases, the bright colors favored by the Neo-Impressionists perfectly complement this reputation.

Social inequality

Although these subjects suggest carefree pleasure, there are undertones of social criticism in some Neo-Impressionist paintings. Seurat's *Circus* shows the strict class distinctions in Paris both by location, with the wealthier patrons seated in the lower tiers,

and by dress and posture, which gets markedly more casual the further the spectators are from ringside.



Figure 4.2.11: Georges Seurat, *A Sunday on La Grande Jatte*, 1884-86, oil on canvas, 207.5 x 308.1 cm (Art Institute of Chicago)

One contemporary critic also remarked that the rigidity of the poses in Seurat's *La Grande Jatte* reminded him of "the stiffness of Parisian leisure, prim and exhausted, where even recreation is a matter of striking poses." [1] As we examine the characters in *La Grande Jatte* in detail, there are some surprising inclusions and juxtapositions. In the left foreground, a working-class man in shirtsleeves overlaps a much more formally-dressed middle-class gentleman in a top hat holding a cane. A trumpet player in the middle-ground plays directly into the ears of two soldiers standing at attention in the background. A woman with an ostentatiously eccentric pet monkey on the right and another fishing on the left have been interpreted as prostitutes, one of whom is casting out lures for clients. Between them, a toy lap-dog with a pink ribbon leaps toward a rangy hound whose coat is as black as that of the bourgeois gentleman with the cane.

Despite these provocative juxtapositions and overlaps, very few of the figures actually seem to be interacting with each other; each is lost in their own world. Unlike the mood of convivial good-fellowship between the classes and sexes in Auguste Renoir's ***Moulin de la Galette***, Seurat's *Grande Jatte* sets up a dynamic of alienation and tension.



Figure 4.2.12: Georges Seurat, *Bathers at Asnières*, 1884, oil on canvas, 201 x 300 cm (National Gallery of Art, London) (photo: **Steven Zucker**, CC BY-NC-SA 2.0)

La Grande Jatte forms an implicit pair with an earlier painting of the same size by Seurat, *Bathers at Asnières*. Asnières was an

industrial suburb of Paris, just across the river Seine from La Grande Jatte. Unlike that island's largely middle-class patrons in their top hats and bustle skirts, here we see more working-class and lower-middle-class figures in shirtsleeves and straw hats or bowlers. In the background the smokestacks of the factories at Clichy serve as a reminder of labor, even during the men's leisure time.

As in the painting of La Grande Jatte, all of the figures are isolated in their own world, but a sense of implicit tension is raised by their insistent gaze across the river at their wealthier compatriots. A middle-class couple being rowed by a hired oarsman in a boat with a prominent French flag further adds to the class tensions raised by the work.

Political revolutionaries?

Perhaps it was this odd sense of unresolved class tensions that caused Signac to suggest that even Seurat's paintings of "the pleasures of decadence" are about exposing "the degradation of our era" and bearing witness to "the great social struggle that is now taking place between workers and capital." [2] Seurat's own politics were unclear, but Signac was a social anarchist, as were several other Neo-Impressionists, including Camille Pissarro and his son Lucien, as well as Maximilian Luce, Theodore van Rysselberghe, Henri Cross, and the critic Felix Fénéon. Social anarchists reject a strong centralized government in which the state owns the means of production and guides the economy; they believe that social ownership and cooperation will emerge naturally in a stateless society.



Figure 4.2.13: Paul Signac, *In the Time of Harmony*, 1893-95, oil on canvas, 297 x 396 cm (Hôtel de Ville, Montreuil, France)

Signac's *In the Time of Harmony* was originally titled *In the Time of Anarchy*, but political controversy forced a change. Between 1892 and 1894 there were eleven bombings in France by anarchists, and a very public trial of suspected anarchists that included Fénéon and Luce.

Signac's painting was intended to show that, despite its current revolutionary tactics, the aim of anarchism was a peaceful utopia. In the foreground, workers lay down their tools for a picnic of figs and champagne while others play at boules. A couple in the center contemplates a posy, while behind them a man sows and women hang laundry. Although the mood is timeless — with different clothing, this painting could be a Classical pastoral scene — in the distance modern mechanical farm equipment reinforces the painting's subtitle, "The Golden Age is Not in the Past, it is in the Future."

Relatively few Neo-Impressionist paintings are so overtly allegorical and political. Signac argued that it was the Neo-Impressionists' technique, not any directly socialist or anarchist subject matter, that was most in tune with the political revolutionaries. The Neo-Impressionists' rigorous appeal to hard science, rather than dead conventions, along with their uncompromising will to "paint what they see, as they feel it," will help "give a hard blow of the pick-axe to the old social structure" and promote a corresponding social revolution. [3]

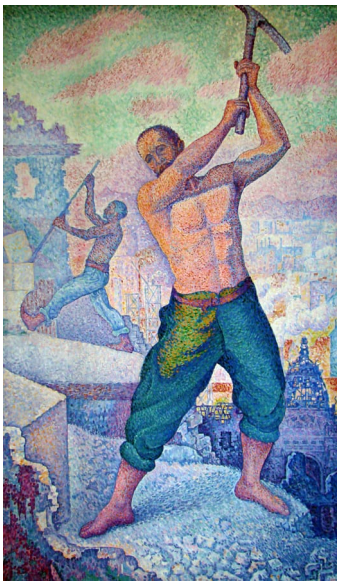


Figure 4.2.14: Paul Signac, *The Demolition Worker*, 1887-89, oil on canvas, 250 x 152 cm (Musée d'Orsay)

Notes:

1. Henri Fèvre, "L'Exposition des Impressionnistes," in *Étude sur le Salon de 1886 et sur l'exposition des impressionnistes* (Paris, 1886), p. 43 (our translation).
2. Paul Signac, "Impressionists and Revolutionaries," *La Révolte*, June 13-19, 1891, as translated in Nochlin, ed., p. 124.
3. ibid., p. 124.

Neo-Impressionist Color Theory

by DR. CHARLES CRAMER and DR. KIM GRANT

In 1899, the artist Paul Signac rejected the "Pointillist" label and asserted, "The Neo-Impressionist does not *dot*, he *divides*." He laid out a four-part argument outlining how division achieves the goals of "luminosity" and "harmony" by means of:

1. The optical mixture of solely pure pigments (all the tints of the prism and all their tones);
2. The separation of the different elements (local color, color of the lighting, their interactions, etc.);
3. The equilibration of these elements and their proportions (according to the laws of contrast, of gradation, and of irradiation);
4. The choice of a brushstroke commensurate with the dimensions of the painting. [1]

Signac's argument is dense with the technical vocabulary of late-nineteenth century color theory. The Neo-Impressionists prided themselves on bringing scientific rigor to the hitherto largely intuitive Impressionist project. By understanding the contemporary meanings of Signac's terms, we can trace how scientific color theory affected Neo-Impressionist practice.

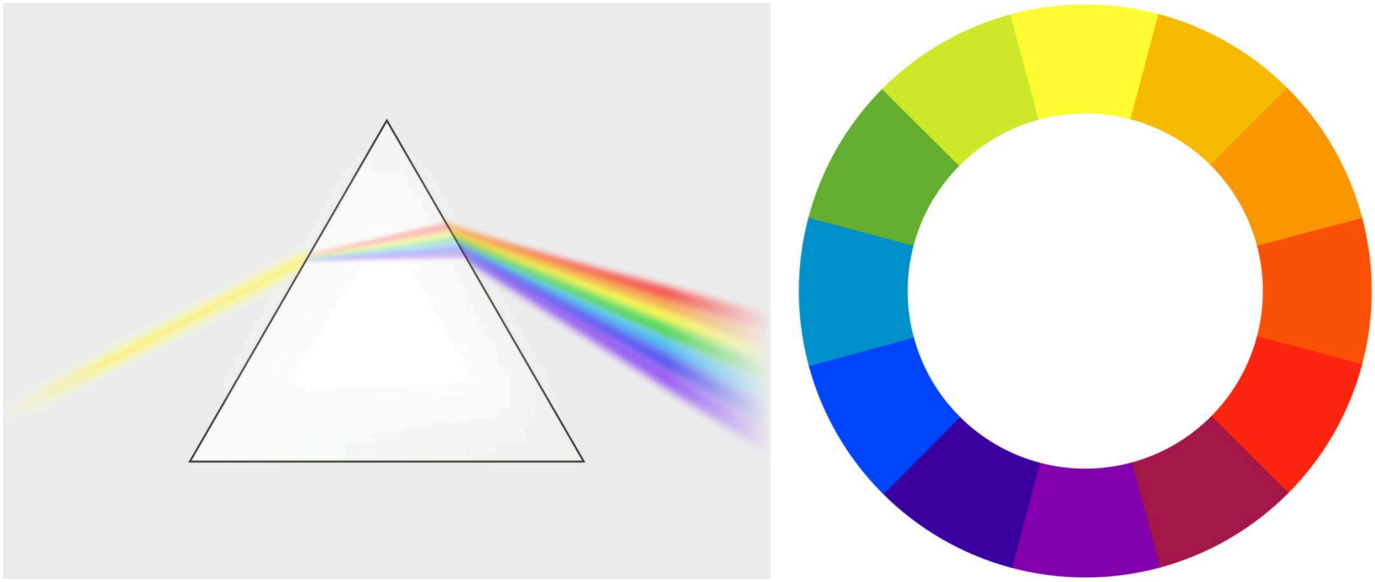


Figure 4.2.15: Left: a prism breaking visible light into the color spectrum; right: the color wheel

The Neo-Impressionist uses “solely pure pigments,” which Signac specifies as the colors of the “prism.” This wording already suggests a scientific basis for Neo-Impressionist color usage. In the seventeenth century the English physicist Sir Isaac Newton used a glass prism to separate white light into a rainbow. In painters’ terms, the colors of the prism correspond to the primary colors red, yellow, and blue, the secondary colors orange, green, and violet, and the tertiary colors blue-violet, blue-green, yellow-green, etc.

The Neo-Impressionists would mix these hues or “tints” only with white to produce different values or “tones” (all the gradations of blue from light to dark, for example). Above all, they avoided the muddy earth colors that dominated European painters’ palettes before the late-nineteenth century.

In their quest for pure, bright colors, the Neo-Impressionists were aided by new pigments created through chemical synthesis, as opposed to the ground-up minerals or organic matter of traditional pigments. Analysis has shown that Seurat’s palette of 1889-90 consisted of many colors that were not available before the 19th century, including chrome yellow (invented 1797), cobalt blue (1803-04), cadmium orange (1820s), french ultramarine (1826), and manganese violet (1860s).



Figure 4.2.16: Samples of Lefranc & Company’s oil paints from 1891, painted onto a printed diagram

Brushstroke and optical mixture

The nickname “Pointillism” was given to the movement because of the artists’ tendency to paint in small dots (*point*s in French). Signac objected to the term because it suggests a stylistic gimmick, but executing paintings in small, discrete brushstrokes was crucial to another key concept of the movement that he mentions above: optical mixture.

As any painter quickly realizes, whenever you blend two pigments, the resulting mixture is duller than either of the original pigments. This dulling effect is magnified the farther apart the colors are on the color wheel. Mixing blue and green results in a fairly bright blue-green, but mixing blue and orange creates dull grays and muddy browns.



Figure 4.2.17: Mixing complementary colors (image: **Munsell Color Blog**)

Rather than mixing colors on the palette, the Neo-Impressionists would juxtapose them on the canvas in small dots. Seen from a suitable distance, these dots mix in the eye, and achieve the intended effects without losing the chromatic intensity of the original pigments.

For example, the flesh of the women in Seurat’s *The Models* is made up of thousands of tiny dots of colors ranging from the expected light yellows, peaches, and pinks, to surprising blues, violets, and greens. Viewed from a sufficient distance, these colors blend in the eye to create a convincing and very luminous representation of the play of light and shadow across the models’ bodies.



Figure 4.2.18: Georges Seurat, *Models (Poseuses)*, 1886-88, oil on canvas, 200 x 250 cm (Barnes Foundation)

The dots of color must be quite small in order for optical mixture to occur, although as Signac notes, their size could vary relative to the size of the painting. A mural meant to be read from a distance of several meters could use larger dots than a small landscape meant to be viewed up close.

Local color vs. perceived color

Signac's preferred term "division" refers to the way the artist isolates all the component influences that contribute to a given perceived color. In the excerpt above, he lists the two main components: local color and the color of the light, along with "their interactions, etc." Local color is what we think of as the actual color of the object itself: a *yellow* bus, a *red* apple, a *white* shirt. But simply painting an object in its local color ignores the effects of light on the object.



Figure 4.2.19: Camille Corot, *The Bridge at Narni*, 1826, oil on paper mounted on canvas, 34 x 48 cm (Musée du Louvre)

One of the effects of light is of course chiaroscuro: parts of the object struck by light are lighter than the parts in shadow. Camille Corot's *Bridge at Narni* is a good example of a traditional landscape painted in local color and chiaroscuro. The bulk of the painting is in three basic colors: the green of the grass, the reddish tan of the dirt and bridge (and muddy water), and the blue of the sky and distant mountains. Corot has mixed darker and lighter values of each of these colors to show how the scene is affected by light coming from the sun in the upper right.

What Corot doesn't emphasize, however, is what is called the color temperature of the light itself. A white shirt seen in a warm light will appear to be yellowish-orange, while viewed under cool light it will be tinted blue-violet.



Figure 4.2.20: Left: Paul Signac, *Morning Calm, Concarneau, Opus 219 (Larghetto)*, 1891, oil on canvas, 65.7 x 81.6 cm (private collection); right: Paul Signac, *Evening Calm, Concarneau, Opus 220 (Allegro Maestoso)*, 1891, oil on canvas, 64.9 x 81.3 cm (The Metropolitan Museum of Art)

The color temperature of outdoor light is affected by the time of day, the season, and the weather. In these two paintings executed in the French coastal town of Concarneau, Signac pays close attention not just to the local colors of the objects, but also to their perceived colors — the colors that we actually see as they are affected by the temperature of the light. A palette based on orange and light blue depicts the bright, clear qualities of morning light, while a pinkish-yellow atmosphere with heavy, violet shadows conveys the effect of twilight.

Divisionism

The perceived color of any given object is the result of multiple factors, including the local color of the object, the color temperature of the light striking that object, possible reflected color from nearby objects, atmospheric perspective (which makes distant objects appear more blue-gray) and, as we shall see, the effect of "simultaneous contrast" with adjacent colors. Instead of blending all of these factors together, divisionism keeps them separate. The foreground grass in Signac's *Evening Calm* includes dots of yellow and orange — the color of the light— to show how the greens are warmed by the light of the evening sun.

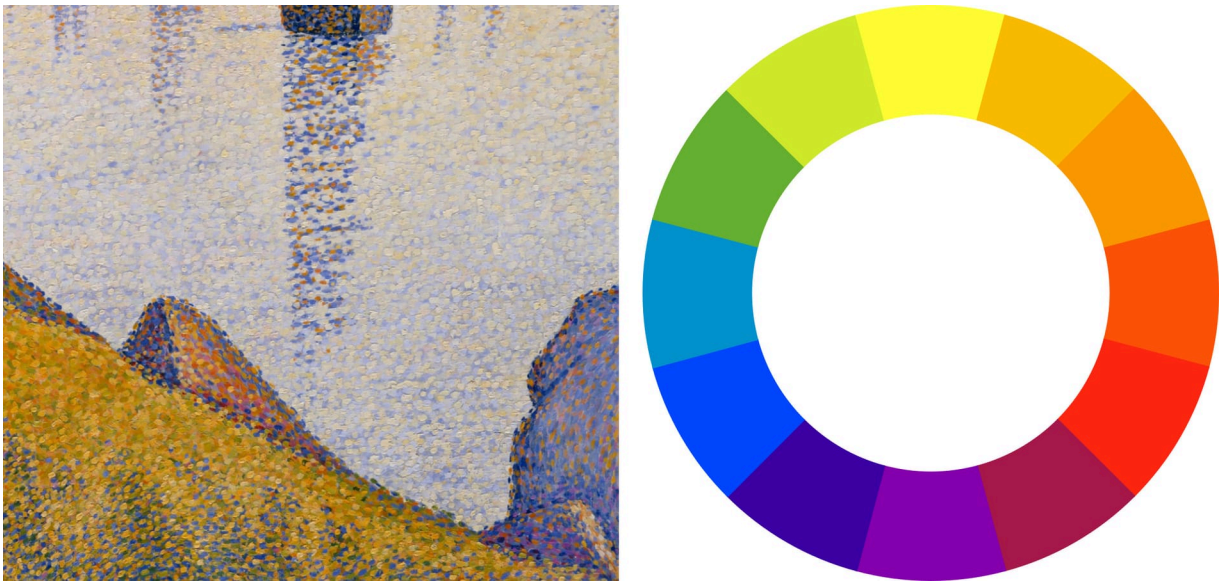


Figure 4.2.21: Left: Paul Signac, *Evening Calm, Concarneau, Opus 220 (Allegro Maestoso)*, detail, 1891, oil on canvas, 64.9 x 81.3 cm (The Metropolitan Museum of Art); Right: The color wheel

In the shadowed portions of the grass, Signac intersperses the greens with dots of cerulean and ultramarine blue. This is because shadow colors are the "complement" of the color of the light. Complementary colors are colors opposite one another on the color wheel, so the yellow-orange evening light produces violet-blue shadows.

This effect is even more strongly marked in the triangular rock jutting up from the center foreground, the lit side of which is shown glowing in the sunset through dots of orange, yellow, and rose. The shadowed side is dotted with mostly dark ultramarine blue, the complement of orange, although some interspersed oranges and even crimsons show the warm reflected light received from the grass. Rather than blending these complementary colors together, which would produce a dull muddy gray, Signac keeps them separate or divided, maintaining an overall intensity of color. Despite the improbable component colors, viewed from a proper distance, optical mixture produces a very convincing overall illusion of a rock bathed in warm evening light.

The law of contrast

Signac also mentions the artist's need to take into account "the laws of contrast, of gradation, and of irradiation." These "laws" refer to principles of color interaction discovered by nineteenth-century theorists such as Michel Chevreul, Ogden Rood, and Charles Henry, which seemed to promise that the entirety of art could be subsumed to rigorous scientific principles.

Chevreul's most famous contribution to color theory is the "law of simultaneous contrast," which takes account of how our perception of color changes relative to adjacent colors. Look at how different the same color swatch of blue appears against a field of bright green versus a field of dull orange, for example.

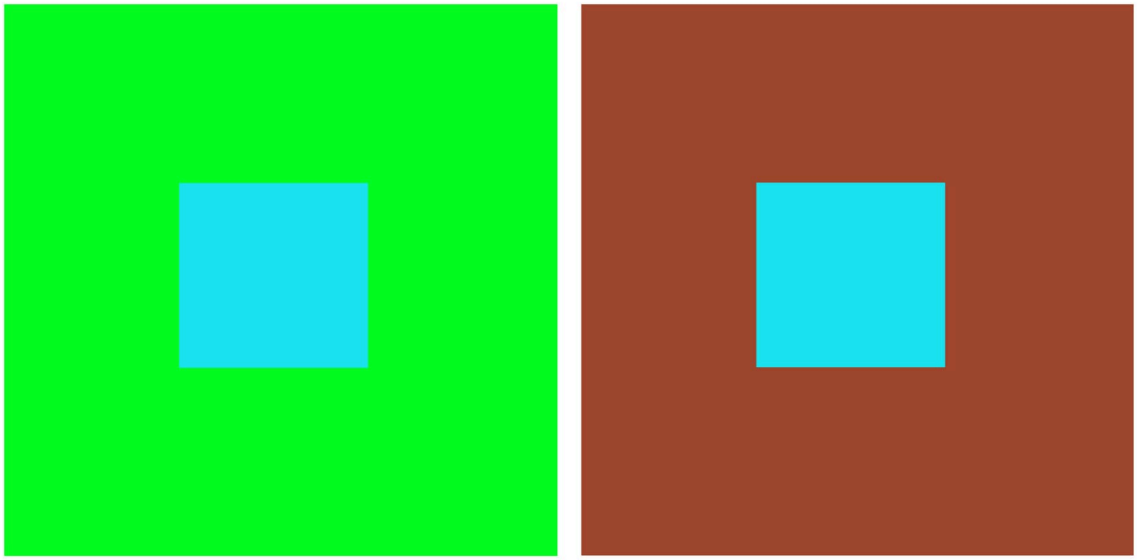


Figure 4.2.22: Demonstration of the effect of simultaneous contrast

The general form of the law of simultaneous contrast is that two juxtaposed colors will appear maximally different from one another. Thus the blue appears both darker and duller when it is seen in a field of light, high-chroma yellow-green on the left, and it appears lighter and higher in chromatic intensity when seen against a field of dark, dull orange on the right.

Viewed against a white field, a swatch of color will actually gain a "halo" of its complementary color as a result of this effect. For example, if you gaze at the green swatch without focusing for several seconds, you will begin to see magenta edges emerge around it.



Figure 4.2.23: Georges Seurat, *Models (Poseuses)*, 1886-88, oil on canvas, 200 x 250 cm (Barnes Foundation)

Seurat records this effect in his painting *The Models*. Notice how the seated model on the right has a dark, violet-blue halo around the light orange flesh of her back, and a light halo against the dark blue-violet shadowed side of her stomach and upper arm. This natural "irradiation" effect is exaggerated by Seurat in order to help intensify colors and values by juxtaposition with their opposites through simultaneous contrast.

Color perception, color harmony, color expression

We have concentrated here on how the Neo-Impressionists used color theory to help duplicate perceptual effects. They employed

divisionism to keep their paintings as luminous as possible while recording how perceived color is affected by factors such as the temperature of the light, reflected color, and simultaneous contrast with adjacent colors.

The aims of the Neo-Impressionists went beyond perceptual accuracy to also include the purely aesthetic effects of color: how they can be used to create pleasing color harmonies based on certain principles. Signac's "laws of contrast and gradation" evokes two of these principles: "gradation" is the aesthetic harmony produced by gentle transitions between largely analogous colors, and "contrast" is produced by the sharper juxtaposition of opposites. Later works by Signac seem more concerned with such harmonies than with perceptual accuracy.

The Neo-Impressionists also recognized that color has expressive effects. Signac claimed that "joy" is evoked by paintings with dominant warm and light tones, while "sorrow" is evoked by dominant cool and dark colors. [2] Ideally, a Neo-Impressionist painting will take into account all three qualities: perceptual accuracy, formal harmony, and emotional expression. The artists believed that all of these were susceptible to rigorous scientific laws that were just being recognized and systematized in their period.

Notes:

1. Paul Signac, *From Eugene Delacroix to Neo-Impressionism*, as translated in Linda Nochlin, ed., *Impressionism and Post-Impressionism*, 1874-1904: Sources and Documents (Englewood Cliffs, N.J.: Prentice-Hall, 1966), p. 118. This passage is very close to Georges Seurat's own formulation of his method in a letter to Maurice Beaubourg of August 28, 1890: "The means of expression is the optical mixture of tones and colors (both of local color and of the illuminating color–sun, oil lamp, gas lamp, etc.), i.e., of the lights and their reactions (shadows) according to the laws of contrast, gradation, and irradiation" (in Nochlin, ed., p. 114).
2. Ibid., p. 121.

Additional resources:

The history of pigments

Georges Seurat

Georges Seurat, *Bathers at Asnières*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.1: Georges Seurat, *Bathers at Asnières*, 1884, oil on canvas, 6.6 x 9.8 ft (National Gallery, London)

Smarthistory images for teaching and learning:










Seurat



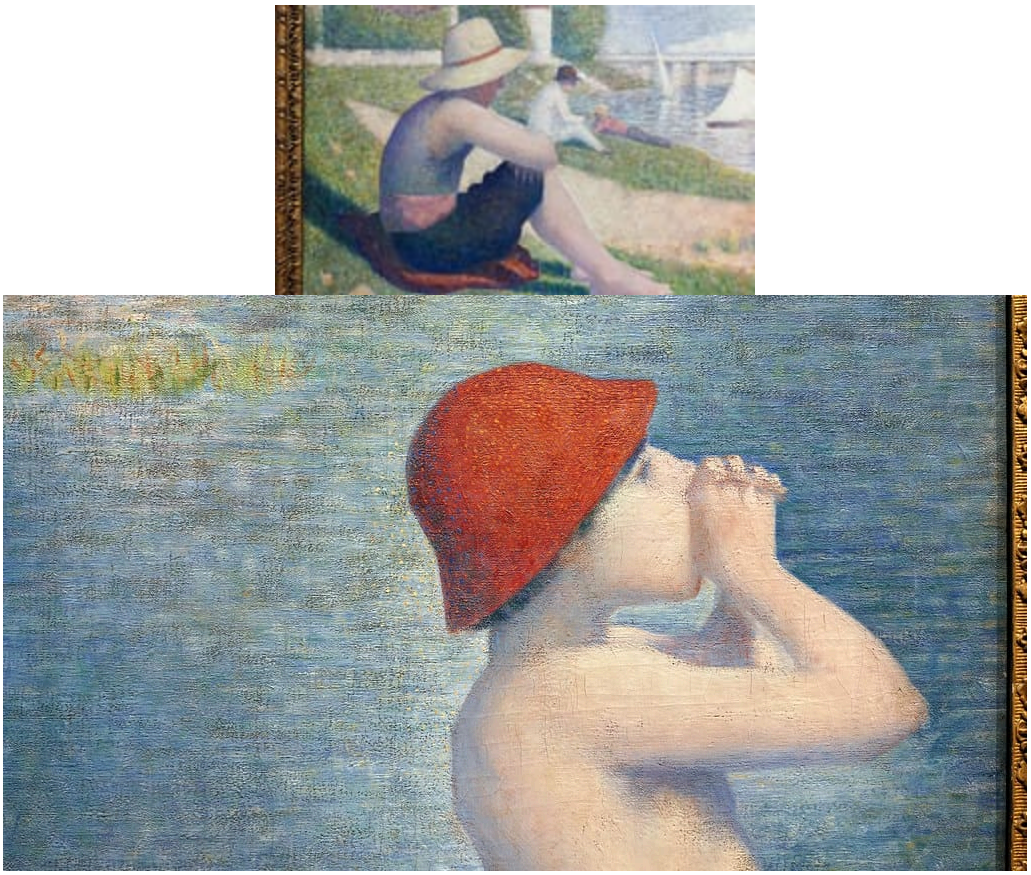


Figure 4.2.24: More Smarthistory images...

Georges Seurat, *A Sunday on La Grande Jatte – 1884*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.2: 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)

Smarthistory images for teaching and learning:









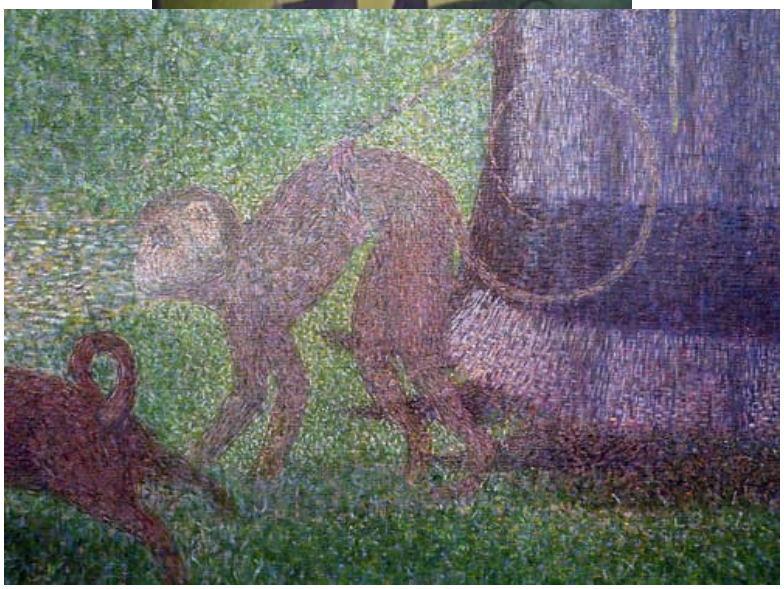




Figure 4.2.25: More Smarthistory images...

Vincent van Gogh

The Potato Eaters

by DR. BETH HARRIS and DR. STEVEN ZUCKER

What should a peasant painting smell like? Van Gogh has an opinion...

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.3: Vincent van Gogh, *The Potato Eaters*, 1885, oil on canvas, 82 x 114 cm (Van Gogh Museum, Amsterdam, Vincent van Gogh Foundation). A conversation with Dr. Beth Harris and Dr. Steven Zucker.

Additional resources:

This painting at the museum

Another version of this painting at the Kröller-Müller Museum

Van Gogh as a peasant painter — from the Van Gogh Museum

Nineteenth-Century French Realism on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

French Paintings of the 19th Century from The National Gallery of Art

Linda Nochlin and Dan Karlholm, "Misery, Beauty, and Other Issues: Linda Nochlin in Conversation with Dan Karlholm"

Vincent van Gogh, *Self-Portrait Dedicated to Paul Gauguin*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.4: Vincent van Gogh, *Self-Portrait Dedicated to Paul Gauguin,* 1888, oil on canvas, 24 x 19-11/16″ (Fogg, Harvard Art Museums, Cambridge, Massachusetts)



Figure 4.2.26: Vincent van Gogh, *Self-Portrait Dedicated to Paul Gauguin*, 1888, oil on canvas, 61.5 x 50.3 cm (Fogg, Harvard Art Museums, Cambridge, MA)

This self portrait was painted for Paul Gauguin as part of swap between the artists. Van Gogh chose to represent himself with monastic severity. The other painting is Paul Gauguin's *Self-Portrait Dedicated to Vincent van Gogh (Les Misérables)*. Gauguin's title is a reference to the heroic fugitive, Jean Valjean, in Victor Hugo's novel *Les Misérable*s. Gauguin's painting also contains a portrait of Emile Bernard that was painted not by Gauguin but by Bernard within Gauguin's painting.



Figure 4.2.27: Paul Gauguin, *Self-Portrait Dedicated to Vincent van Gogh (Les Misérables)*, 1888, oil on canvas, 44.5 x 50.3 cm (Van Gogh Museum, Amsterdam)

The following is a letter by Van Gogh to his brother Theo about the painting exchange with Gauguin dated October 7, 1888:

My dear Theo,

Many thanks for your letter. How glad I am for Gauguin; I shall not try to find words to tell you – let's be of good heart.

I have just received the portrait of Gauguin by himself and the portrait of Bernard by Bernard and in the background of the portrait of Gauguin there is Bernard's on the wall, and vice versa.

The Gauguin is of course remarkable, but I very much like Bernard's picture. It is just the inner vision of a painter, a few abrupt tones, a few dark lines, but it has the distinction of a real, real Manet.

The Gauguin is more studied, carried further. That, along with what he says in his letter, gave me absolutely the impression of its representing a prisoner. Not a shadow of gaiety. Absolutely nothing of the flesh, but one can confidently put that down to his determination to make a melancholy effect, the flesh in the shadows has gone a dismal blue.

So now at last I have a chance to compare my painting with what the comrades are doing. My portrait, which I am sending to Gauguin in exchange, holds its own, I am sure of that. I have written to Gauguin in reply to his letter that if I might be allowed to stress my own personality in a portrait, I had done so in trying to convey in my portrait not only myself but an impressionist in general, had conceived it as the portrait of a bonze, a simple worshiper of the eternal Buddha.

And when I put Gauguin's conception and my own side by side, mine is as grave, but less despairing. What Gauguin's portrait says to me before all things is that he must not go on like this, he must become again the richer Gauguin of the "Negresses."

I am very glad to have these two portraits, for they finally represent the comrades at this stage; they will not remain like that, they will come back to a more serene life.

And I see clearly that the duty laid upon me is to do everything I can to lessen our poverty.

No good comes the way in this painter's job. I feel that he is more Millet than I, but I am more Diaz then he, and like Diaz I am going to try to please the public, so that a few pennies may come into our community. I have spent more than they, but I do not care a bit now that I see their painting—they have worked in too much poverty to succeed.

Mind you, I have better and more saleable stuff than what I have sent you, and I feel that I can go on doing it. I have confidence in it at last. I know that it will do some people's hearts good to find poetic subjects again, "The Starry Sky," "The Vines in Leaf," "The Furrows," the "Poet's Garden."

So then I believe that it is your duty and mine to demand comparative wealth just because we have very great artists to keep alive. But at the moment you are as fortunate, or at least fortunate in the same way, as Sensier if you have Gauguin and I hope he will be with us heart and soul. There is no hurry, but in any case I think that he will like the house so much as a studio that he will agree to being its head. Give us half a year and see what that will mean.

Bernard has again sent me a collection of ten drawings with a daring poem – the whole is called At the Brothel.

You will soon see these things, but I shall send you the portraits when I have had them to look at for some time.

I hope you will write soon, I am very hard up because of the stretchers and frames that I ordered.

What you told me of Freret gave me pleasure, but I venture to think that I shall do things which will please him better, and you too.

Yesterday I painted a sunset.

Gauguin looks ill and tormented in his portrait!! You wait, that will not last, and it will be very interesting to compare this portrait with the one he will do of himself in six months' time.

Someday you will also see my self-portrait, which I am sending to Gauguin, because he will keep it, I hope.

It is all ashen gray against pale veronese (no yellow). The clothes are this brown coat with a blue border, but I have exaggerated the brown into purple, and the width of the blue borders.

The head is modeled in light colours painted in a thick impasto against the light background with hardly any shadows. Only I have made the eyes slightly slanting like the Japanese.

Write me soon and the best of luck. How happy old Gauguin will be.

A good handshake, and thank Freret for the pleasure he has given me. Good-by for now.

Ever yours,

Vincent.

Letter courtesy of Web Exhibits

Additional resources:

This painting at the Harvard Museums

Paul Gauiguin's Self Portrait with Portrait of Émile Bernard at the Van Gogh Museum

Michael Kimmelman's New York Times exhibition review that discusses the relationship between Van Gogh and Gauguin

Smarthistory images for teaching and learning:









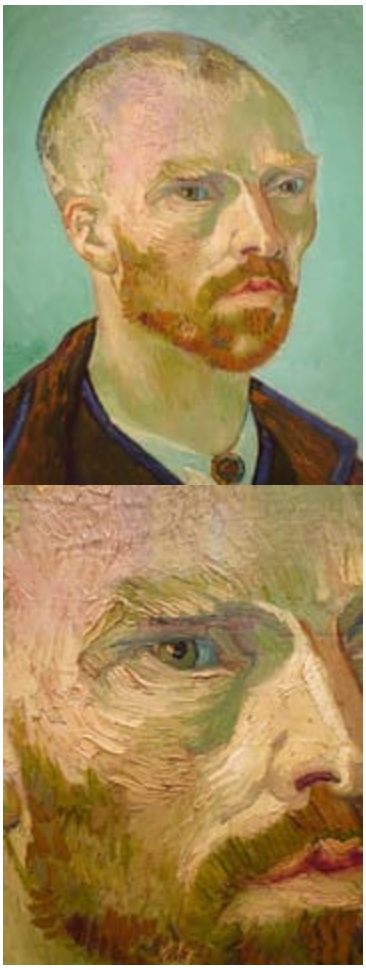


Figure 4.2.28: More Smarthistory images...

Vincent van Gogh, *Self-Portrait with Bandaged Ear*

by BEN POLLITT



Figure 4.2.29: The artist's face and bandaged ear (detail), Vincent van Gogh, *Self-Portrait with Bandaged Ear*, 1889, oil on canvas, 60 x 49 cm (Courtauld Galleries, London)

The unfortunate man

The following report appeared in the Arles journal *Le Forum Republicain* on December 30, 1888:

> **Last Sunday, at 11:30 in the evening, Vincent Vaugogh [sic], a painter of Dutch origin, called at the Brothel No. 1, asked for a woman called Rachel and handed her ... his ear, saying: 'Guard this object with your life'. Then he disappeared. When informed of the action, which could only be that of a pitiful madman, the police went the next day to his house and discovered him lying on his bed apparently at the point of death. The unfortunate man has been rushed to hospital.**

Accounts of what took place that night vary. Whatever the exact circumstances, though, whatever underlying motivations could have compelled van Gogh to do it, the episode effectively put an end to one of the most famous working relationships in the history of art, as Paul Gauguin boarded the train to Paris the next day.

For nine weeks they had lived together sharing lodgings in the Yellow House, just outside the old town walls of Arles in the South of France, spurring each other on as collaborators and as rivals too. The dream had been to set up "a studio in the South," as van Gogh put it, a community of artists, with himself and Gauguin, the founding fathers, all working in harmony with nature and, as he hoped, with each other.

A brave face?

The painting, completed two weeks after the event, is often read as a farewell to that dream. For Steven Naifeh and Gregory White Smith, the most recent biographers of the artist, however, the portrait was first and foremost a plea to van Gogh's doctors.



Figure 4.2.30: Vincent van Gogh, Self-Portrait with Bandaged Ear, 1889, oil on canvas, 60 x 49 cm (Courtauld Galleries, London)

It shows the artist in three-quarter profile standing in a room in the Yellow House wearing a closed coat and a fur cap. His right ear is bandaged. It was in fact his left ear that was bandaged, the painting being a mirror image. To his right is an easel with a canvas on it. Barely visible, a faint outline underneath reveals what looks to be a still-life which appears to have been painted over. The top of the easel has been cropped by the edge of the canvas and the sitter's hat so as to form a fork-like shape. To his left is a blue framed window, and partly obscured by the gaunt ridge of his cheek, a Japanese woodblock print shows two geishas in a landscape with Mount Fuji in the background.

Naifeh and White Smith argue that van Gogh, following his release from hospital, was anxious to persuade his doctors that he was indeed perfectly fit and able to take care of himself and that, despite his momentary lapse, it would not be necessary for them to have him committed, as had been suggested, to one of the local insane asylums; hence the winter coat and hat, to keep warm as they had advised, and with the window ajar still getting that much-needed fresh air into his system. The bandage too, which would have been soaked in camphor, suggests that he both accepts what has happened and is happy, literally, to take his medicine. The same note of stoic optimism, if one wishes to read the painting this way, is also found in the letters to his brother Theo, in which van Gogh, far from abandoning his dream of a "studio in the South," talks of continuing the project, expressing the desire for more artists to come to Arles, even proposing that Gauguin and he could "start afresh."

Yet, of course, whether or not van Gogh was willing to admit to it, the project had most definitely reached its end. And though for a short time he did get to carry on living in the Yellow House, within a few weeks, acting on a petition handed in to the local authorities and signed by 30 of his neighbors, he was forcefully removed and taken to Arles Hospital where he was locked in an isolation cell. In May van Gogh committed himself to the private asylum in Saint-Remy a small town north of Arles and in a little over a year he was dead.

An obsession with Japanese Art

Though Naifeh and White Smith's argument is convincing, how the artist accounts for himself in his letters and how he expresses himself in paint, are different things. For my own part, what is most interesting about the image is what it reveals about van Gogh's artistic practice and particularly his obsession with Japanese art: "All my work to some extent is based on Japanese art," he wrote in July, 1888.

Three years earlier, while in the port city of Antwerp in Belgium, he would wander through the markets there where woodblock prints of the Ukiyo-e school, the so-called "artists of the floating world" were readily available and could be bought for just a few centimes. These first glimpses into the art of Japan came at a pivotal moment in the artist's career: half way between his native Holland where he had schooled himself in the Realist tradition of artists such as Jozef Israëls, with his dark, earthy palette and sympathy for the rural poor, and Paris where he would encounter the colorful urbanity of the Impressionists.

For van Gogh, the artists of Japan offered the perfect meeting-point of theory and practice. The most famous of them was Hokusai, "the Dickens of Japan," who shared the Dutchman's passion for depicting the lives of the poor. It was this compassionate

dimension of Japanese art that van Gogh hoped to bring to Impressionism, a movement that—by the time he arrived in Paris in 1886—had already absorbed the visual inventiveness of the Ukiyo-e school.

As time went on, the links went still further. In his two-year sojourn in Paris, the city of strangers, it was fellowship above all else that he yearned for, and so he came to imagine the Impressionists, among whose ranks he claimed to belong, to be as he imagined the Japanese, a united body of artists, sharing the same goals and ideals. It was this that prompted the journey south. On arriving in Arles he wrote to his brother, declaring his hope that "other artists will rise up in this lively country and do for it what the Japanese have done for theirs." And again, while decorating his new house with paintings of sunflowers, he wrote to Theo: "Come now, isn't it almost a true religion which the simple Japanese teach us, who live in nature as though they themselves were flowers."



Figure 4.2.31: Vincent van Gogh, Self-Portrait (Dedicated to Gauguin), 1888, 65 x 52 cm (Fogg Art Museum, Cambridge)

It was in Arles that he read Pierre Loti's novel *Madame Chrysanthème*, best known today as the literary source for Puccini's opera *Madame Butterfly*. While its self-sacrificing heroine worked her graceful way into van Gogh Orientalist fantasies, Loti's description of Buddhist priests inspired his own *Self-Portrait (Dedicated to Paul Gauguin)*, a painting that draws out the direction he hoped the two artists would follow.

How very different *Self-Portrait with Bandaged Ear* is to this earlier portrait. With its formal setting; the repeated triangles, for example, in the form of his coat, the top of the easel and the view offered of Mount Fuji itself, lending the painting it's aspirational quality, its upward thrust. And yet the dominant feeling is surely conveyed by the internal frames: the window, the canvas and print, each of which appears condensed and somewhat forced into the painting, as though hemming the sitter in.



Figure 4.2.32: Sato Torakiyo (publisher), *Geishas in a Landscape*, c 1870-80, colored woodblock print, 60 x 43 cm (Courtauld Museum, London)

The Japanese print as van Gogh painted it in *Self-Portrait with Bandaged Ear* differs from the original. Comparing them we see how van Gogh shifted the composition to the right, deliberately discarding one of the figures in favour of the heron, whose razor-sharp beak rears up as if to stab at the artist's ear. Opposite it, the canvas squeezed in to the left with its ghostly imprint of flowers surmounted by the fork of the easel sets up a formally satisfying but psychologically unsettling parallel. Is there a hint in all this, albeit unconsciously expressed, that the dream of an artist's community in Arles has turned against him?

Perhaps, but then of course there is always van Gogh's color—the joyous application of pigment onto canvas, the glorious use of impasto, thick and swift; that fabulous hatching technique, in places evoking the textures it depicts, the weave of the coat, the threads of the bandage, the fur of the hat. And note the tonal array of strokes that make up the face: violet, green, red, brown, orange, straw yellow; the blacks centered in those piercing pupils.



Figure 4.2.33: André Derain, *Henri Matisse*, 1905, oil on canvas, 71 x 60 cm (Tate Modern, London)

A yearning to be proved sane or a heartfelt cry of anguish, whatever we may read in the image about van Gogh the man, from a purely art historical point of view, it is here in his brushwork and in his palette that one discovers the source of André Derain's "deliberate disharmonies." How fitting then that it was while on holiday in the South of France, a favorite haunt of that early Modernist movement to which he belonged—the Fauves—that Derain painted his friend and fellow artist Matisse; enough perhaps to say that Van Gogh's hope and prediction that "other artists will rise up in this lively country" was not so wildly off the mark after all.

Additional resources:

This painting featured on the Courtauld Gallery's website

This painting in *The Guardian*

Vincent van Gogh on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Japonisme on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Japonaiserie (van Gogh) in Wikipedia

Japonism in Wikipedia

Vincent van Gogh, *The Bedroom*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.5: Vincent van Gogh, *The Bedroom*, 1889, oil on canvas, 29 x 36-5/8 inches (73.6 x 92.3 cm) (Art Institute of Chicago)

Smarthistory images for teaching and learning:





Figure 4.2.34: More Smarthistory images...

Vincent van Gogh, *The Starry Night*

by DR. NOELLE PAULSON



Figure 4.2.35: Vincent van Gogh, *The Starry Night,* 1889, oil on canvas, 73.7 x 92.1 cm (The Museum of Modern Art)

A rare night landscape

The curving, swirling lines of hills, mountains, and sky, the brilliantly contrasting blues and yellows, the large, flame-like cypress trees, and the thickly layered brushstrokes of Vincent van Gogh's *The Starry Night* are ingrained in the minds of many as an expression of the artist's turbulent state-of-mind. Van Gogh's canvas is indeed an exceptional work of art, not only in terms of its quality but also within the artist's oeuvre, since in comparison to favored subjects like irises, sunflowers, or wheat fields, night landscapes are rare. Nevertheless, it is surprising that *The Starry Night* has become so well known. Van Gogh mentioned it briefly in his letters as a simple "study of night" or "night effect."

His brother Theo, manager of a Parisian art gallery and a gifted connoisseur of contemporary art, was unimpressed, telling Vincent, "I clearly sense what preoccupies you in the new canvases like the village in the moonlight... but I feel that the search

for style takes away the real sentiment of things" (813, 22 October 1889). Although Theo van Gogh felt that the painting ultimately pushed style too far at the expense of true emotive substance, the work has become iconic of individualized expression in modern landscape painting.



Figure 4.2.36: Vincent van Gogh, *Starry Night over the Rhone*, 1888, oil on canvas, 72 x 92 cm (Musée d'Orsay)

Technical challenges

Van Gogh had had the subject of a blue night sky dotted with yellow stars in mind for many months before he painted *The Starry Night* in late June or early July of 1889. It presented a few technical challenges he wished to confront—namely the use of contrasting color and the complications of painting en plein air (outdoors) at night—and he referenced it repeatedly in letters to family and friends as a promising if problematic theme. "A starry sky, for example, well – it's a thing that I'd like to try to do," Van Gogh confessed to the painter Emile Bernard in the spring of 1888, "but how to arrive at that unless I decide to work at home and from the imagination?" (596, 12 April 1888).

As an artist devoted to working whenever possible from prints and illustrations or outside in front of the landscape he was depicting, the idea of painting an invented scene from imagination troubled Van Gogh. When he did paint a first example of the full night sky in *Starry Night over the Rhône* (1888, oil on canvas, 72.5 x 92 cm, Musée d'Orsay, Paris), an image of the French city of Arles at night, the work was completed outdoors with the help of gas lamplight, but evidence suggests that his second Starry Night was created largely if not exclusively in the studio.



Figure 4.2.37: Vincent van Gogh, *The Starry Night*, 1889, oil on canvas, 73.7 x 92.1 cm (The Museum of Modern Art)

Location

Following the dramatic end to his short-lived collaboration with the painter Paul Gauguin in Arles in 1888 and the infamous breakdown during which he mutilated part of his own ear, Van Gogh was ultimately hospitalized at Saint-Paul-de-Mausole, an asylum and clinic for the mentally ill near the village of Saint-Rémy. During his convalescence there, Van Gogh was encouraged to paint, though he rarely ventured more than a few hundred yards from the asylum's walls.



Figure 4.2.38: Saint-Paul-de-Mausole near Saint-Rémy, France (photo: **Emdee**, CC BY-SA 3.0)



Figure 4.2.39: Church (detail), Vincent van Gogh, *The Starry Night*, 1889, oil on canvas, 73.7 x 92.1 cm (The Museum of Modern Art, New York)

Besides his private room, from which he had a sweeping view of the mountain range of the Alpilles, he was also given a small studio for painting. Since this room did not look out upon the mountains but rather had a view of the asylum's garden, it is assumed that Van Gogh composed *The Starry Night* using elements of a few previously completed works still stored in his studio, as well as aspects from imagination and memory. It has even been argued that the church's spire in the village is somehow more Dutch in character and must have been painted as an amalgamation of several different church spires that van Gogh had depicted years earlier while living in the Netherlands.

Van Gogh also understood the painting to be an exercise in deliberate stylization, telling his brother, "These are exaggerations from the point of view of arrangement, their lines are contorted like those of ancient woodcuts" (805, c. 20 September 1889). Similar to his friends Bernard and Gauguin, van Gogh was experimenting with a style inspired in part by medieval woodcuts, with their thick outlines and simplified forms.



Figure 4.2.40: Stars (detail), Vincent van Gogh, *The Starry Night*, 1889, oil on canvas, 73.7 x 92.1 cm (The Museum of Modern Art, New York)

The colors of the night sky

On the other hand, *The Starry Night* evidences Van Gogh's extended observation of the night sky. After leaving Paris for more rural areas in southern France, Van Gogh was able to spend hours contemplating the stars without interference from gas or electric city

street lights, which were increasingly in use by the late nineteenth century. “This morning I saw the countryside from my window a long time before sunrise, with nothing but the morning star, which looked very big” 777, c. 31 May – 6 June 1889). As he wrote to his sister Willemien van Gogh from Arles,

> **It often seems to me that the night is even more richly colored than the day, colored with the most intense violets, blues and greens. If you look carefully, you’ll see that some stars are lemony, others have a pink, green, forget-me-not blue glow. And without laboring the point, it’s clear to paint a starry sky it’s not nearly enough to put white spots on blue-black.**
>
> **(678, 14 September 1888)**

Van Gogh followed his own advice, and his canvas demonstrates the wide variety of colors he perceived on clear nights.

Invention, remembrance and observation

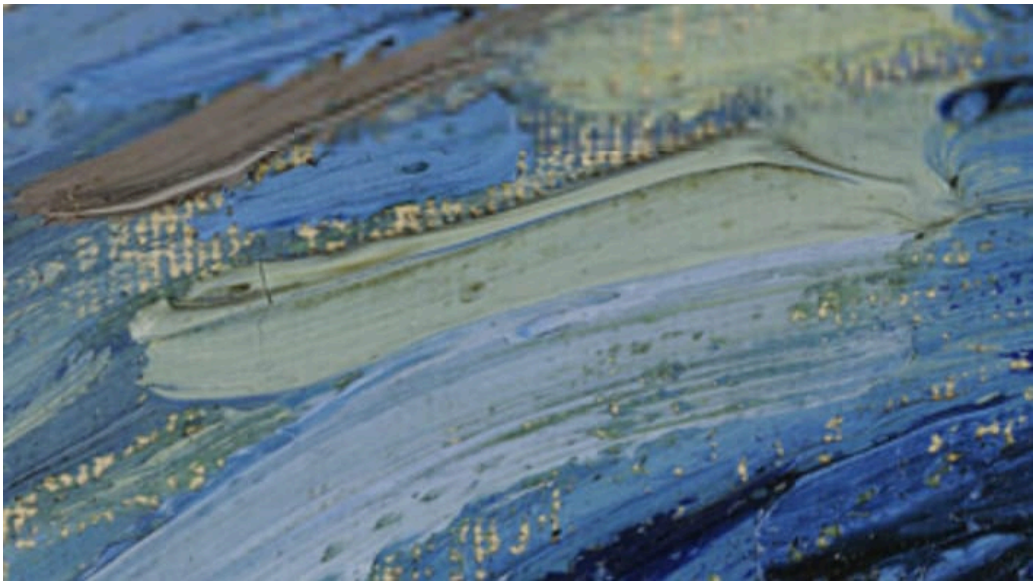


Figure 4.2.41: Impasto and brush strokes (detail), Vincent van Gogh, *The Starry Night*, 1889, oil on canvas, 73.7 x 92.1 cm (The Museum of Modern Art, New York)

Arguably, it is this rich mixture of invention, remembrance, and observation combined with Van Gogh’s use of simplified forms, thick impasto, and boldly contrasting colors that has made the work so compelling to subsequent generations of viewers as well as to other artists. Inspiring and encouraging others is precisely what Van Gogh sought to achieve with his night scenes. When *Starry Night over the Rhône* was exhibited at the Salon des Indépendants, an important and influential venue for vanguard artists in Paris, in 1889, Vincent told Theo he hoped that it “might give others the idea of doing night effects better than I do.” *The Starry Night*, his own subsequent “night effect,” became a foundational image for Expressionism as well as perhaps the most famous painting in Van Gogh’s oeuvre.

Additional resources:

This painting at MoMA

This painting at the Google Art Project

The Starry Night from MoMA Multimedia

Smarthistory images for teaching and learning:



Figure 4.2.42: More Smarthistory images...

The Pont-Aven School and Synthetism

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.2.43: Poster for the Exhibition at the Café des Arts, 1889, lithograph; 28 x 39.7 cm (Pennsylvania State University Libraries, Rare Books and Manuscripts Special Collection)



Figure 4.2.44

When the mirrors intended to decorate the walls of the Café des Arts in Paris did not arrive in time for its opening in 1889, the owner agreed to an improvised art exhibition instead. The artists, including **Paul Gauguin**, Emile Bernard, Charles Laval, and Emile Schuffenecker, called themselves the "Groupe Impressioniste et Synthétiste," but they are better known today as the Pont-Aven School, after a town in the French province of Brittany where many of the artists painted.

At the exhibition Gauguin showed a painting of three Breton girls dancing in a meadow outside of Pont-Aven, with the steeple of St. Joseph's church in the background. This painting exhibits two key characteristics of the Pont-Aven School: "primitivist" themes featuring rural and peasant subject matter, and a "synthetist" style consisting of simplified drawing, clearly-defined contours, intensified colors, and flattened space.



Figure 4.2.45: Paul Gauguin, *Breton Girls Dancing*, 1888, oil on canvas, 73 x 92.7 cm (**National Gallery Washington DC**)

"The land of the painter"

Brittany had been a popular destination for tourists since the first railway line from Paris was completed in the 1860s. It was famous not only for its rugged landscape but also for its picturesque inhabitants, especially the Breton peasant women in their starched white caps. A popular English guidebook of the time titled *Breton Folk* described Brittany as "the land of the painter," and it commended the region's particular attraction for artists "in search of picturesque costume and scenes of pastoral life." [1]



Figure 4.2.46: Randolph Caldecott, "Potato-Getting Near St. Pol de Léon", from *Breton Folk* (1881), p. 74

Rustic and peasant subjects were popular with French artists and patrons starting with the **Barbizon School** and **French Realist** painters of the mid-nineteenth century. Such "timeless" rural scenes offered a reassuring sense of tradition and continuity during a time marked by rapid industrialization and urbanization.



Figure 4.2.47: Pascal Dagnan-Bouveret, *Breton Women at a Pardon*, 1887, oil on canvas, 125.1 x 141.1 cm (Museu Calouste Gulbenkian, Lisbon)

Pascal Dagnan-Bouveret's *Breton Women at a Pardon*, shown in the French Salon of 1889, demonstrates the popularity of Breton subjects in a conventional Academic style. It shows a group of Breton peasants gathered in the foreground listening to a woman read. The background depicts a characteristic Breton ritual called a Pardon, in which penitents process barefoot or on their knees around the church to earn absolution for their sins. To a middle-class urban viewer, the Breton peasants would have seemed quaint and old-fashioned, but also admirable for their piety and authenticity.

Synthetism



Figure 4.2.48: Paul Gauguin, *Vision after the Sermon (or Jacob Wrestling with the Angel)*, 1888, oil on canvas, 72.20 x 91.00 cm (**National Gallery of Scotland, Edinburgh**)

Like Dagnan-Bouveret's painting of the previous year, Gauguin's famous ***Vision after the Sermon*** also depicts the profound religious faith of the Breton people. A group of women in the foreground file out of church, having just heard a sermon on Jacob wrestling an angel (Genesis 32:24-32). So great is their faith that they literally "see" the Biblical scene in front of the church, right next to a prosaically grazing cow.

The style of the two works is very different, however. Gauguin's color is bright and unnatural compared to Dagnan-Bouveret's muted grays and earth tones, and next to the Academic artist's meticulous naturalism Gauguin's technique appears downright incompetent. The drawing is crude, the anatomy of the women's faces is almost childish, the flat planes of their clothing utterly

fail to convey a sense of the bodies underneath, and the red ground stands up like a wall rather than receding into space.

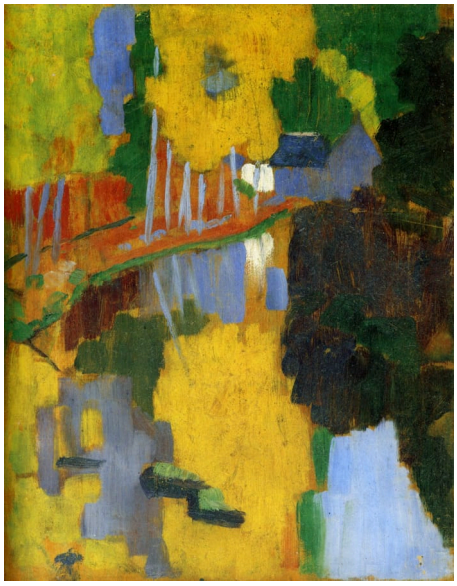


Figure 4.2.49: Paul Sérusier, *The Talisman*, 1888, oil on panel, 27 x 21 cm (Musée d'Orsay)

Far from incompetent, however, Gauguin's simplified, even somewhat crude, technique was a conscious choice. A young artist named Paul Sérusier who studied with Gauguin recounted the older artist's advice while they were out painting together on the bank of a river near Pont-Aven:

How do you see these trees? They're yellow; so put some yellow. This shadow, it's rather blue, paint it with pure ultramarine. Those red leaves? Put vermillion. [2]

Gauguin tells Sérusier to both simplify and intensify what he is seeing. Rather than seeking subtle nuances of color and tone within the yellowish autumn leaves, Sérusier paints them in pure, unmodulated yellow. The cool gray trunks of the trees are similarly rendered as strokes of ultramarine mixed with white, against a background of vermilion red. Each color is intensified, and the drawing and composition are simplified into a flat pattern. Elsewhere, Gauguin advised artists to paint from memory rather than directly from nature, because memory automatically discards extraneous detail and distills perceptions down to their essence.

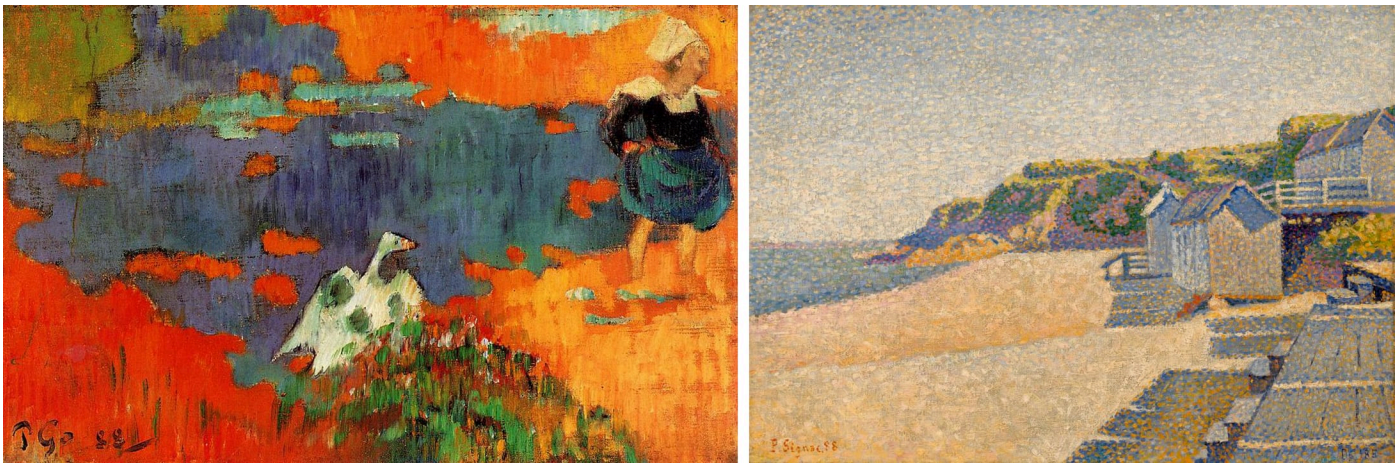


Figure 4.2.50: Left: Paul Gauguin, *Breton Girl and Goose by the Water*, 1888, oil on canvas, 25.1 x 39.4 cm (private collection); right: Paul Signac, *The Bathing Cabins, Opus 185 (Beach of the Countess)*, 1888, oil on canvas, 33.3 x 46.4 cm (**Nelson-Atkins Museum of Art**)

This process of distilling multiple, complex elements into a simplified whole is what the group meant when they called themselves "Synthetists" at the Café des Arts exhibition. Insisting on the process of synthesis was a deliberate contrast to the highly scientific and analytic process of **Neo-Impressionism**. The two paintings above were executed in the same year just a few miles apart in Brittany. Whereas the Neo-Impressionists worked to analyze or carefully break down all the separate components that make up

complex color sensations and then rendered them in innumerable tiny dots, the Synthetists distilled them into broad areas of pure color.



Figure 4.2.51: Left: Emile Bernard, *Breton Women in the Meadow*, 1888, oil on canvas, 74 x 92 cm (private collection); Right: Louis Anquetin, *Avenue de Clichy, le soir, cinq heurs*, 1887, watercolor and gouache on paper (private collection)

The Synthetist style was sometimes called "Cloisonnism," after the **cloisonné technique** used to decorate objects by melting colored enamel between wire outlines. It also has similarities to Japanese prints, which were popular at the time, as well as Medieval colored woodcuts and stained glass. Synthetism was somewhat antithetically associated with both sensual/decorative qualities and religious/spiritual qualities, but whatever its genesis or purpose, it forms a sharp contrast to both the Academic naturalist style of Dagnan-Bouveret and the Neo-Impressionist style of Signac.

Primitivism

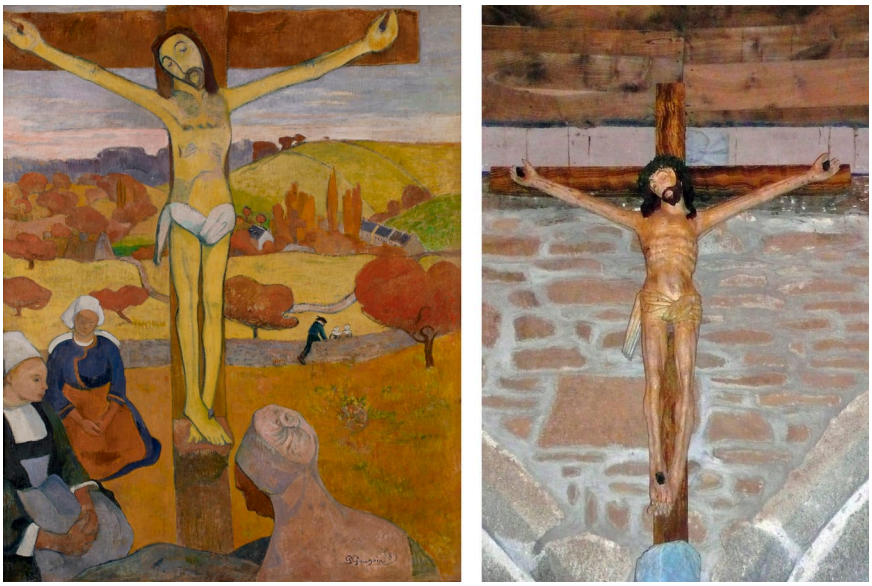


Figure 4.2.52: Left: Paul Gauguin, *The Yellow Christ*, 1889, oil on canvas, 91.1 x 73.4 cm (Albright-Knox Art Gallery); Right: Anonymous, Crucifix, Notre-Dame de Trémalo Chapel, Pont-Aven, 17th century, wood and polychrome (photo: © **Yann Gwilhoù**, CC-BY-SA 3.0)

There is a logic in depicting peasant life with this simplified style. The bright colors and crude drawing of Synthetism have much in common with rural folk art. Gauguin implicitly acknowledges this similarity of style in his painting *The Yellow Christ* of 1889, which shows a group of Breton women kneeling in prayer around a wooden crucifix in a field. The crucifix is a representation of one by an anonymous seventeenth-century artist that Gauguin saw a small chapel set in the fields outside of Pont-Aven. Although

the work's crude carving and stiff anatomy do not demonstrate technical facility, they seem to guarantee the simple and sincere faith of the anonymous sculptor who created it.

Instead of setting the crucifix in the chapel, Gauguin transports it into a field to further connect Christ's life to the timeless cycles of nature that drive the traditional lives of Breton peasants. The light in the sky marks the time as early evening, and the color of the foliage denotes fall. Both suggest an ending, but an ending that holds promise of a new beginning. Christ, just like the sun and the fall harvest grains, will rise again.

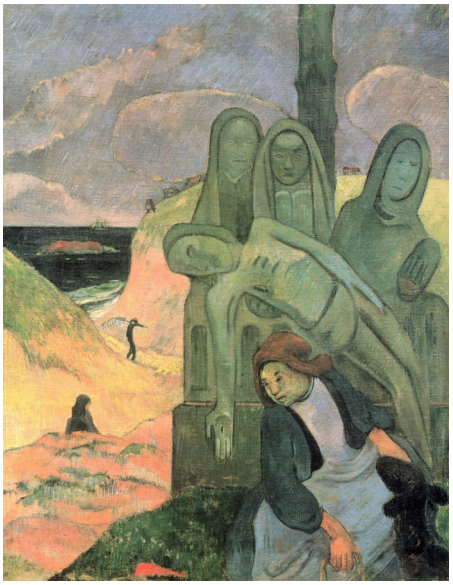


Figure 4.2.54: Paul Gauguin, *The Green Christ or Breton Calvary*, 1889, oil on canvas, 92 x 73 cm (Royal Museums of Fine Arts of Belgium)

Both the simplified folk style and the peasant subject matter exemplify **primitivism**, a turning backwards to an earlier way of life (pre-industrial, pre-scientific, and pre-urban) as a way of seeking greater authenticity and a higher purpose in life. Gauguin wrote in a letter to his friend Emile Schuffenecker, "I love Brittany. I find a certain wildness and primitiveness here. When my clogs resound on this granite soil, I hear the dull, matte, powerful tone I seek in my painting." [3] Unlike Dagnan-Bouveret, who represented Breton folk life with the sophisticated technique and scientific eye of a thoroughly modern Parisian, Gauguin aspired to "go primitive," as exemplified by his adoption of peasant clogs (*sabots*) as well as the simple folk-art style of his paintings.

Authenticity or fantasy?

It is easy to romanticize the Pont-Aven School's project of celebrating the simple rural life and folk traditions of the Breton peasants. Many tellings of Gauguin's biography eulogize his act of giving up a career as a stockbroker, along with all of the pleasures and conveniences of modern life, in order to live as poor painter among the peasants of Brittany and later on the South Sea island of Tahiti.

More recent scholarship has problematized both that biography and that project, however. The vision of Pont-Aven in Gauguin's paintings is largely a romantic fantasy. Brittany was rapidly modernizing, and the folk traditions and costumes that Gauguin admired were vanishing or put on display only for holidays and tourists. The 1880 guidebook already notes that

> **In the shops and on the promenades [of Brittany] the majority of women are dressed as in Paris ... Every year more white caps are thrown aside ... and each year the markets of St. Malo and St. Servan have less individuality of costume. [4]**

Gauguin's paintings of Brittany are, in the end, more fantasies than accurate images of an authentic peasant culture.



Figure 4.2.55: Paul Gauguin, *Vision after the Sermon (or Jacob Wrestling with the Angel)*, 1888, oil on canvas, 72.20 x 91.00 cm (National Gallery of Scotland, Edinburgh)

It is also worth asking why the main protagonists of Gauguin's paintings are women, both in Brittany and later in Tahiti. In *Vision after the Sermon* as in *The Yellow Christ* and *The Green Christ*, it is women whose quaint costumes provide the antithesis to modern fashionability, women whose profound religious faith provides the antidote to modern science and skepticism, and women whose adherence to tradition provides a respite from the constant, disruptive innovations of modern life. While this does elevate women to a place of honor, it also reinforces commonplace stereotypes, suggesting that women preserve the faith and folk traditions simply because they are less suited than men to the new world of science, technology, and constant change.

Notes:

1. Henry Blackburn and Randolph Caldecott, *Breton Folk: An Artistic Tour in Brittany* (Boston, 1881), p. 3.
2. Gauguin's advice to Sérusier was recorded by his friend Maurice Denis, "Paul Sérusier, sa vie, son oeuvre," in *Sérusier, L'ABC de la peinture* (Paris: Floury, 1942), p. 42.
3. Letter, Gauguin to Schuffenecker, February 1888, in M. Malingue, ed, *Lettres de Gauguin à sa femme et à ses amis* (Paris, 1946), p. 322 (our translation).
4. Blackburn, *Breton Folk*, p. 10.

Paul Gauguin

Gauguin, *Self-Portrait with Portrait of Émile Bernard (Les misérables)*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.6: Paul Gauguin, *Self-Portrait with Portrait of Émile Bernard (Les misérables)*, 1888, oil on canvas, 44.5 x 50.3 cm (Van Gogh Museum). Speakers: Dr. Steven Zucker and Dr. Beth Harris

Additional resources:

This portrait at the Van Gogh Museum

Post-Impressionism on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Van Gogh and Gauguin: The Studio of the South (from the Art Institute of Chicago)

Paul Gauguin, *Vision after the Sermon* (or *Jacob Wrestling with the Angel*)

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.7: Paul Gauguin, *Vision after the Sermon* (or *Jacob Wrestling with the Angel*), 1888, oil on canvas, 2′ 4 3/4″ x 3′ 1/2″ (National Gallery of Scotland, Edinburgh)

Paul Gauguin, *Nevermore*

by RACHEL ROPEIK, DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.8: Paul Gauguin, *Nevermore*, 1897, oil on canvas (Courtauld Gallery, London)

Smarthistory images for teaching and learning:



Figure 4.2.56: More Smarthistory images...

Paul Gauguin, *The Red Cow*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.9: Paul Gauguin, *The Red Cow*, 1889, oil on canvas (LACMA)

Note: though the video states that the cypress trees suggest this canvas may have been painted in the south, it was painted in Le Pouldu near Pont-Aven in Brittany.

Smarthistory images for teaching and learning:

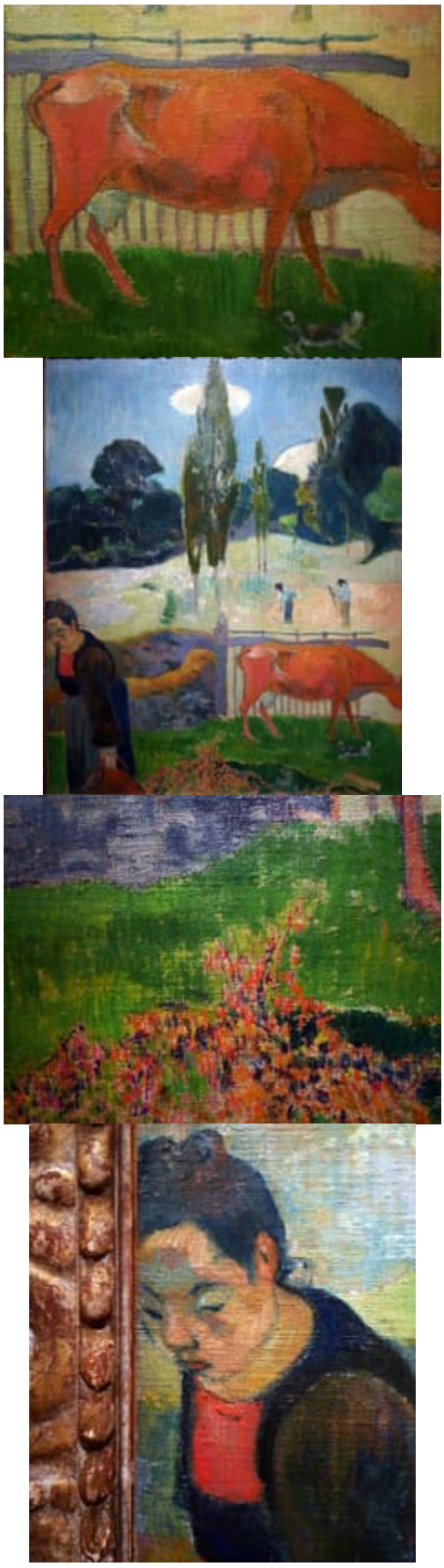


Figure 4.2.57: More Smarthistory images...

Paul Gauguin, *Spirit of the Dead Watching*

by BEN POLLITT



Figure 4.2.58: Paul Gauguin, *Spirit of the Dead Watching*, 1892, oil on burlap mounted on canvas, 116.05 x 134.62 x 13.34 cm (Albright-Knox Art Gallery, Buffalo, NY)

Be mysterious

"*Soyez mysterieuses*," (be mysterious), Gauguin said. Perhaps he had this command in mind when he produced the most significant painting—by his own reckoning—to come out of his first stay in Tahiti, *The Spirit of the Dead Watching*. Few critics would doubt the importance of this work. Its mysteriousness and openness to interpretation has secured for it a position among Gauguin's key works.

Gauguin made his first visit to Tahiti (a French colony) in March 1891, returning to Paris in May 1893. It was a hugely productive period in Gauguin's career. "In the two years I have spent here," he wrote, "with only a few months lost, I have produced sixty-six more or less fine canvases and a number of ultra-primitive sculptures. That is enough for any one man."

A background of terror

To herald his return to Europe and also to rescue his family from penury, with the help of his Danish wife, Mette, Gauguin organized an exhibition of his work in Copenhagen. Among the nine canvases he sent from Tahiti was *The Spirit of the Dead Watching*, carrying with it an asking price—the most expensive in the sale—of between 1,500 and 2,000 francs. Clearly highly prized by Gauguin, the best of two years' worth of "fine" canvases, the painting depicts an adolescent girl (the model was Gauguin's Tahitian girlfriend Tehura, who was only fourteen years old), lying belly down on a bed, her face staring out at the viewer with a fearful expression. The bed is covered with a blue pareo (a wraparound skirt worn by Tahitians) and a light chrome-yellow sheet. Behind the bed, silhouetted and in profile, a woman watches over the child.

Gauguin created a haunting, supernatural quality by exploiting what he considered to be the emotional potential of color. When describing the painting to Mette, he points out how the shades of purple on the wall create "a background of terror" and how the sheet "must be yellow, because, in this color, it arouses something unexpected for the spectator." Using colors to arouse feelings was very much in line with the work of other Post-Impressionist artists, such as Gauguin's contemporary and friend, Vincent van Gogh.

The spirit of the dead

Aside from color, the composition is itself unsettling, particularly the relationship between the girl and the old woman behind her whose simplified form and disproportionate scale suggest Tahitian statuary or tiki. If she is a carved statue of wood, though, what

or who does it signify? If not, then is she real or otherworldly? Is this the spirit of the dead watching that the title refers to? And if she is imagined, then by whom? Is all that surrounds the girl the conjurings of her own haunted imagination? Or is it what she looks out at—the space we ourselves inhabit—that is the source of her terror? Could it be, then, that we are the spirit of the dead watching? The Tahitian language certainly allows for such ambiguities. The expression, manao tupapau means either watching the spirit of the dead or the spirit of the dead watching.

Other formal features of the painting seem to enhance this ambivalence. Notice, for example, the complex vantage point we hold. Our gaze is level with the luminous eyes of the old woman, while at the same time, we look down at the figure of the young woman.

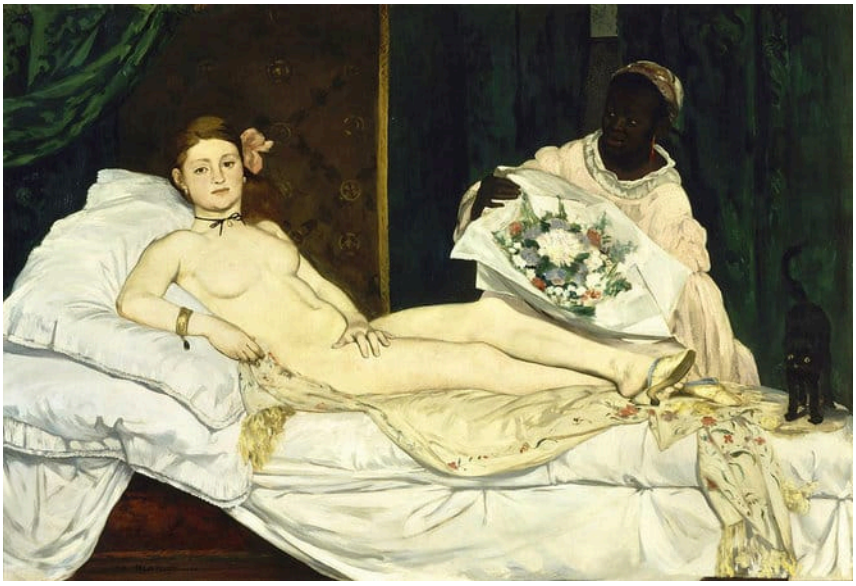


Figure 4.2.59: Édouard Manet, *Olympia*, 1863, oil on canvas, 130.5 x 190 cm (Musée d'Orsay, Paris)

A slightly indecent study of a nude

We can also consider this painting within the tradition of the female nude and recall Manet's *Olympia* (1865). Manet's work provided a template for younger artists, one that rejected long-established conventions in the representation of the nude and challenged the moral values of the bourgeoisie. Gauguin, for one, admired *Olympia* enough to have produced a copy of it in 1891.

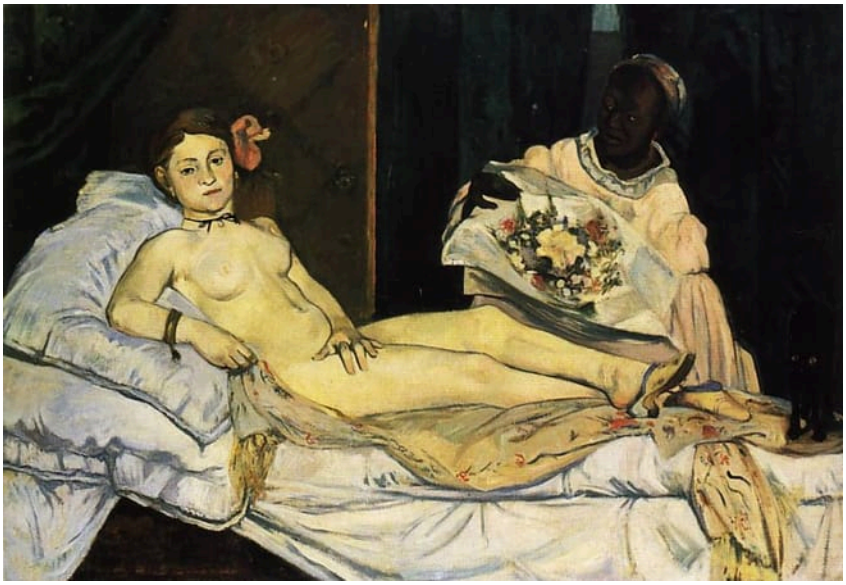


Figure 4.2.60: Paul Gauguin, *Copy of Manet's Olympia*, 1891, oil on canvas, 89 x 130 cm (Private collection)

He was keen to shock the bourgeoisie and certainly his own nude in *The Spirit of the Dead Watching*—"a slightly indecent study"

as he described it—is in many ways as radical as Manet's. The body is awkwardly positioned and disproportionate. The feet overhang the bed and the hands are larger than the feet. And most shocking of all, is the age of the model.

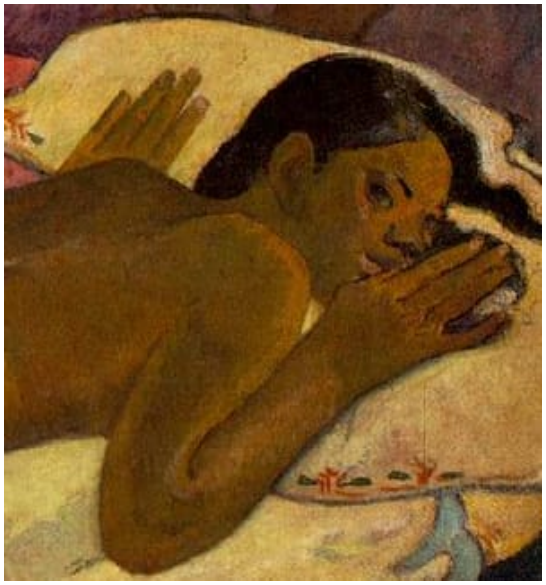


Figure 4.2.61: Female figure (detail), Paul Gauguin, *Spirit of the Dead Watching*, 1892, oil on burlap mounted on canvas, 116.05 x 134.62 x 13.34 cm (Albright-Knox Art Gallery, Buffalo, NY)

Equally disturbing is the fear she exhibits. Gauguin described this in letters to his wife, Mette. Having walked that day to a neighboring village, Gauguin didn't return to his house until the early morning. On entering, he found Tehura naked on the bed staring at him in terror. The reason for her fear, according to Gauguin, was that Tehura believed in *tupapaus*, the spirits of the dead who in Tahitian mythology inhabit the interior of the island and whose presence illuminates the forest at night.



Figure in background (detail), Paul Gauguin, *Spirit of the Dead Watching*, 1892, oil on burlap mounted on canvas, 116.05 x 134.62 x 13.34 cm (Albright-Knox Art Gallery, Buffalo, NY)

Gauguin was skeptical about this belief, holding that these phosphorescent night glows that Tahitians took for spirits were in fact a type of fungus that grows on dead trees. Either way, for Tehura, to walk through the interior after sundown risked disturbing the *tupapaus* with potentially disastrous consequences; hence her fear and so too those glimmering spectral forms that feature in the background of the painting and that Gauguin stated stood for the tupapaus themselves.

Critical readings

Given his construction of Tahitian culture as "primitive," Gauguin's version of these events has been scrutinized by art historians who have cast doubt on whether Tehura would have actually held these beliefs (since she was a practicing Christian). Gauguin is thus accused of projecting his own primitivist preconceptions onto his subject.

Another critique comes from the art historian, Nancy Mowll Mathews, who argues that it was not the spirits that Tehura was frightened of, but Gauguin himself, the middle-aged, white, male colonialist against whom, as a sexual predator, she had little power to resist. This reading gives a disturbing twist to the image with Gauguin taking sadistic pleasure in depicting the fear that he himself caused. It's worth noting that in Gauguin's account, seeing her in this state moved him to declare that she never looked so beautiful, and that he was drawn to comfort her, promising never to leave her again.

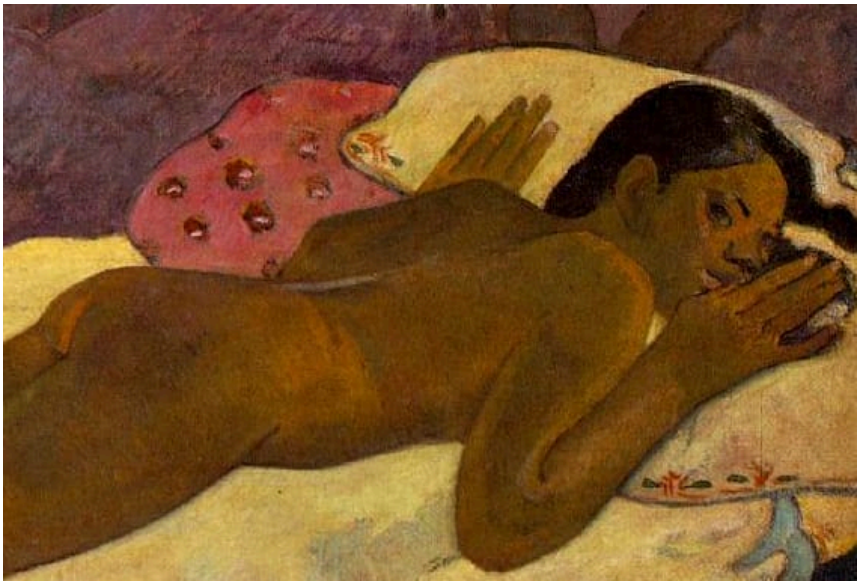


Figure 4.2.63: Nude (detail), Paul Gauguin, *Spirit of the Dead Watching*, 1892, oil on burlap mounted on canvas, 116.05 x 134.62 x 13.34 cm (Albright-Knox Art Gallery, Buffalo, NY)

The critic Stephen Eisenman takes a different line of argument, describing the painting as "an assault upon the tradition of the European nude." Of particular interest for Eisenman is the viewer's uncertainty regarding the sex of the figure, the large hands and narrow hips suggesting a male rather than a female form. "The posture and anatomy of Tehura, which emphasizes her boyishness, is derived from various androgynous and hermaphroditic prototypes," Eisenman argues, citing the *Borghese Hermaphrodite* as one of them. Seen in this light, the painting, far from being an image of patriarchal dominion over the colonized body, is instead a subversive attack on that patriarchy and all the gendered values that it maintains.

However we choose to look at the painting, it provokes endless questioning, in which we are forced to encounter the other, whether that be in terms of age, faith, gender, spirituality, ethnicity, sexuality, culture, whatever you will, it is a painting that explores the heterogeneous nature of identity, asking profound questions as to who and what we are.

Additional resources:

This painting at the Albright-Knox Art Gallery

Amelia Hill, "Gauguin's erotic Tahiti idyll exposed as a sham," The Guardian, October 7, 2001.

Post-Impressionism on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Paul Gauguin, *Oviri*

by BEN POLLITT



Figure 4.2.64: Paul Gauguin, *Oviri*, 1894, Stoneware, 75 x 19 x 27 cm (Musée d'Orsay, Paris)

Gauguin's return to Paris from his first stay in Tahiti in August 1893 did not go quite as he had hoped: no fanfare, no hero's welcome, and most disappointingly of all no sales.

Gauguin and "art pottery"

Despite some critical interest in his work, success still seemed to elude him. What was more, after years of support, his wife Mette cut off any ties with him. Broke and without a family, he went to Brittany where living costs were cheaper, but readjusting to life in "civilized" France proved a challenge. A drunken brawl with a bunch of Breton sailors shattered his ankle, an injury from which he would never completely recover. Enough was enough, apparently. In June 1895 he departed for Tahiti never to return. It is in this tempestuous period that he produced arguably his masterpiece in the medium of ceramics: *Oviri*.

From wood-carvings and ceramics to highly finished marble works, sculpture was integral to Gauguin's artistic practice. His works in clay, all produced in Paris in the mid-80's to the mid-90's, owe much to the great ceramist Ernest Chaplet who offered Gauguin assistance in firing and glazing as well as access to his kiln in Rue Blomet, Montparnasse. *Oviri* was the largest and the last of these series.

Ceramics appealed to him for several reasons; the first was financial, not only is clay cheap, but given its practical usages, Gauguin hoped, misguidedly as it turned out, that his pottery would attract more buyers than his painting. Then there was his famous love of non-European art, such as the Inca and pre-Columbian pottery he encountered in his Peruvian childhood. Gauguin viewed such works—both decorative and utilitarian—as capable of expressing profound emotions as much so-called high art, hence the term "art pottery" he used to describe them.

Gauguin was not entirely alone in wishing to elevate this humble medium. Towards the end of the nineteenth century there was a noticeable crumbling of the hierarchies that had separated the fine artist from the craftsman, the distinction say between the liberal and the mechanical artist which had held sway since the Renaissance. In Tahitian culture there were no such fine distinctions, instead, the craftsman/artist was defined quite differently, as Gauguin came to discover, being neither warrior/hunter nor homemaker/carer, over there he was neither fully male nor fully female but occupied, socially speaking, an androgynous middle ground somewhere between the two. This ambiguous sense of gendered identity appealed to Gauguin's subversive spirit. Certainly the creative potential of androgyny intrigued him and is often commented on in discussions of *Oviri*.

Oviri

A shortened form of *Oviri-moe-aihere* (the savage who sleeps in the wild forest), the Tahitian goddess of death and mourning, the name itself fascinated Gauguin: savage, brutal, bloodthirsty. He used it, like a *nom de guerre*, to refer to himself, as though taking on the goddess's terrible aspects.



Figure 4.2.65: Detail, Paul Gauguin, *Oviri*, 1894, Stoneware, 75 x 19 x 27 cm (Musée d'Orsay, Paris)



Figure 4.2.66: Eugène Delacroix, *Medea About to Kill Her Children*, 1838, Oil on canvas, 122 x 84 cm (Musée du Louvre, Paris)

Here she stands, then: under her feet a dead she-wolf; in her hands the crushed form of its cub; the red glaze suggestive of the trickling flow of their blood. There is no known source for the episode, which was probably Gauguin's invention. This left the way open for various interpretations: that the wolves represent the savagery of the goddess herself; that by killing them she is somehow absorbing their violent capabilities; even that they are Gauguin himself. In a number of letters he draws the comparison, recalling, for instance, how Degas once described him as "the hungry wolf without a collar." Others see a veiled allusion to the practice of infanticide, outlawed by the time of Gauguin's arrival, that was carried out by the Areoi, Tahiti's priestly elite. The image evokes notions of sacrifice or perhaps stories of the vengeful mother archetype, drawing connections between *Oviri* and Delacroix's *Medea About to Kill Her Children* of 1838.



Figure 4.2.67: Detail, Paul Gauguin, *Oviri*, 1894, Stoneware, 75 x 19 x 27 cm (Musée d'Orsay, Paris)



Figure 4.2.68: Paul Gauguin, *E Haere O I Hia? (Where are you going?)*, 1892, oil on canvas, 96 x 69 cm (Staatsgalerie, Stuttgart)

Whatever story it tells, its earliest manifestations in terms of design can be traced to a work produced two years earlier during his first stay in Tahiti, *Where Are You Going?* It is here, in the stocky, sculptural and distinctly androgynous frame of the foreground figure, carrying in her arms a wolf-cub that we get our first glimpse of Oviri.

How different the ceramic is to the painting, though. Perhaps due to the personal crisis that he experienced on his return to Paris or perhaps due to the medium itself with its direct contact between hand and clay. *Oviri* is a far more radical departure, an atavistic assault on the canons of grace, harmony and beauty. Ugly seems hardly adequate to describe this twisted and condensed avatar of primal, destructive forces, the huge goggle eyes floating inhumanly around her disproportioned head.

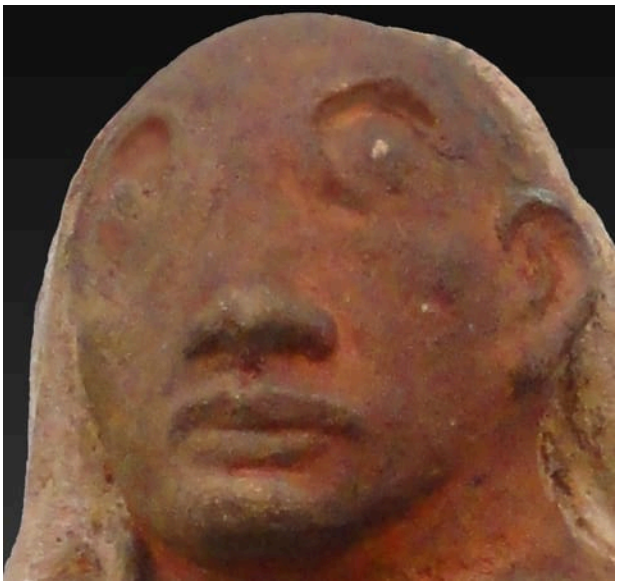


Figure 4.2.69: Detail, Paul Gauguin, *Oviri*, 1894, Stoneware, 75 x 19 x 27 cm (Musée d'Orsay, Paris)

The block-like figure, lacking any piercings or projecting parts, like Egyptian statuary, commands a frontal view. When seen from the back, though, we are presented with a wholly different image, another work of art almost. What had looked from the front to be hair appears now as a cocoon-like covering, the chrysalis underneath, incipient, on the point of breaking out. The contrast with *Oviri*, the murderess, is striking.

From this angle, the work also bears a striking likeness to Rodin's *Balzac*, a sculpture he had been working on since 1891. Although not exhibited publicly until 1898, Gauguin certainly knew of the commission and perhaps was aware of the direction Rodin was taking with it. In both works we find the same dramatic reduction of form, rejecting any reference to the classical past, tapping instead into a more primordial impulse, in *Oviri*'s case a force at once female and male, in which the destructive, death-wielding act of crushing the wolf-cub finds its creative, life-giving antithesis in the organic, bud-like form of its reverse.

A grave marker

It was this confounding of the ultimate boundary, that between death and life, that might well have prompted Gauguin in 1900, knowing that he had not long to live, to ask a friend to send him his *Oviri* from Paris intending it for his tombstone. His friend never got round to it; a merciful oversight given the stoneware would not have weathered well in that tropical climate. Instead it went on to feature in the artist's retrospective of 1906, an exhibition Picasso saw and most probably drew inspiration from when composing his *Les Demoiselles d'Avignon*.

In 1978, a bronze cast was made of the sculpture, which was placed before Gauguin's grave in the Marquesas. Acknowledged as a masterpiece, in 1987 the original entered the collection of the Musée d'Orsay.

Additional resources:

This sculpture at the Musée d'Orsay

Barbara Landy, "The Meaning of Gauguin's 'Oviri' Ceramic," Burlington Magazine, vol. 109 (1967), pp. 242, 244-246. (JSTOR)

Paul Gauguin, *Where do we come from? What are we? Where are we going?*

by DR. NOELLE PAULSON



Figure 4.2.70: Paul Gauguin, *Where do we come from? What are we? Where are we going?*, 1897-98, oil on canvas, 139.1 x 374.6 cm (Museum of Fine Arts, Boston)

Where do we come from? What are we? Where are we going? is a huge, brilliantly colored but enigmatic work painted on rough, heavy sackcloth. It contains numerous human, animal, and symbolic figures arranged across an island landscape. The sea and Tahiti's volcanic mountains are visible in the background. It is Paul Gauguin's largest painting, and he understood it to be his finest work.

Where are we going? represents the artist's painted manifesto created while he was living on the island of Tahiti. The French artist transitioned from being a "Sunday painter" (someone who paints for his or her own enjoyment) to becoming a professional after his career as a stockbroker failed in the early 1880s. He visited the Pacific island Tahiti in French Polynesia staying from 1891 to 1893. He then returned to Polynesia in 1895, painted this massive canvas there in 1897, and eventually died in 1903, on Hiva Oa in the Marquesas islands.



Figure 4.2.71: Detail, Paul Gauguin, *Where do we come from? What are we? Where are we going?*, 1897-98, oil on canvas, 139.1 x 374.6 cm (Museum of Fine Arts, Boston)

Gauguin wrote to his friend Daniel de Monfried, who managed Gauguin's career in Paris while the artist remained in the South Pacific, "I believe that this canvas not only surpasses all my preceding ones, but [also] that I shall never do anything better, or even like it." Gauguin completed *Where are we going?* at a feverish rate, allegedly within one month's time, and even claimed to de Monfried that he went into the mountains to attempt suicide after the work was finished. Gauguin—ever the master of self-promotion and highly conscious of his image as a vanguard artist—may or may not have actually poisoned himself with arsenic as he alleged, but this legend was quite pointedly in line with the painting's themes of life, death, poetry, and symbolic meaning.



Figure 4.2.72: Detail, Paul Gauguin, *Where do we come from? What are we? Where are we going?*, 1897-98, oil on canvas, 139.1 x 374.6 cm (Museum of Fine Arts, Boston)

Gauguin himself provided a telling description of the painting's esoteric imagery in the same letter to de Monfried, written in February 1898:

> **It is a canvas four meters fifty in width, by one meter seventy in height. The two upper corners are chrome yellow, with an inscription on the left and my name on the right, like a fresco whose corners are spoiled with age, and which is appliquéd upon a golden wall. To the right at the lower end, a sleeping child and three crouching women. Two figures dressed in purple confide their thoughts to one another. An enormous crouching figure, out of all proportion and intentionally so, raises its arms and stares in astonishment upon these two, who dare to think of their destiny. A figure in the center is picking fruit. Two cats near a child. A white goat. An idol, its arms mysteriously raised in a sort of rhythm, seems to indicate the Beyond. Then lastly, an old woman nearing death appears to accept everything, to resign herself to her thoughts. She completes the story! At her feet a strange white bird, holding a lizard in its claws, represents the futility of words....So I have finished a philosophical work on a theme comparable to that of the Gospel.**[1]

Not only does Gauguin's text clarify some of the painting's abstruse, idiosyncratic iconography, it also invites us to "read" the image. Gauguin suggests that the figures have mysterious symbolic meanings and that they might answer the questions posed by the work's title. And, in the manner of a sacred scroll written in an ancient language, the painting is to be read from right to left: from the sleeping infant—where we come from—to the standing figure in the middle—what we are—and ending at the left with the crouching old woman—where we are going.



Figure 4.2.73: Detail, Paul Gauguin, *Where do we come from? What are we? Where are we going?*, 1897-98, oil on canvas, 139.1 x 374.6 cm (Museum of Fine Arts, Boston)

Stylistically, the composition is designed and painted to recall frescoes or icons painted on a gold ground. The upper corners have been painted with a bright yellow to contribute to this effect, and the figures appear out of proportion to one another—"deliberately so" as Gauguin wrote—as if they were floating in space rather than resting firmly upon the earth.

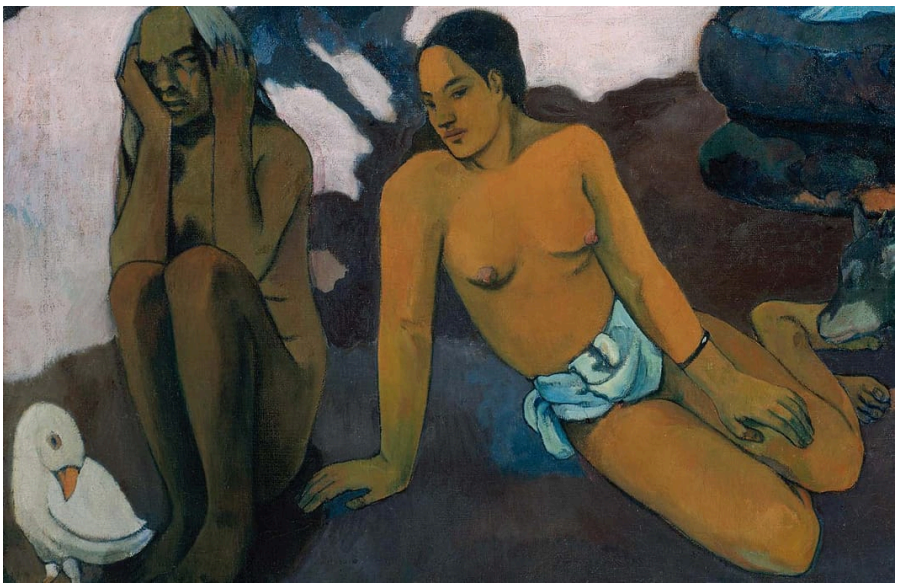


Figure 4.2.74: Detail, Paul Gauguin, *Where do we come from? What are we? Where are we going?*, 1897-98, oil on canvas, 139.1 x 374.6 cm (Museum of Fine Arts, Boston)

These stylistic features, along with Gauguin's enigmatic subject contribute to the painting's "philosophical" quality. And as is common with other Symbolist works of this period, precise, complete interpretations of *Where do we come from?* remain out of reach. The painting is a deliberate mixture of universal meaning—the questions asked in the title are fundamental ones that address the very root of human existence—and esoteric mystery. Although *Where do we come from?* is painted on a large scale similar to the decorative public panels created by the French artist Pierre Puvis de Chavannes (an artist Gauguin admired), *Where do we come from?* is essentially a private work whose meaning was likely known only to Gauguin himself.

A few months after completing the painting, Gauguin sent it to Paris along with several other works of art, intending that they should be exhibited together in a gallery or an artist's studio. He sent de Monfried careful instructions about how *Where do we come from?* should be framed ("a plain strip of wood, 10 centimeters wide, and white-washed to resemble a mural") and who should be invited to the exhibition ("in this way, instead of crowds one can have whom one wants, and thus gain connections

that cannot harm you.") The concern Gauguin reveals in the details indicates his continued awareness of the Parisian art market, which remained a central focus even as he exiled himself on a small tropical island on the other side of the globe.

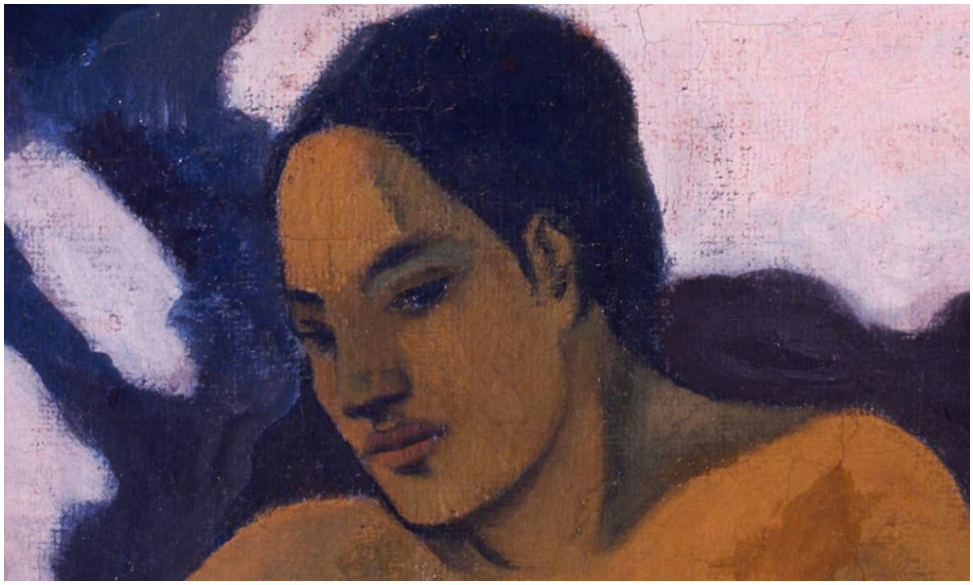


Figure 4.2.75: Detail, Paul Gauguin, *Where do we come from? What are we? Where are we going?*, 1897-98, oil on canvas, 139.1 x 374.6 cm (Museum of Fine Arts, Boston)

In November and December 1898, the group of Tahitian paintings was displayed at the gallery of Ambroise Vollard, a former law student turned art dealer who specialized in vanguard artists. Vollard seems to have had difficulty selling the "large picture," as Gauguin called it. Efforts by the artist's Parisian friends to collectively acquire the painting and donate it to the French state were never realized. *Where do we come from?* shuttled between galleries and private collections in France and Norway until the Museum of Fine Arts, Boston, purchased it in 1936.

1. "The Wisdom of Paul Gauguin—Artist," *International Studio*, volume 73, number 291, 69.

Gauguin and Laval in Martinique

by REMI POINDEXTER

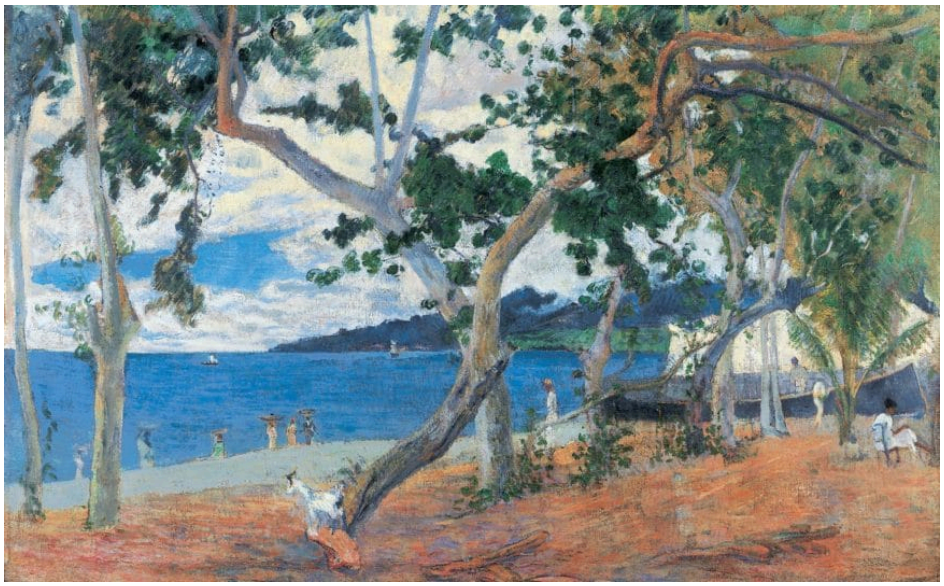


Figure 4.2.76: Paul Gauguin, *Coastal Landscape From Martinique (The Bay of St.-Pierre, Martinique)*, 1887, oil on canvas, 50 × 90 cm (Ny Carlsberg Glyptotek, Copenhagen)

When you think of Paul Gauguin, you probably think of exoticized visions of the South Pacific or colorful scenes of the Breton countryside. What you most likely do not immediately think of is the Caribbean. However, before he painted famous works like ***Vision after the Sermon*** and ***Spirit of the Dead Watching***, the artist spent several months in Martinique, a French possession in the Lesser Antilles. While on the island, Gauguin painted numerous works that portray Martinique as a lush landscape filled with local women and tropical fruits. These colorful works provide an unexpected link to Caribbean art and can serve as a case study in the history of travel and depictions of Martinique in the nineteenth century.

From Panama to Martinique

Gauguin's journey began on April 10, 1887, when he and his friend Charles Laval boarded the steamship Canada heading for Panama. Both were artists searching for something new, beyond what they viewed as the constraints of modern life in France. Gauguin—whose finances were running low—was particularly fed up with life in Paris, which he called "a desert for a poor man."[1]



Figure 4.2.77

In Panama, the pair hoped to find employment that would offer them new horizons in which to create. Unfortunately, Panama did not match their idealistic expectations: the landscape had been drastically altered by the construction of the Panama Canal, disease was rampant, and stable work was hard to find. After many difficult weeks, Gauguin and Laval left Panama for Martinique hoping to find more ideal conditions. They arrived on June 11, 1887 and rented a hut on a sugar plantation, near the island's cultural and economic capital of Saint-Pierre.

People, Fruits, and Landscapes

Although they were close to the city, the two artists focused on the tropical landscape, as seen in Gauguin's *The Mango Trees, Martinique*. Here, Gauguin depicts a group of women picking fruit in a grove of trees. Gauguin uses short strokes and varying shades of green and orange to paint the tropical vegetation which includes a recognizable papaya tree in the left foreground. The women wear traditional clothing: long, loose dresses or skirts, beaded necklaces, and madras headscarves.



Figure 4.2.78: Paul Gauguin, *The Mango Trees, Martinique*, 1887, oil on canvas, 86 × 116 cm (**Van Gogh Museum, Amsterdam**)

All of the figures in the scene are of African descent, reflecting a major demographic on the island. Like many Caribbean islands, Martinique was shaped by a plantation economy fueled by the forced labor of people who were kidnapped and transported from Africa during the transatlantic slave trade. Although slavery was abolished in 1848, descendants of enslaved people formed a large part of the island's working class, including plantation workers, who worked alongside new arrivals from Africa and Asia in often wretched conditions.

Near the center of the composition, a woman balances a basket on her head, a practice that fascinated those visiting the Caribbean. In Martinique, the women who carried goods from the countryside to markets this way were known as *porteuses*. These women were a popular subject for artists and writers traveling to Martinique—including Gauguin and Laval. Because of where they lived, the artists would have seen many local women picking fruits or passing through on their way to Saint-Pierre.



Figure 4.2.79: Charles Laval, *Women by the Sea*, 1887–89, oil on canvas, 65 × 91.5 cm (Musée d'Orsay, Paris)

Charles Laval's *Women by the Sea* also shows a group of *porteuses* walking along the coast. As in *The Mango Trees*, the women in the scene wear traditional dresses, skirts, and headscarves. Rather than a grove of trees, Laval provides a clear view of the Bay of Saint-Pierre with the Mount Pelée volcano rising in the distance. Laval also builds his composition using directional strokes of paint, but animates his figures in a more dramatic way. The *porteuse* on the left extends her forearm and fingers, while her tray of fruits bends under its own weight—a contrast to Gauguin's peaceful figures.

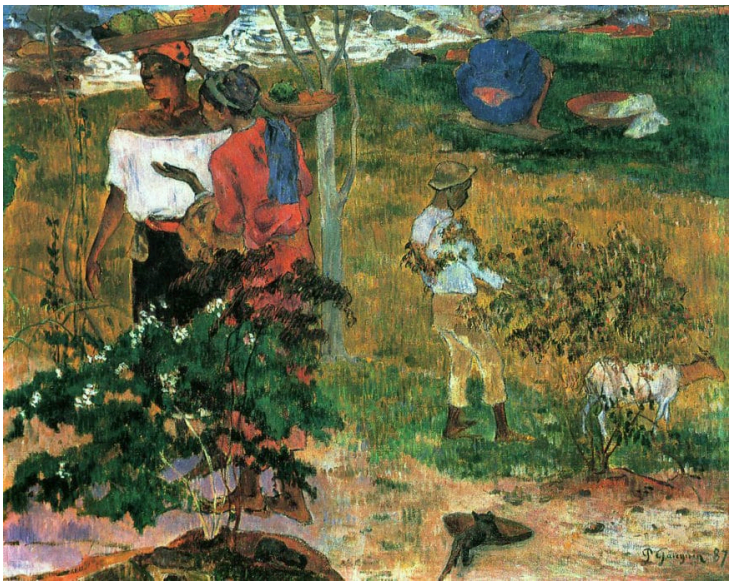


Figure 4.2.80: Paul Gauguin, *Tropical Conversation*, 1887, oil on canvas, 61 × 76 cm (private collection)



Figure 4.2.81: "'Ti Marie," engraving in Lafcadio Hearn, *Two Years in the French West Indies* (New York: Harper & Brothers, 1890), p. 107.

Idealized Caribbean Labor

A common element in Gauguin and Laval's work in Martinique is the depiction of working Afro-Caribbean women—notably *porteuses*. Although they certainly were a part of contemporary Martinique, both artists overwhelmingly favored them in their paintings. A recent exhibition catalogue noted that the artists created a vision of an island inhabited almost entirely by *porteuses*.[2]

Images of these figures were popular well before Gauguin and Laval arrived. Eighteenth- and nineteenth-century painters depicted *porteuses* in bustling cityscapes and as staffage (small figures included in landscape paintings, often to mark scale) in picturesque views for elite local patrons and audiences in France. In the second half of the nineteenth century, Caribbean travel books and magazines featured images of *porteuses* in their illustrations, which were seen by thousands of readers in France and the United States. *Two Years in the French West Indies* (published in 1890) by American travel writer Lafcadio Hearn included an entire chapter on *porteuses*, which featured an engraved illustration. Like the figures depicted by Gauguin and Laval, the barefoot woman wears a loose, long dress, madras turban, and balances a tray on her head.

The popularity of *porteuses* may be due to the unfamiliar and seemingly idealized nature of their labor. Although in reality they travelled dozens of miles along mountainous paths with heavy loads on their heads, *porteuses* could be viewed as independent

workers in harmony with nature—arguably heightened by the animals in the compositions. Compared to depictions of work on sugar plantations—which incidentally are largely absent from images depicting Martinique—the *porteuses* offered a female subject that would please audiences and cast the island as an exotic idyll.

Gauguin, Laval, and the Conventions of Depicting Martinique

Although Gauguin and Laval adhered to certain conventions of depicting Martinique, their work also stands out. The artists' chose to focus exclusively on Afro-Martiniquan people. Many paintings, photographs, and engravings emphasized the ethnic diversity on the island, especially varying shades of skin tone. Illustrated books often featured images of different (mostly female) "ethnic types," from dark-skinned *negresses* to light-skinned *mulâtresses* (note that these terms have derogatory connotations in English, but are more descriptive—if still problematic—in a French Caribbean context). In contrast, Gauguin and Laval largely avoided the depiction of different racial "types" and depicted an exclusively dark-skinned population. Whether this was a conscious choice or for another reason, the artists' figures go beyond the tradition of the ethnic showcase.

While Gauguin's choice to focus on women is hardly surprising, the fact that the figures are not blatantly eroticized is also significant, given the artist's reputation. Unlike the lounging, nude figures Gauguin later painted in Tahiti, the Martiniquan figures are fully clothed, working women. In the Martinique landscape paintings, they seem to inhabit a tropical Arcadia that are also genre scenes depicting work and rest.



Figure 4.2.82: Paul Gauguin, *Coming and Going, Martinique,* 1887, oil on canvas, 72.5 × 92 cm (Carmen Thyssen-Bornemisza Collection on loan at the Museo Nacional Thyssen-Bornemisza, Madrid)

Conclusion

Gauguin and Laval's journey to Martinique is a lesser-known chapter in the history of nineteenth-century French painting that connects to the country's Caribbean colonies. Like many artists who travelled to Martinique, the two artists depicted *porteuses* and lush tropical landscapes. However, the unique style of their works, as well as their nearly exclusive focus on Afro-Caribbean figures stands out. While Gauguin will likely continue to be remembered for his colorful (and increasingly problematized) views of the Pacific, maybe next time you hear his name you'll think of a small French island in the Caribbean.

Notes:

1. Paul Gauguin, *Letters to His Wife and Friends*, ed. Maurice Malingue, trans. Henry J. Stenning (Boston: MFA Publications, 2003), p. 75.
2. Joost van der Hoeven, "Martinique Experienced," *Gauguin and Laval in Martinique* (Bussum: Thoth Publishers, 2018), p. 68.

Additional Resources

"Gauguin and Laval in Martinique," Van Gogh Museum

Maite van Dijk, Joost van der Hoeven, et al. *Gauguin and Laval in Martinique* (Bussum: Thoth Publishers, 2018).

Paul Gauguin, *Letters to His Wife and Friends,* ed. Maurice Malingue, trans. Henry J. Stenning (Boston: MFA Publications, 2003).

Lafcadio Hearn, *Two Years in the French West Indies* (New York: Harper & Brothers, 1890).

Kay Dian Kriz, *Slavery, Sugar, and the Culture of Refinement: Picturing the British West Indies, 1700–1840* (New Haven: Yale University Press, 2008).

Joost van der Hoeven, "Martinique Experienced," *Gauguin and Laval in Martinique* (Bussum: Thoth Publishers, 2018), pp. 58–75.

Paul Cézanne

An introduction to the painting of Paul Cézanne

by DR. BETH HARRIS and DR. STEVEN ZUCKER



Figure 4.2.83: Paul Cézanne, *Still Life with Apples*, 1895-98, oil on canvas, 68.6 x 92.7 cm (The Museum of Modern Art, New York)

Categorizing the style of Paul Cézanne's (Say-zahn) artwork is problematic. As a young man he left his home in Provence in the south of France in order to join with the avant-garde in Paris. He was successful, too. He fell in with the circle of young painters that surrounded Manet, he had been a childhood friend of the novelist, Emile Zola, who championed Manet, and he even showed at the first Impressionist exhibition, held at Nadar's studio in 1874.

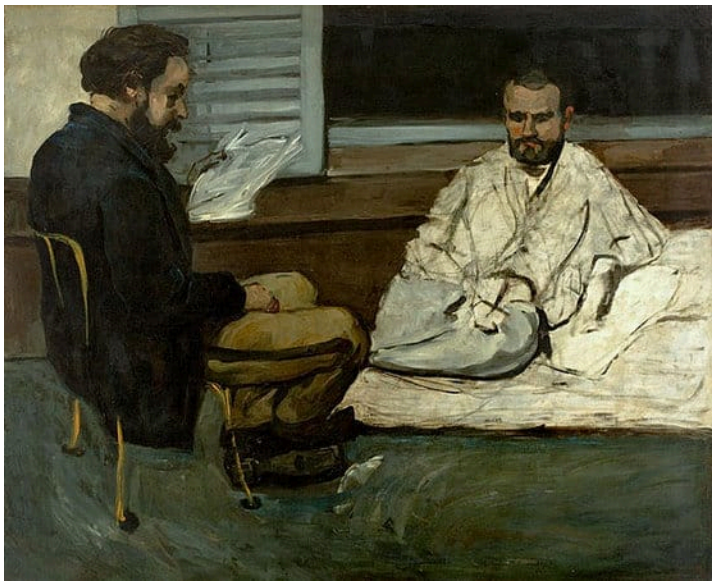


Figure 4.2.84: Paul Cézanne, *Paul Alexis reading to Émile Zola*, 1869-1870, oil on canvas (São Paulo Museum of Art)

Out of place in Paris

However, Cézanne didn't quite fit in with the group. Whereas many other painters in this circle were concerned primarily with the effects of light and reflected color, Cézanne remained deeply committed to form. Feeling out of place in Paris, he left after a relatively short period and returned to his home in Aix-en-Provence. He would remain in his native Provence for most of the rest of his life. He worked in the semi-isolation afforded by the country, but was never really out of touch with the breakthroughs of the avant-garde.



Figure 4.2.85: Paul Cézanne, *Madame Cézanne (Hortense Fiquet*, 1850–1922) in a Red Dress, 1888-90, oil on canvas, 116.5 x 89.5 cm (The Metropolitan Museum of Art, New York)

Working outdoors, but with a different purpose

Like the Impressionists, he often worked outdoors directly before his subjects. But unlike the Impressionists, Cézanne used color, not as an end in itself, but rather like line, as a tool with which to construct form and space. Ironically, it is the Parisian avant-garde that would eventually seek him out. In the first years of the 20th century, just at the end of Cézanne's life, young artists would make a pilgrimage to Aix, to see the man who would change painting.



Figure 4.2.86: Paul Cézanne, *Mont Sainte-Victoire,* c. 1887, oil on canvas, 66.8 x 92.3 cm (Courtauld Institute of Art, London)

Influence

Paul Cézanne is often considered to be one of the most influential painter of the late 19th century. Pablo Picasso readily admitted his great debt to the elder master. Similarly, Henri Matisse once called Cézanne, "...the father of us all." For many years The Museum of Modern Art in New York organized its permanent collection so as to begin with an entire room devoted to Cézanne's painting. The Metropolitan Museum of Art also gives over an entire large room to him. Clearly, many artists and curators consider him enormously important.

Additional resources:

Cézanne's *Still Life with Apples* at the MoMA

Biography of the artist from Grove Art on MoMA.org

Cézanne in Provence

Meyer Shapiro on Cézanne from Artchive

Smarthistory images for teaching and learning:



Figure 4.2.87: More Smarthistory images...

Paul Cézanne, *The Bather*

by DR. BETH HARRIS and DR. STEVEN ZUCKER



Figure 4.2.98: Paul Cézanne, *The Bather*, 1885-86, oil on canvas, 127 x 96.8 cm (The Museum of Modern Art)

A figure in space

The picture is of a single male in an ambiguous landscape. The figure is pushed up to the front of the canvas and he fills it almost from top to bottom. Behind him, deep space is defined, but there is something of a visual tug-of-war going on. Cézanne has, as is traditional, defined both the near and distant ground planes. Unusually though, he leaves out the middle plane, which intensifies the distance between the fore and back-grounds. The trouble begins when he collapses the two.



Figure 4.2.99: Legs (detail), Paul Cézanne, *The Bather*, 1885-86, oil on canvas, 127 x 96.8 cm (The Museum of Modern Art)

Look closely at the contour that defines the edge of the figure. Don't look inside the line that defines the edges of his body, look just outside (see especially beside the right leg). Cézanne has changed the brushwork and color just slightly. It appears that after the background and the figure were finished, he went back and reworked the part of the atmosphere surrounding the bather. The result is an odd shift in distance.

Rupturing illusion

The illusion of depth that allows our eye to travel back in space is ruptured as the reworked paint seems to cling to the foreground

figure. It is as if the background is lifted forward, attaching itself to the edge of the man like a frame.

Why would Cézanne want to destroy the spacial relationships that he has carefully rendered? This sounds like something Edouard Manet might do. Like Manet, it is as if Cézanne wants the viewer to try to account for this distortion—and to engage actively in the picture and its construction.

Asymmetry

Such questions becomes even more insistent if we look at the rendering of the figure. Clearly this is not the work of Raphael nor of the refined academic technicians associated with the 19th-century Salon. It fact, the figure is a mess. Beyond being generalized, the parts do not seem to belong together. Look at the arms, for instance. The left doesn't pair with the one on the right. The same is true of the chest and even the face. The legs are particularly awkward. Although one is forward, it is nevertheless far too long in relation to the other.

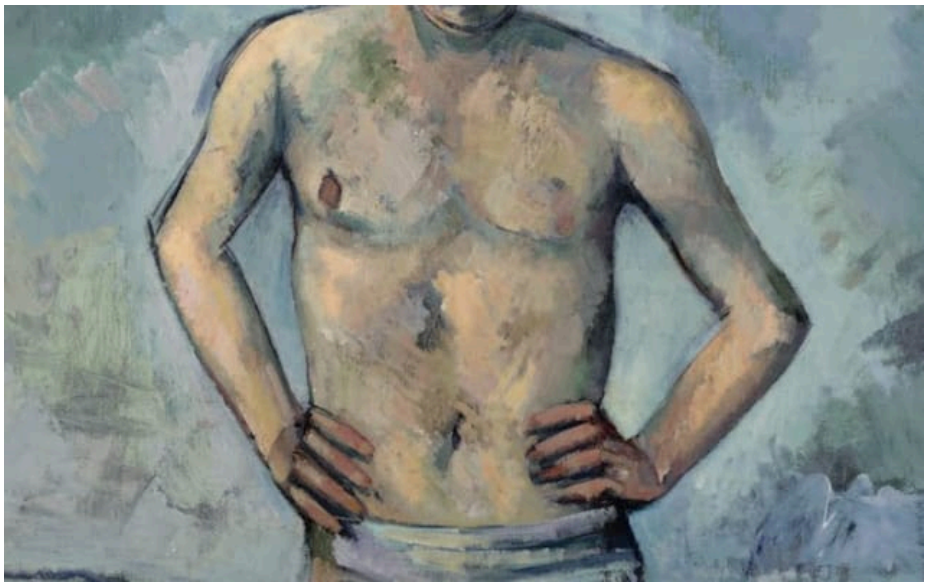


Figure 4.2.100: Arms and torso (detail), Paul Cézanne, *The Bather*, 1885-86, oil on canvas, 127 x 96.8 cm (The Museum of Modern Art)

What is the careful observer to think? Has The Museum of Modern Art made a terrible mistake? Have museums around the world given over precious wall space to a charlatan? Cézanne could draw accurately when he chose, but in this instance he consciously chose to disregard tradition and represent space in a manner that invites the viewer to acknowledge both the illusion of depth and the dismantling of that illusion.

Additional resources:

This painting at MoMA

Paul Cézanne from The Metropolitan Museum of Art's Timeline of Art History

Michael Kimmelman, "Cezanne, in All His Magnificent Mystery," *New York Time*s, 6/9/96

Smarthistory images for teaching and learning:

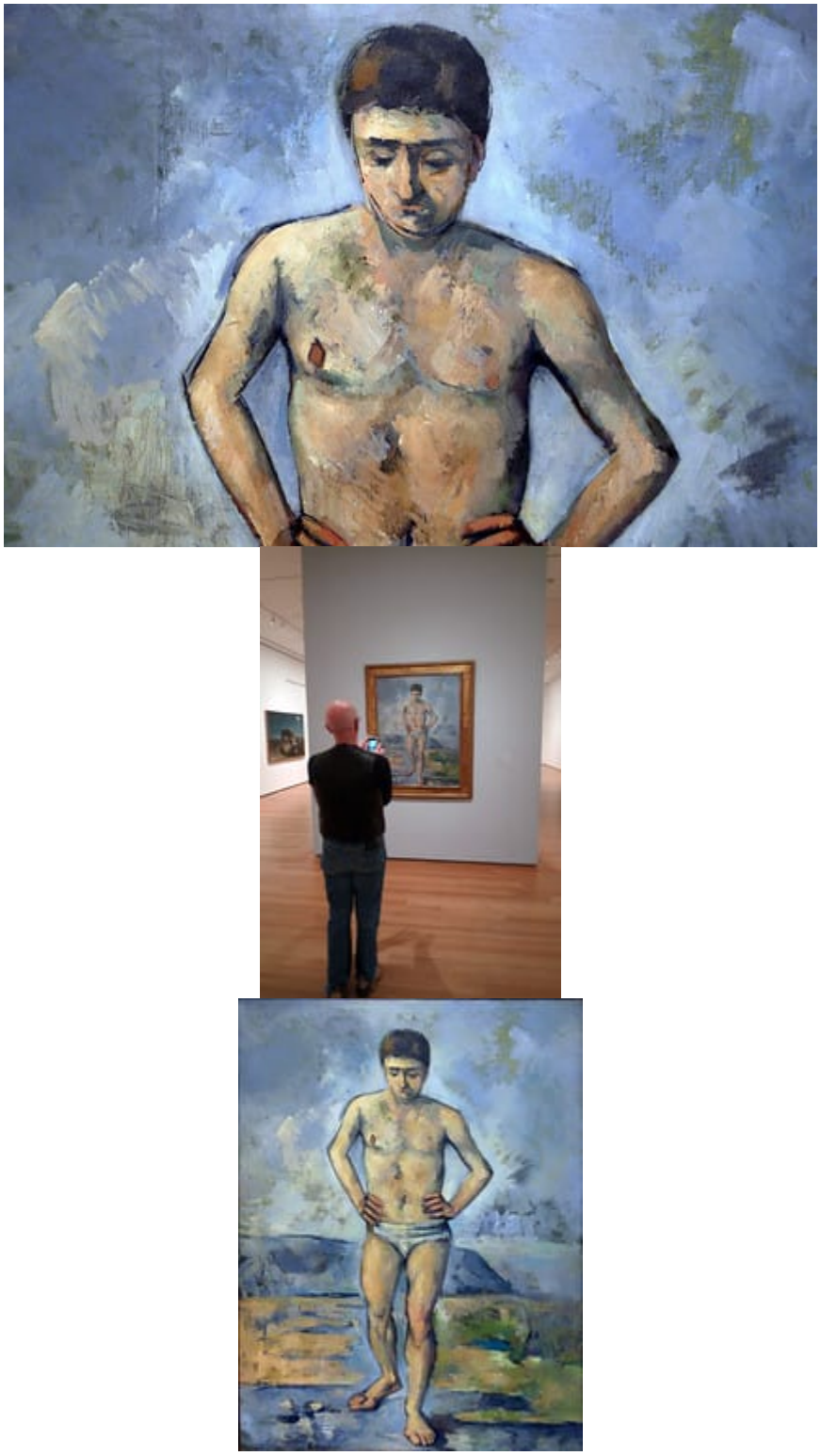


Figure 4.2.101: More Smarthistory images...

Paul Cézanne, *The Basket of Apples*

by DR. BETH HARRIS and DR. STEVEN ZUCKER



Figure 4.2.102: Paul Cézanne, *The Basket of Apples*, c. 1893, oil on canvas, 65 x 80 cm (Art Institute of Chicago)

In David's Neo-Classical era, still life was considered the least important subject type. Only minor artists bothered with what was then seen as the most purely decorative and trivial of painting subjects. The hierarchy of subjects went roughly from the most important—historical and religious themes (often very large in scale); to important—portraiture (usually of moderate scale); less important—landscape & genre (themes of common life, usually of modest scale); to least important— still life (generally small canvases).



Figure 4.2.103: Willem Kalf, *Still Life with Ewer, Vessels, and Pomegranate*, mid 1640s, oil on canvas, 81.3 x 103.5 cm (The J. Paul Getty Museum, Los Angeles, CA)

A hopeless subject

There had been one significant historical exception. In the 17th century in Northern Europe and particularly in the Netherlands, still life blossomed. But this period was brief and had little impact in France other than in the work of Chardin. So why would Cézanne turn so often to this discredited subject?

It was the very fact that still life was so neglected that seems to have attracted Cézanne to it. So outmoded was the iconography (symbolic forms and references) in still life that this rather hopeless subject was freed of virtually all convention. Here was a subject that offered extraordinary freedom, a blank slate that gave Cézanne the opportunity to invent meaning unfettered by

tradition. And Cézanne would almost single-handedly revive the subject of still life making it an important subject for Picasso, Matisse, and others in the 20th century.



Figure 4.2.104: Pablo Picasso, *Nature morte au compotier (Still Life with Compote and Glass)*, 1914-15, oil on canvas, 63.5 x 78.7 (Columbus Museum of Art)

The image at the top of this page looks simple enough, a wine bottle, a basket tipped up to expose a bounty of fruit inside, a plate of what are perhaps stacked cookies or small rolls, and a tablecloth both gathered and draped. Nothing remarkable, at least not until one begins to notice the odd errors in drawing. Look, for instance, at the lines that represent the close and far edge of the table. I remember an old student of mine remarking to the class, "I would never hire him as a carpenter!" What she had noticed was the odd stepping of a line that we expect to be straight.

Purposeful errors

But that is not all that is wrong. The table seems to be too steeply tipped at the left, so much so that the fruit is in danger of rolling off it. The bottle looks tipsy and the cookies are very odd indeed. The cookies stacked below the top layer seem as if they are viewed from the side, but at the same moment, the two on top seem to pop upward as if we were looking down at them. This is an important key to understanding the questions that we've raised about Cézanne's pictures so far.



Figure 4.2.105: Cookies (detail), Paul Cézanne, *The Basket of Apples*, c. 1893, oil on canvas, 65 x 80 cm (Art Institute of Chicago)

Like Edouard Manet, from whom he borrowed so much, Cézanne was prompted to rethink the value of the various illusionistic techniques that he had inherited from the masters of the Renaissance and Baroque eras. This was due in part to the growing impact of photography and its transformation of modern representation. While Degas and Monet borrowed from the camera the fragmenting of time, Cézanne saw this mechanized segmentation of time as artificial and at odds with the perception of the human eye. By Cézanne's era, the camera did shatter time into fragments as do non-digital cameras that can be set so that the shutter is open to light for only 1/1000 of a second.

Sight and memory

Cézanne pushed this distinction between the vision of the camera and of human vision. He reasoned that the same issues applied to the illusionism of the old masters, of Raphael, Leonardo, Caravaggio, etc. For instance, think about how linear perspective works. Since the Early Renaissance, constructing the illusion of space required that the artist remain frozen in a single point in space in order maintain consistent recession among all receding orthogonals. This frozen vantage point belongs to both the artist and then the viewer. But is it a full description of the the experience of human sight? Cézanne's still life suggests that it is not.

If a Renaissance painter set out to render Cézanne's still life objects (not that they would, mind you), that artist would have placed himself in a specific point before the table and taken great pains to render the collection of tabletop objects only from that original perspective. Every orthogonal line would remain consistent (and straight). But this is clearly not what Cézanne had in mind. His perspective seems jumbled. When we first look carefully, it may appear as if he was simply unable to draw, but if you spend more time, it may occur to you that Cézanne is, in fact, drawing carefully, although according to a new set of rules.

Seemingly simple, Cézanne's concern with representing the true experience of sight had enormous implications for 20th century visual culture. Cézanne realized that unlike the fairly simple and static Renaissance vision of space, people actually see in a fashion that is more complex, we see through both time and space. In other words, we move as we see. In contemporary terms, one might say that human vision is less like the frozen vision of a still camera and more akin to the continuous vision of a video camera except that he worked with oil on canvas which dries and becomes static.



Figure 4.2.106: Detail, Paul Cézanne, *The Basket of Apples*, c. 1893, oil on canvas, 65 x 80 cm (Art Institute of Chicago)

Purposeful destruction

So very tentatively, Cézanne began the purposeful destruction of the unified image. Look again at the cookies, or whatever they are, stacked upon the plate in the upper right. Is it possible that the gentle disagreements that we noted result from the representation of two slightly different view points? These are not large ruptures, but rather, they suggest careful and tentative discovery. It is as if Cézanne had simply depicted the bottom cookies as he looked across at them and then as he looked more slightly down at the top cookies after shifting his weight to his forward leg. Furthermore, I'm not sure that he was all that proud of these breaks that allow for more than a single perspective. Look, for instance, at the points where the table must break to express these multiple perspectives and you will notice that they are each hidden from view. Nevertheless, in doing this, Cézanne changed

the direction of painting.

Additional resources:

This painting at the Art Institute of Chicago

Still Life tour from the National Gallery of Art

Selection on The Basket of Apples from Richard Brettell, *Post-Impressionists*. Chicago (1987, p. 67

Paul Cézanne, *Still Life with Plaster Cupid*

by RACHEL ROPEIK, DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.10: Paul Cézanne, *Still Life with Plaster Cupid*, c.1895, oil on canvas (Courtauld Gallery, London)



Figure 4.2.107: Frans Hals, *Portrait of Rene Descartes*, 1649, oil on canvas, 19 x 14 cm (Statens Museum for Kunst, Copenhagen)

René Descartes

I want to raise Cartesian philosophy here. The word is capitalized because it refers to the philosophy of the proto-Enlightenment thinker René Descartes. Even if you have never heard of this great rationalist, it is likely that you will recognize one of his phrases such as “I think, therefore, I am.” This odd sentence is the result of his effort to find irrefutable proof that he actually existed. Philosophers often ask questions that are meant to reveal fundamental truths. Can you imagine for a moment asking yourself this very question–How can I actually prove that I exist? Descartes realized an elegant solution, his very ability to ask the question was the proof of independent consciousness and therefore, of his existence.

With such questions, Descartes raised many considerations that would shape the modern world. Sometimes these questions raised, in turn, conclusions seemingly at odds with each other, such as his skepticism of both perception and of self-evident assumption

Objective and subjective knowledge

Ironically, such thoughts would eventually lead to a reappraisal of our confidence in society's scientific empiricism. Empiricism relies upon objectivity. You will remember that the word "objective" means a truth that is beyond personal experience. In contrast, the word "subjective" is directly linked to personal experience.

Here is an example. Imagine a minor accident between a taxi and a city bus. A patrolman comes along to reconstruct the event. Does he only ask the cab driver what took place or does he also ask the passenger in the back of the cab and the bus driver and the riders on the bus? The cop's goal is the reconstruct what "actually" happened. But if we take a post-Cartesian position we might ask whether there really was a single actual (objective) event or whether there were actually multiple (subjective) truths, each the result of each witness's perspective. Let's take a more directly applicable example. Look about the room that you are currently in. It probably has six sides: four walls, a floor, and a ceiling. When an architect drew a diagram of your room, he/she would have conceptually stepped outside of the space so that it could be understood in total.

But is this objective view a false one? Now in the built room, you cannot see its totality in a single moment. We can only see bits and pieces of the room at any one time and must rely upon memory to understand the room as a whole. Your more subjective experience has historically been considered less important than the architect's objective conception even though you experience directly and the architect knows the room only theoretically.

Cézanne and subjective experience

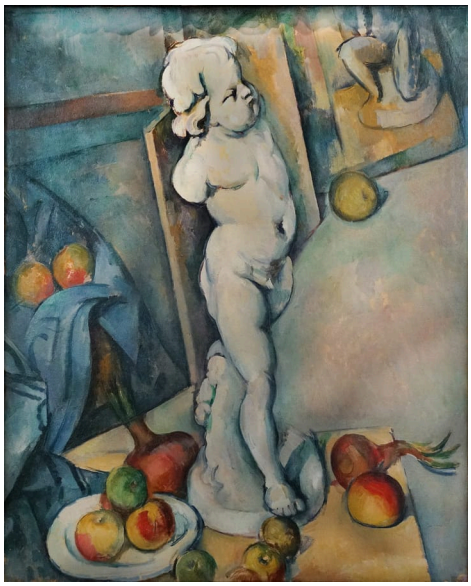


Figure 4.2.108: Paul Cézanne, *Still Life with Plaster Cupid*, c. 1894 oil on canvas, 70.6 x 57.3 cm (Courtauld Gallery, London) (photo: **Steven Zucker**, CC BY-NC-SA 2.0)

Regarding the traditional hierarchical relationship between objective and subjective, Cézanne seems to ask, "which is more true?" and his conclusion mirrors an important development of modernism. In *Still Life with Plaster Cupid*, it is the subjective view that constructs the space. Cézanne has placed a plaster cast (copy) of an ancient Roman sculpture of a cupid (the son of Venus) on a tabletop so that it dominates the composition.

To an artist of the 19th century such classical sculpture would refer to the great humanist triumph of the Greeks and Romans and the birth of naturalism. In fact, one of the most prominent features of such sculpture would be its contrapposto (you remember this: axial shifts responding to weight borne by one leg). Actually, Cézanne's li'l god-ling is also twisting at the waist, creating a subtle spiral torsion. Again, the space is odd, the floor especially, seems to rise up too steeply with the stacked canvases forming its uneven perimeter. Have you noticed that the canvases that line the floor, shape the space of the room and that this "shaping" is related to the twisting of the cupid? Let do this point by point. The right foot of the sculpture points roughly towards us and

aligns, more or less, with the receding orthogonal of the table. The figure's hips have turned. They are aligned with the plane of the canvas at the extreme left that is partly hidden behind the blue tablecloth. The Cupid's shoulders are turned even further and align with the canvas that rests behind the godling's torso.



Figure 4.2.109: Paul Cézanne, *Still Life with Plaster Cupid* (detail), c. 1894 oil on canvas, 70.6 x 57.3 cm (Courtauld Gallery, London) (photo: **Steven Zucker**, CC BY-NC-SA 2.0)

This is clearly not the objective space of the architect. Cézanne has clearly sought to match the perception of space to the movement of the the body. But isn't that what we really experience? When you walk into a room, do you see the room as an objective whole? No. We can only see a fragment at a time. But as we've already established, we don't actually see in fragments; we see continuously and space is shaped by our continuous movement through it. Try it. Focus on any straight line in the room you are now in. Lean forward, and as you might expect, the angles of the room shift. In *Still Life with Plaster Cupid*, we see Cézanne's attempt to render true human vision, vision that is subjective, continuous, and informed by memory.

Additional resources:

This painting at the Courtauld Gallery

John House (video) on Still Life with Plaster Cupid

Brice Marden (video) on Cezanne and his own painting

Smarthistory images for teaching and learning:



Figure 4.2.110: More Smarthistory images...

Paul Cézanne, *The Red Rock*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.11: Paul Cézanne, *The Red Rock*, c. 1895, oil on canvas, 91 x 66 cm (Musée de l'Orangerie, Paris)

Smarthistory images for teaching and learning:







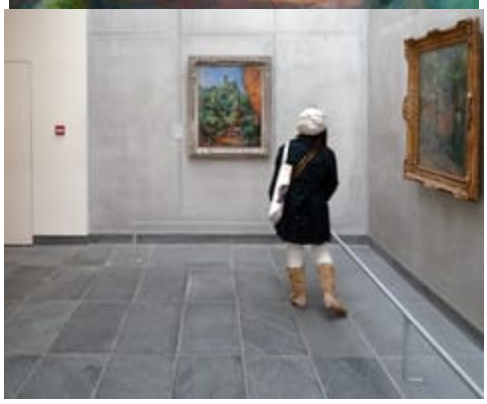




Figure 4.2.111: More Smarthistory images...

Paul Cézanne, *Turning Road at Montgeroult*

by DR. STEVEN ZUCKER and DR. BETH HARRIS



Figure 4.2.112: Paul Cézanne, *Turning Road at Montgeroult*, 1898, oil on canvas, 81.3 x 65.7 cm (Museum of Modern Art, New York)

Recently acquired

Here is a painting recently acquired by The Museum of Modern Art. It was considered one of the few great canvases by Cézanne still in a private collection. It was given to the museum by Mr. and Mrs. John Hay Whitney along with six other masterpieces by van Gogh, Matisse, and Picasso. Some gift. Still, the painting is a bit difficult to understand. At first, the structure of space is straight-forward. As expected, there is a foreground (the green foliage at the bottom), a middleground (the road and houses) and an area of deep recession (the sky).

Spatial distortion

Each of these zones are largely defined by color; green for the bushes in front, a warm ocher for the middle plane (road and houses), and blue for the sky. It is here that Cézanne begins to play tricks. Having rejected clear linear or atmospheric perspective as a means of constructing recessionary illusion, Cézanne relies on the clues afforded by scale, overlapping, and color. Yet for all this, the space in *Turning Road at Montgeroult* seems awkward.

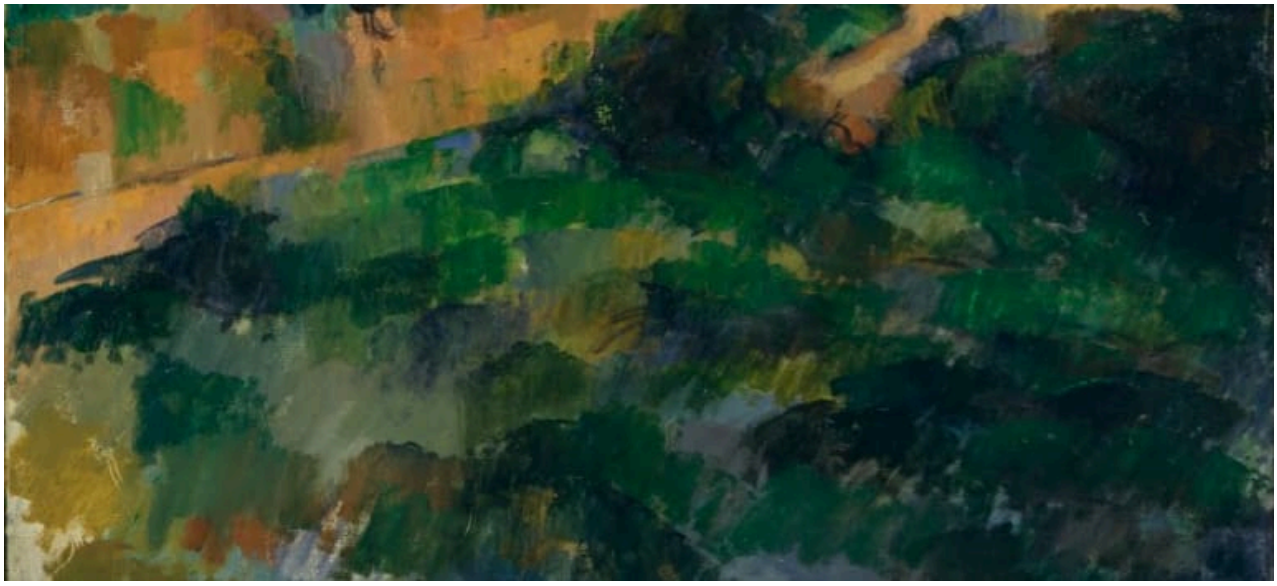


Figure 4.2.113: Detail, Paul Cézanne, *Turning Road at Montgeroult*, 1898, oil on canvas, 81.3 x 65.7 cm (Museum of Modern Art, New York)

Even as we see the three zones of space in relation to each other, the painting seems oddly flat, as if the sky were pulled forward and the foreground were pushed back. Of course we still see the illusion, but even as we see the space that Cézanne's line insists upon, the painting looks too much like three flat planes resting atop each other and the painting begins to remind us that it is, in fact, a vertical curtain.



Figure 4.2.114: Detail, Paul Cézanne, *Turning Road at Montgeroult*, 1898, oil on canvas, 81.3 x 65.7 cm (Museum of Modern Art, New York)

There are two means by which Cézanne has sabotaged the space of this canvas (unfortunately the effect is muted in reproduction and even more so on the computer screen–so trust me on this). The first is brushwork. In an Old Master landscape, the greatest detail and the most delicate brushwork exist in the foreground. The movements of the brush get broader and more generalized as space moves back. Here, however, the artist has treated the entire canvas with a consistent level of clarity, or lack there of, leveling the sense of near and far.



Figure 4.2.115: Detail, Paul Cézanne, *Turning Road at Montgeroult*, 1898, oil on canvas, 81.3 x 65.7 cm (Museum of Modern Art, New York)

Secondly, Cézanne has understood the potential of color, as opposed to chiaroscuro and linear perspective to structure or destabilize space. Have you noticed that in the middle of the sky, just to the left of the church steeple and the tree, there is a small smudge of brown paint. It is the same ocher used to render the shadows in the road and on the roofs. What is this? Have you ever seen a dense brown smudge just floating in the sky? I don't think so.

Mistakes on purpose

So what are we as the viewer to make of it? Is it a mistake? Was Cézanne a dottering old man by 1898, who accidentally hit the canvas as his arms flailed about and then was too lazy to wipe it out and repaint that section? No. So what is it then? Well, when you look at the ochre smudge, what happens to the deep space of the sky? Do you notice how the ochre smudge refuses to sit

back in deep space but instead pushes forward toward the middle plane of the houses?

When seen in person, the brown paint that hangs in the sky actually brings the sky with it, denying the illusion of deep space entirely. Also, note the bright sky blues in the foreground bushes. Just as the ochre spot in the sky forces the sky forward, so the clear blues that oddly appear within the viewer's reach, punch holes in the solidity of the foreground. The brown in the back pushes forward and the blue in the front pushes back. The result is a flattening of space or perhaps a more honest expression of the true flatness of the canvas.

Additional resources:

This painting at MoMA

This painting at the Google Art Project

Smarthistory images for teaching and learning:



Figure 4.2.116: More Smarthistory images...

Paul Cézanne, *Mont Sainte-Victoire*

by DR. BEN HARVEY

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.12: Paul Cézanne, Mont Sainte-Victoire, 1902-04, oil on canvas, 73 x 91.9 cm (Philadelphia Museum of Art)
Speakers: Dr. Steven Zucker and Dr. Beth Harris

It can be difficult to estimate, by eye, just how far away a mountain lies. A peak can dominate a landscape and command our attention, filling our eyes and mind. Yet it can come as something of a shock to discover that such a prominent natural feature can still be a long distance from us.



Figure 4.2.117: Paul Cézanne, Mont Sainte-Victoire, 1902-04, oil on canvas, 73 x 91.9 cm (Philadelphia Museum of Art)

A mountain

At 3317 feet (1011 meters) high, the limestone peak of Mont Sainte-Victoire is a pigmy compared to the giants of, say, Mount Fuji and Mount Rainier. But, like them, it still exercises a commanding presence over the country around it and, in particular, over Aix-en-Provence, the hometown of Paul Cézanne. Thanks to his many oil paintings and watercolors of the mountain, the painter has become indelibly associated with it. Think of Cézanne and his still-lifes and landscapes come to mind, his apples and his depictions of Mont Sainte-Victoire.



Figure 4.2.118: Paul Cézanne, *Bathers at Rest*, 1876-77, oil on canvas, 82 x 101 cm (The Barnes Foundation, Philadelphia)

Steeped in centuries of history and folklore, both classical and Christian, the mountain—or, more accurately, mountain range—only gradually emerged as a major theme in Cézanne's work. In the 1870s, he included it in a landscape called *The Railway Cutting*, 1870 (Neue Pinakothek, Munich) and a few years later it appeared behind the monumental figures of his *Bathers at Rest*, 1876-77 (The Barnes Foundation, Philadelphia), which was included in the Third Impressionist Exhibition of 1877. But it wasn't until the beginning of the next decade, well after his adoption of Impressionism, that he began consistently featuring the mountain in his landscapes. Writing in 1885, Paul Gauguin was probably thinking of Mont Sainte-Victoire when he imagined Cézanne spending "entire days in the mountains reading Virgil and looking at the sky." "Therefore," Gauguin continued, "his horizons are high, his blues very intense, and the red in his work has an astounding vibrancy." Cézanne's legend was beginning to emerge and a mountain ran through it.

A series

Cézanne would return to the motif of Mont Sainte-Victoire throughout the rest of his career, resulting in an incredibly varied series of works. They show the mountain from many different points of view and often in relationship to a constantly changing cast of other elements (foreground trees and bushes, buildings and bridges, fields and quarries). From this series we can extract a subgroup of over two-dozen paintings and watercolors. Dating from the very last years of the artist's life, these landscapes feature a heightened lyricism and, more prosaically, a consistent viewpoint. They show the mountain as it can be seen from the hill of Les Lauves, located just to the north of Aix.



Figure 4.2.119: Mont Sainte-Victoire (photo: **Bob Leckridge**, CC BY-NC-ND 2.0)

A walk from the studio

Cézanne bought an acre of land on this hill in 1901 and by the end of the following year he had built a studio on it. From here, he would walk further uphill to a spot that offered a sweeping view of Mont Sainte-Victoire and the land before it. The painter Emile Bernard recalled accompanying Cézanne on this very walk:

> **Cézanne picked up a box in the hall [of his studio] and took me to his motif. It was two kilometers away with a view over a valley at the foot of Sainte-Victoire, the craggy mountain which he never ceased to paint[...]. He was filled with admiration for this mountain.**

Cézanne consciously cultivated his association with the mountain and perhaps even wanted to be documented painting it. When they visited Aix in 1906, the artists Maurice Denis and Ker-Xavier Roussel found themselves being led to the same location. In an oil painting by Denis and in some of Roussel's photographs, we see Cézanne standing before his easel and painting the mountain. Again! It was the view we can see in most of Cézanne's late views of Mont Sainte-Victoire, including the painting that concerns us here, which is now in the Philadelphia Museum of Art.

The painting in Philadelphia

In this work, Cézanne divides his composition into three roughly equal horizontal sections, which extend across the three-foot wide canvas. Our viewpoint is elevated. Closest to us lies a band of foliage and houses; next, rough patches of yellow ochre, emerald, and viridian green suggest the patchwork of an expansive plain and extend the foreground's color scheme into the middleground; and above, in contrasting blues, violets and greys, we see the "craggy mountain" surrounded by sky. The blues seen in this section also accent the rest of the work while, conversely, touches of green enliven the sky and mountain.

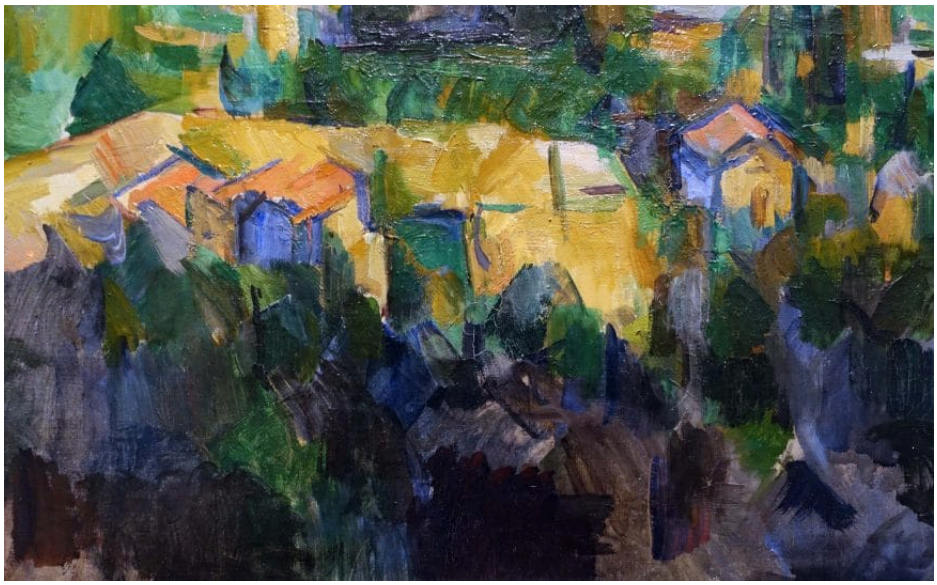


Figure 4.2.120: Detail, Paul Cézanne, *Mont Sainte-Victoire*, 1902-04, oil on canvas, 73 x 91.9 cm (Philadelphia Museum of Art)

Subtle adjustments

In other words, Cézanne introduced subtle adjustments in order to avoid too simple a scheme. So the peak of the mountain is pushed just to the right of center, and the horizon line inclines gently upwards from left to right. In fact, a complicated counterpoint of diagonals can be found in each of the work's bands, in the roofs of the houses, in the lines of the mountain, and in the arrangement of the patches in the plain, which connect foreground to background and lead the eye back.

Flatness and depth

Cézanne evokes a deep, panoramic scene and the atmosphere that fills and unifies this space. But it is absolutely characteristic of his art that we also remain acutely aware of the painting as a fairly rough, if deftly, worked surface. Flatness coexists with depth and we find ourselves caught between these two poles—now more aware of one, now the other. The mountainous landscape is both within our reach, yet far away.

A comparison

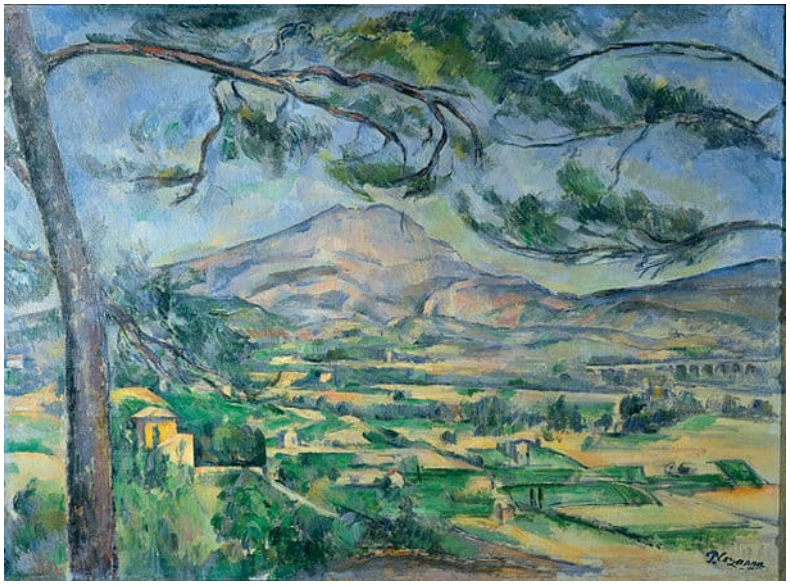


Figure 4.2.121: Paul Cézanne, *Mont Sainte-Victoire with Large Pine*, c. 1887, oil on canvas, 66.8 c 92.3 (The Courtauld Gallery, London)

Comparing the Philadelphia canvas with some of Cézanne's other views of Mont Sainte-Victoire and with photos of the area can help us to grasp some of the perceptual subtleties and challenges of the work. Take the left side of the mountain. Though the outermost contour is immediately apparent, inside of it one can also discern a second line (or, more accurately, a series of lines and edges). The two converge just shy of the mountaintop. The area between this outer contour and the interior line or ridge demarcates a distinctive spatial plane; this slope recedes away from us and connects to the larger mountain range lying behind the sheer face. Attend to this area, and the mountain seems to gain volume. It becomes less of an irregular triangle and more of a complicated pyramid.



Figure 4.2.122: Detail, Paul Cézanne, *Mont Sainte-Victoire*, 1902-04, oil on canvas, 73 x 91.9 cm (Philadelphia Museum of Art)

Or look again at the painting's most obvious focus of interest, the top of the mountain. Cézanne's other works show that the mountain has a kind of double peak, with a slightly higher point to the left side and a lower one to the right. At first glance, the Philadelphia canvas seems to contradict this: the mountain's truncated apex appears to rise slightly from left to right. But a closer look reveals that Cézanne does respect topography. The small triangular patch of light gray—actually the priming of the canvas—can be read as belonging to the space immediately above the mountain or perhaps as a cloud behind it. Thus it is the gray and light blue brushstrokes immediately below this patch that describe the downward slant of the mountain top.

Curiously, in one respect, our point-of-view is actually a little misleading. At an elevation of 3104 feet (946 meters), the left peak is not the highest point, but merely appears to so from Les Lauves. A huge iron cross—la croix de Provence—was erected on this spot in the early 1870s, the fourth to be placed there. Though visible from afar, the cross appears in none of Cézanne's depictions of the mountain.

Cézanne had presumably stood on this summit, or these summits, several times. He had thoroughly explored the countryside around Aix, first during youthful rambles with his friends and later as a plein-air artist in search of motifs. And we know for certain that he had climbed to the top of the mountain as recently as 1895. Armed with these experiences, he could have estimated the distance from Les Lauves to the top of Mont Sainte-Victoire with some accuracy—it's about ten miles (16 kilometers) as the crow flies.



Figure 4.2.123: Detail, Paul Cézanne, *Mont Sainte-Victoire*, 1902-04, oil on canvas, 73 x 91.9 cm (Philadelphia Museum of Art)

When he stood on the mountain in 1895 Cézanne had, so to speak, entered into one of his own landscapes. As he stood there, perhaps he paused to recall some of the paintings of Mont Sainte-Victoire he had already made. But, to return to Gauguin's language, could he possibly have dreamt of the works he would go on to paint in the following decade—works like the Philadelphia landscape, with its high horizon, intense blues, and astounding vibrancy?

Additional resources:

This painting in the Philadelphia Museum of Art

Another painting of Mont Saint-Victoire at The Courtauld Gallery

Another painting of Mont Saint-Victoire at The Metropolitan Museum of Art

Cézanne at The Metropolitan Museum of Art's Timeline of Art History

Paul Cézanne, *The Card Players*

by DR. BEN HARVEY



Figure 4.2.124: Paul Cézanne, *The Card Players*, 1890-92, oil on canvas, 65.4 x 81.9 cm (The Metropolitan Museum of Art)

A new direction

Writing near the end of his life, Paul Cézanne told an art critic that "one does not put oneself in place of the past, one only adds a new link." [1] In other words, through his art he wanted to engage with art history but also to modify it and take it in a new direction. It is a sentiment beautifully exemplified in the artist's five paintings of card players, which he had worked on about a decade earlier, in the early-to-mid 1890s.



Figure 4.2.125: Caravaggio, *The Cardsharps*, c. 1594, oil on canvas (Kimbell Art Myuseum, Fort Worth)

In terms of its subject matter, the series owes a clear debt to earlier depictions of card and game players by Baroque and Rococo artists such as Caravaggio (above), **de la Tour**, **the Le Nain brothers**, and **Chardin**; within Cézanne's own lifetime, the theme had been taken up anew by Daumier, **Meissonier**, Degas, and Caillebotte.

Cézanne's "new link" lies in the way he steers the subject away from its obvious symbolic and dramatic potential: clubs and hearts, winners and losers, the cheaters and the cheated. All of this had been thoroughly explored already. Instead, Cézanne attends to other aspects of the activity. He stresses the shared social space of the card game, intimate and familiar, and the attention and concentration the game demands. Not coincidentally, these are the same psychological states demanded by the acts of making and looking at art.

The version at the Met

The version of the card players at Metropolitan Museum of Art (image at the top of the page) is now generally thought to be the earliest of the five paintings in the series. It depicts somewhat eccentrically-proportioned figures surrounding a table: three play cards and a fourth merely observes the game, his pipe indicative of his contemplative attitude. These are rural laborers quietly and sociably passing the time in a tavern or room. Like the other works in the series, the setting in the Met's canvas is sparse. We see a table and three chairs (two of them more implied than fully described); a full pipe rack and a swag of yellow fabric hang from the room's rear wall. The tabletop creates a clear focus of attention within the larger work. It supports the players' arms and hands, which, in turn, provide a frame for some objects: a pipe, cards, and a prominent grey rectangle—perhaps a tobacco pouch or another card.

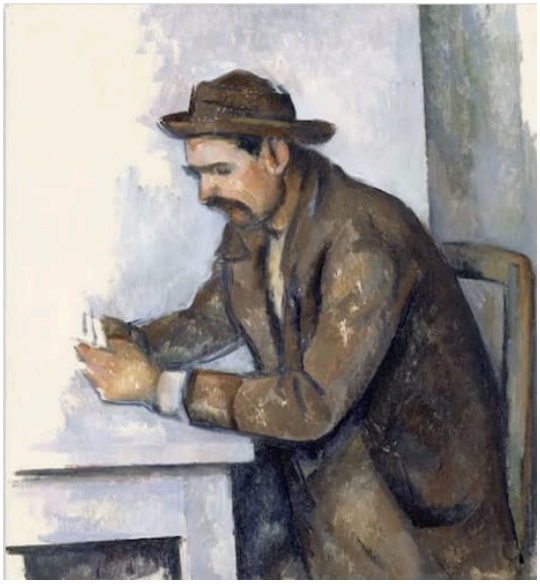


Figure 4.2.126: Paul Cézanne, *The Cardplayer*, 1890-92, oil on canvas, 46 x 50 cm (Musée d'Orsay, Paris). This study "shows a card player who features in the two largest versions, but in a reversed position (Philadelphia, Barnes Foundation; New York, The Metropolitan Museum of Art)" (**source**)

Although this would have been a familiar scene to Cézanne, we should not imagine him setting up his easel in front of an actual card game. Instead, the artist's surviving preparatory works indicate that he studied his figures independently, one by one, and then incorporated these studies into his multi-figure compositions. Cézanne made oil studies for two of the figures in the Met's painting (see above for one example), and both models have been identified as farm hands who worked at the Cézanne family's estate near Aix-en-Provence, the Jas de Bouffan. Even while they share the same space, Cézanne's figures retain a sense of independence and self-containment. They are engaged, as one art historian aptly put it, in a game of "collective solitaire."

And yet one detail in the Met's painting points, albeit subtly, to a sequence of events and thus to the logic of an actual game. The figure on the left of the work (modelled by one Paulin Paulet) appears to be on the verge of extending his index finger (see detail below), as though about to pick up a card from the table. It's a gesture that connects thought to action, the contemplation of a hand of cards to the movement of a hand. Similar actions, although more emphatically rendered, can be found in an earlier depiction of card players by Gustave Caillebotte (below), who was both Cézanne's colleague in the impressionist group and a collector of his work.



Figure 4.2.127: Gustave Caillebotte, *Game of Bezique*, 1881 (Louvre Abu Dhabi)

Formal elements trump narrative considerations

The particular logic of any card game determines the value of any given card within it, and so Caillebotte provides us an important clue in his title (*The Bezique Game*) and even allows his viewer to discern the colors and ranks of a few cards in his painting (a red ace, a black seven). In contrast, Cézanne's instinct is to withhold all such information—to keep his cards close to his chest. On his table, there is an upturned card holding three roughly rectangular patches of red pigment (see detail below). But these patches do not closely resemble diamonds and, as though to lessen any resemblance, the card also contains similar patches of white and bluish paint.



Figure 4.2.128: Table and hands with cards (detail), Paul Cézanne, *The Card Players*, 1890-92, oil on canvas, 65.4 x 81.9 cm (The Metropolitan Museum of Art)



Figure 4.2.129: Standing figure (detail), Paul Cézanne, *The Card Players*, 1890-92, oil on canvas, 65.4 x 81.9 cm (The Metropolitan Museum of Art)

The tricolor of colors is picked up elsewhere in the composition, in the blue of the workers' clothes, the white of their pipes and shirts, and in the red of the standing man's cravat (left). With their vivid color combinations and flat forms, playing cards may even have had aesthetic significance to Cézanne, suggesting a model for his own practice. As early as 1876, he told Camille Pissarro about a landscape motif he was working on: "It's like a playing-card," he wrote. "Red roofs over the blue sea." [2]

For Cézanne, the formal elements (color, shape, texture, composition) ultimately trumped narrative considerations. The marks we see on the card create a grid of compositional elements, and this places the card in relationship to two analogous grids. The first consists of the larger collection of objects on the table, where the objects and the spaces between them form a kind of tic-tac-toe pattern. The second is made up of the four figures themselves, each of whom occupies one of three distinct spatial zones (foreground, middle-ground, background) as well as one of three different lateral positions (left, center, right).

This connection between objects and figures is even more evident in the largest work in the series of card players now at the Barnes Collection in Philadelphia (see below), which Cézanne probably made soon after the Met's painting. By adding a fifth figure at the back right, the figures now repeat the X schema formed by the objects on the table.



Figure 4.2.130: Paul Cézanne, *The Card Players (Les Joueurs de cartes),* 1890-92, oil on canvas, 135.3 x 181.9 cm (The Barnes Foundation)

Other works in this series

The three remaining works in the series (Courtauld Gallery—see below, **Musée d'Orsay**, and a private collection) contain just two card players confronting each other in strict profile, a compositional idea that first appeared in the two foreground figures in the Met's work. In these later paintings, the table is narrower and cleared of all objects, with the exception of a centrally placed wine bottle. The two men study their cards intently, but no movement or move appears imminent. The details of the game have receded still further and life has been stilled. Cézanne's card players, like many of his figures, occupy a space somewhere between the painting of figures and the painting of objects. They drift between different genres.



Figure 4.2.131: Paul Cézanne, *The Card Players*, c. 1892-95, oil on canvas, 60 x 73 cm (The Courtauld Gallery, London)

A New Yorker cartoon exploits this drift to humorous effect. In it, Robert Mankoff lets still-life elements and game-playing details flood back into one of the artist's two-figure works. He fills up the card players' arms and table with piles of apples, reminding us of Cézanne's close association with the fruit. "I see your Granny Smith," runs the caption, "and I raise you a Golden Delicious" **(view image here)** Cézanne's famous apples are now a specific type, as though straight from a supermarket. His figures are now not merely poker-faced: they are poker players.

Though no money seems to be at stake in Cézanne's card games, commerce was certainly involved in the creation of the piece. By the 1890s, Cézanne was independently wealthy; he could comfortably afford to pay his models to pose and the resulting works were made out of industrially produced pigments usually applied to commercially manufactured, standard-size canvases (a "no. 25" in the case of the Met's work). Around the same time he finished the series, the artist struck up a relationship with a Parisian picture dealer, Ambroise Vollard, who then became the first owner of the Met's canvas. Vollard's business ledgers record that he made a tidy profit from the work, buying it for 250 francs and, in early 1900, selling it for 4,500. The enduring appeal of Cézanne's card players, though, may owe something to the way the five paintings provide a distinct contrast to the modern capitalism that surrounded their creation. If life can seem increasingly fast, superficial, and mercenary, then perhaps some consolation can be found here—in our prolonged engagement with handmade canvases showing a timeless, rooted, and sociable pastime.

[1] Letter to Roger Marx, January 23, 1905, as quoted in John Reward (editor), *Paul Cézanne, Letters*(Da Capo Press, 1995), p. 313.

[2] Letter to Camille Pissarro, July 2, 1876, as quoted in John Reward (editor), *Paul Cézanne, Letters*(Da Capo Press, 1995), p.146.

Additional resources:

Cézanne's *Card Players* at The Metropolitan Museum of Art

Exhibition at the Courtauld Gallery on Cézanne's Card Players—includes three videos

Peter Schjeldahl, "Game Change: Cézanne, card players, and the birth of modernism," The New Yorker (February 28, 2011)

Paul Cézanne, *Bathers (Les Grandes Baigneuses)*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.13: Paul Cézanne, *Bathers (Les Grandes Baigneuses)*, c. 1894-1905, oil on canvas, 127.2 x 196.1 cm (The National Gallery, London)

Paul Cézanne, *The Large Bathers*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

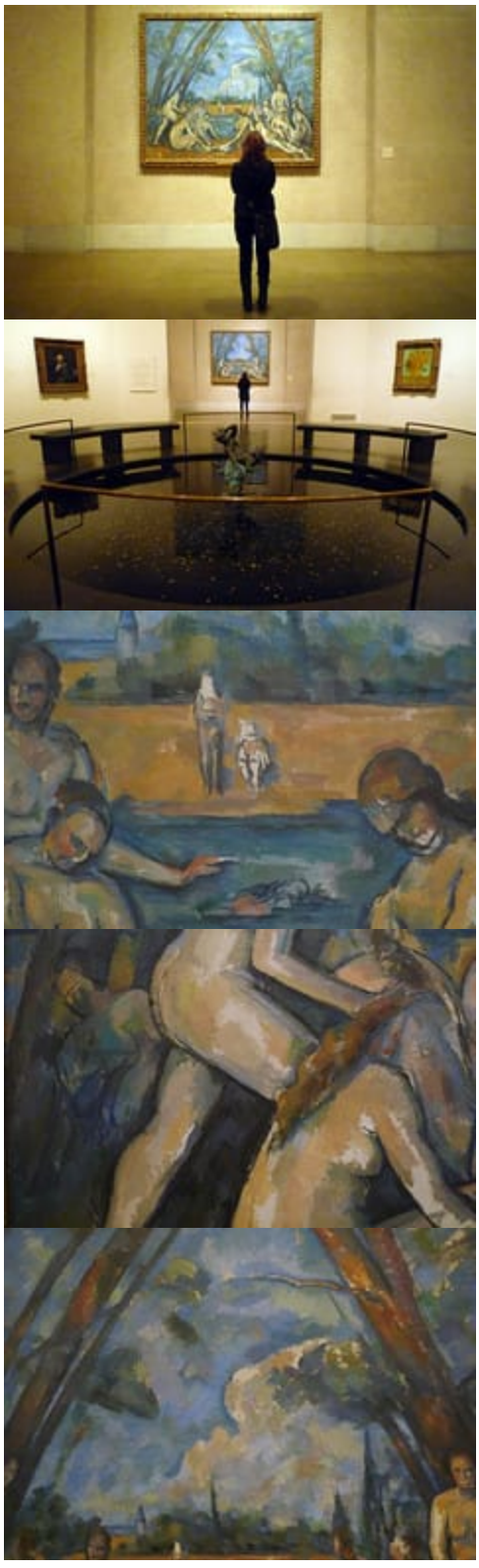
YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.14: Paul Cézanne, *The Large Bathers*, 1906, oil on canvas, 82-7/8 x 98-3/4" / 210.5 x 250.8 cm (Philadelphia Museum of Art)

Smarthistory images for teaching and learning:



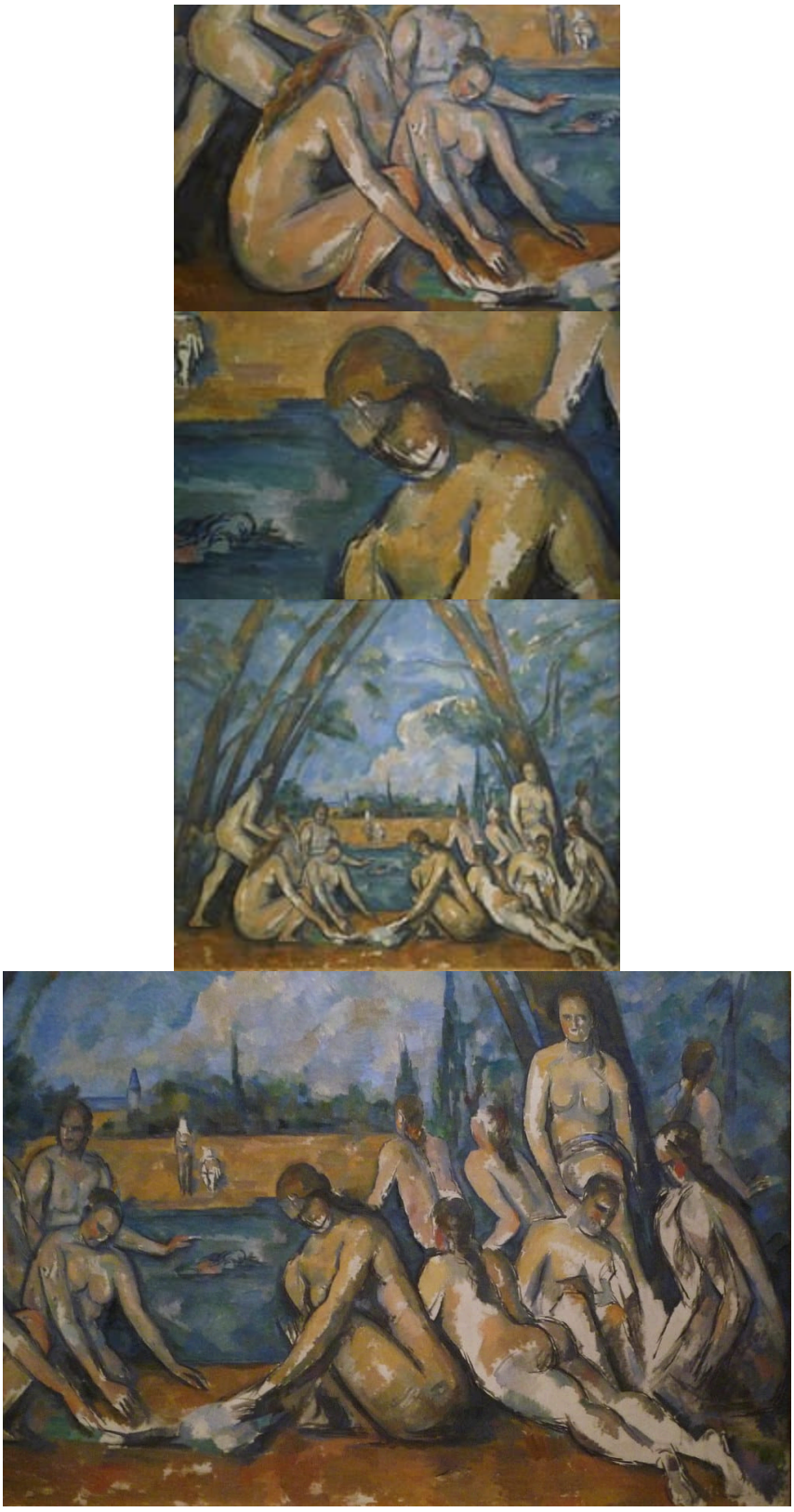


Figure 4.2.132: More Smarthistory images...

Why Is This Woman in the Jungle? Henri Rousseau's *The Dream*

by THE ART ASSIGNMENT

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.15

Artist Henri Rousseau painted *The Dream* in 1910, and it's imagery of a woman lounging on a sofa in the middle of a jungle was as surreal then as it is today. What is it about this artwork that captivated audiences then and now?

Henri de Toulouse-Lautrec, *At the Moulin Rouge*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.2.16: Henri de Toulouse-Lautrec, *At the Moulin Rouge*, 1893-95, oil on canvas, 48-1/2 x 55-1/2 inches (123 x 141 cm) (Art Institute of Chicago)

Smarthistory images for teaching and learning:





Figure 4.2.133: More Smarthistory images...

This page titled 4.2: Post-Impressionism is shared under a Public Domain license and was authored, remixed, and/or curated by Lisa Cianci.

- 8.8: Post-Impressionism by Smarthistory is licensed CC BY-NC-SA 4.0.

4.3: Fauvism + Expressionism

Fauvism and Expressionism

These two movements opened the way for even greater experimentation with color and abstract form.

c. 1900 - 1930

Fauvism

Henri Matisse is the best known of this colorful, innovative group of painters.

c. 1905 - 1910

Fauvism, an introduction

by DR. VIRGINIA B. SPIVEY

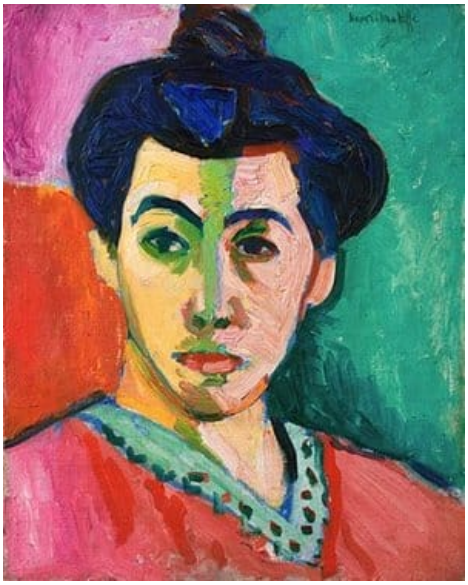


Figure 4.3.1: Henri Matisse, *The Green Line,* 1905, oil on canvas, 40.5 x 32.5 cm (Statens Museum for Kunst, Copenhagen)

Distinctive brushwork

Fauvism developed in France to become the first new artistic style of the 20th century. In contrast to the dark, vaguely disturbing nature of much fin-de-siècle, or turn-of-the-century, Symbolist art, the Fauves produced bright cheery landscapes and figure paintings, characterized by pure vivid color and bold distinctive brushwork.

“Wild beasts”

When shown at the 1905 Salon d’Automne (an exhibition organized by artists in response to the conservative policies of the official exhibitions, or salons) in Paris, the contrast to traditional art was so striking it led critic Louis Vauxcelles to describe the artists as “*Les Fauves*” or “wild beasts,” and thus the name was born.



Figure 4.3.2: Henri Matisse, *Woman with a Hat*, 1905, oil on canvas, 79.4 x 59.7 cm (San Francisco Museum of Modern Art)

One of several Expressionist movements to emerge in the early 20th century, Fauvism was short lived, and by 1910, artists in the group had diverged toward more individual interests. Nevertheless, Fauvism remains significant for it demonstrated modern art's ability to evoke intensely emotional reactions through radical visual form.

The expressive potential of color

The best known Fauve artists include Henri Matisse, André Derain, and Maurice Vlaminck who pioneered its distinctive style. Their early works reveal the influence of Post-Impressionist artists, especially Neo-Impressionists like Paul Signac, whose interest in color's optical effects had led to a divisionist method of juxtaposing pure hues on canvas. The Fauves, however, lacked such scientific intent. They emphasized the expressive potential of color, employing it arbitrarily, not based on an object's natural appearance.

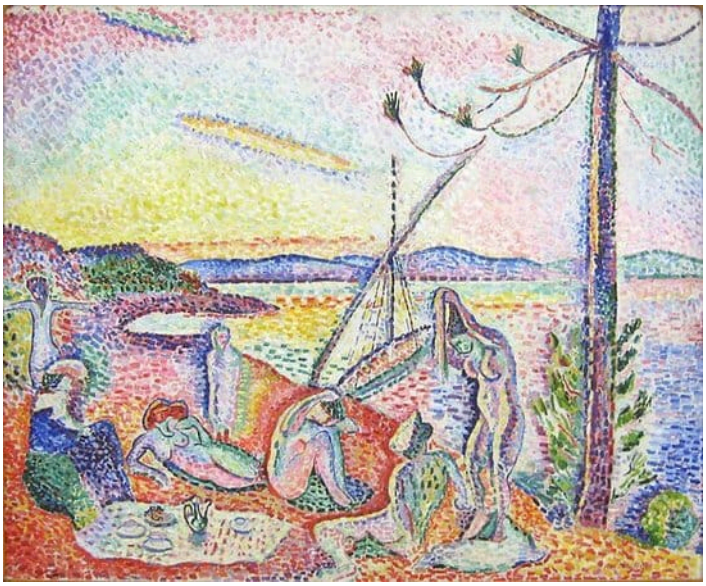


Figure 4.3.3: Henri Matisse, *Luxe, calme et volupté,* 1904, oil on canvas, 98.5 x 118.5 cm (Museé d'Orsay, Paris)

In *Luxe, calm et volupté* (1904), for example, Matisse employed a pointillist style by applying paint in small dabs and dashes. Instead of the subtle blending of complementary colors typical of the Neo-Impressionist painter Seurat, for example, the combination of fiery oranges, yellows, greens and purple is almost overpowering in its vibrant impact.

Similarly, while paintings such as Vlaminck's *The River Seine at Chatou* (1906) appear to mimic the spontaneous, active brushwork of Impressionism, the Fauves adopted a painterly approach to enhance their work's emotional power, not to capture fleeting effects of color, light or atmosphere on their subjects. Their preference for landscapes, carefree figures and lighthearted subject matter reflects their desire to create an art that would appeal primarily to the viewers' senses.



Figure 4.3.4: Maurice de Vlaminck, *The River Seine at Chatou*, 1906, oil on canvas, 82.6 x 101.9 cm (The Metropolitan Museum of Art, New York)

Paintings such as Matisse's *Bonheur de Vivre* (1905-06) epitomize this goal. Bright colors and undulating lines pull our eye gently through the idyllic scene, encouraging us to imagine feeling the warmth of the sun, the cool of the grass, the soft touch of a caress, and the passion of a kiss.



Figure 4.3.5: Henri Matisse, *Bonheur de Vivre (Joy of Life),* 1905-6, oil on canvas, 176.5 x 240.7 cm (Barnes Foundation, Philadelphia)

Like many modern artists, the Fauves also found inspiration in objects from Africa and other non-western cultures. Seen through a colonialist lens, the formal distinctions of African art reflected current notions of Primitivism–the belief that, lacking the corrupting influence of European civilization, non-western peoples were more in tune with the primal elements of nature.

Blue Nude (Souvenir of Biskra) of 1907 shows how Matisse combined his traditional subject of the female nude with the influence of primitive sources. The woman's face appears mask-like in the use of strong outlines and harsh contrasts of light and dark, and the hard lines of her body recall the angled planar surfaces common to African sculpture. This distorted effect, further heightened by her contorted pose, clearly distinguishes the figure from the idealized odalisques of Ingres and painters of the past.



Figure 4.3.6: Henri Matisse, *The Blue Nude (Souvenir de Biskra),* 1907, oil on canvas, 92.1 x 140.3 cm (Baltimore Museum of Art)

The Fauves' interest in Primitivism reinforced their reputation as "wild beasts" who sought new possibilities for art through their exploration of direct expression, impactful visual forms and instinctual appeal.

Additional resources:

Fauvism at theartstory.org

Fauvism at The Metropolitan Museum of Art's Timeline of Art History

African Influences in Modern Art at The Metropolitan Museum of Art's Timeline of Art History

Smarthistory images for teaching and learning:



Figure 4.3.7: More Smarthistory images...

Fauve Landscapes and City Views

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.3.8: André Derain, *Mountains at Collioure*, 1905, oil on canvas, 32 x 39 1/2 inches (National Gallery of Art, Washington)

Bright color and simplified form

Varied patterns of brushstrokes define the landscape in André Derain's *Mountains at Collioure*. Vivid blues and greens burst like fireworks from the twisted red branches of two trees rising up from a field of yellow-green vertical brushstrokes. A flowing horizontal line of blocky lilac strokes suggests a path or wall behind the trees, and diagonal strokes of green indicate a field rising towards the foothills. The mountains in the background are roiling forms painted in bright red, yellow, and blue under a pale green and yellow sky. Colors do not fade with distance according to the rules of **atmospheric perspective**. Their undiminished intensity makes the scene appear flat and decorative, just colors arranged in patterns on the surface of the canvas.



Figure 4.3.9: Henri Matisse, *Luxe, Calme et Volupté*, 1904-5, oil on canvas, 37 x 46 inches (Musée d'Orsay, Paris)

Made in the summer of 1905 when Derain was painting in the south of France with Henri Matisse, *Mountains at Collioure* is a quintessentially **Fauve** landscape with its bright, unmodulated color and simplified forms. Both painters developed styles that synthesized the work of their Post-Impressionist predecessors. Matisse had previously used a technique of regularized brushstrokes derived from the **Neo-Impressionists** in ***Luxe, Calme et Volupté***. He abandoned this technique for the more liberated and suggestive approach of *Landscape at Collioure*, in which the paint is applied in loosely patterned and widely separated brushstrokes to raw canvas.



Figure 4.3.10: Henri Matisse, *Landscape at Collioure*, 1905, oil on canvas, 15 1/4 x 18 3/8 inches (**MoMA**)

A greater degree of abstraction



Figure 4.3.11: Vincent van Gogh, *Olive Trees*, 1889, oil on canvas, 72.4 x 91.9 cm (Kröller Müller, Otterlo)

Derain's *Mountains at Collioure* is more carefully structured than Matisse's contemporary landscape. Both paintings use brilliant color and visible brushstrokes to create surface patterns, but Derain distinguished foreground from background by distinct differences in paint application. The foreground trees with their thickly painted, regular patterns of leaves were depicted in the style of van Gogh, while the undulating flat colored planes of the background mountains echoed Gauguin's abstraction of landscape forms.

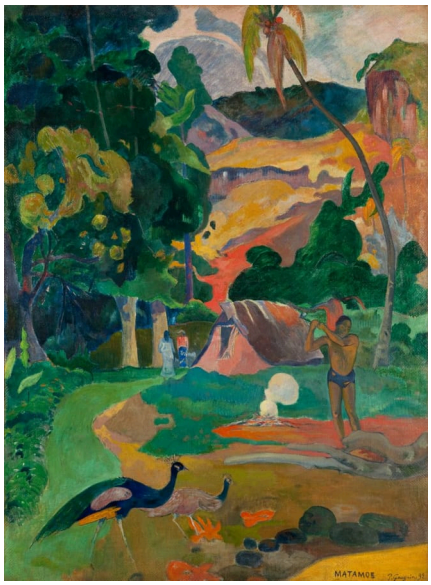


Figure 4.3.12: Paul Gauguin, *Matamoe*, 1892, oil on canvas, 115 x 86 cm (Pushkin Museum, Moscow)

Like the Post-Impressionists, Derain and Matisse intensified or even disregarded local colors in their landscapes while emphasizing surface patterns and textures. What distinguished their paintings from their predecessors and prompted an art critic to call them “Fauves” (wild beasts) was their use of more simplified color palettes, more liberated and inconsistent brushwork, and a greater degree of abstraction in both form and color.

Scenes of modern leisure

Landscapes and city views were the favored subjects of the Fauve painters. They followed the **Impressionists** and Post-Impressionists in depicting popular vacation spots and scenes of modern leisure. These included the Paris suburbs and beach resorts of Normandy favored by the Impressionists, as well as Mediterranean towns in the south of France painted by **Cézanne**, **van Gogh**, and **Gauguin**. Many of their compositions of these vacation spots are very similar to contemporary postcard views of the same locations. Their paintings are, however, far from photographic. All of the Fauve painters used a liberated style to create paintings that seem to celebrate the pleasures of painting as much as the pleasures of life. They embraced both the decorative qualities of painting — the abstract arrangement of colors and shapes—and the employment of liberated, expressive brushwork.

The wildest Fauve

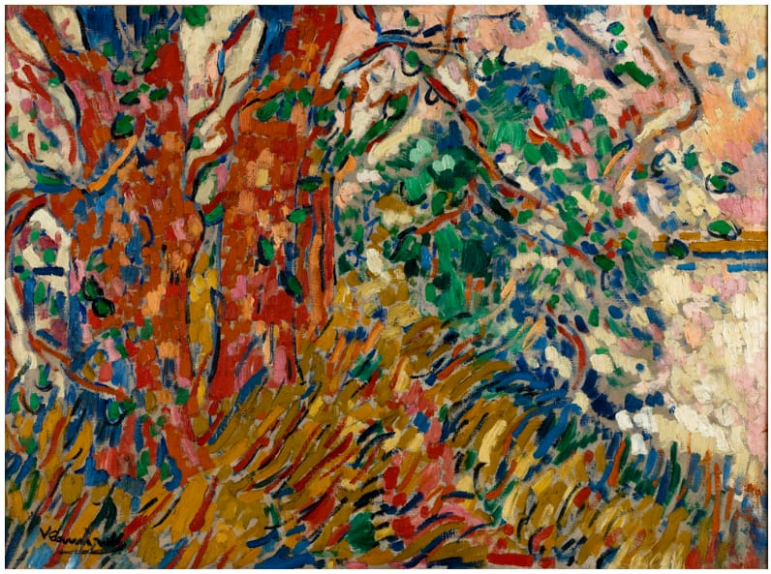


Figure 4.3.13: Maurice Vlaminck, *Banks of the Seine at Chatou*, 1905-6, oil on canvas, 59 x 80 cm (**Musée d'art moderne de Paris**)

Maurice Vlaminck is often considered the most truly Fauve painter of the group. A close friend of Derain's, he was largely self-taught and a devoted admirer of van Gogh's work. He painted the small towns and landscapes near the Paris suburb of Chatou where he lived. His use of intense color, thick paint, and simplified forms is very similar to van Gogh's style. Vlaminck, however, applies paint much more randomly and chaotically than van Gogh, who meticulously organized his canvases into regularly textured patterns of repeating brushstrokes.

In Vlaminck's *The Banks of the Seine at Chatou,* the blocky red tree trunks rise up from ochre, red, and bright blue stripes of long grass. Small patches of vibrant color pepper the upper portion of the canvas like a mosaic suggesting a tangle of branches and leaves swirling above the gleaming river on a bright windy day.



Figure 4.3.14: Maurice Vlaminck, *Bougival*, 1905, oil on canvas, 32 ½ x 39 5/8 inches (**Dallas Museum of Art**)

Fauve painters tended to use a limited range of colors, emphasizing the brightest shades of the primaries (red, blue, and yellow) as well as the secondaries green and orange. Vlaminck took this restricted palette further than Derain and Matisse, and often used his colors straight out of the tube without mixing them. In *Bougival* he organizes the landscape in broad color areas: red for the foreground field, yellow leaves for the middle ground, green trees in the background, and blue hills and water in the distance. The paint is applied with simple, blunt strokes to create a powerful image of a fall day in the countryside.

London views

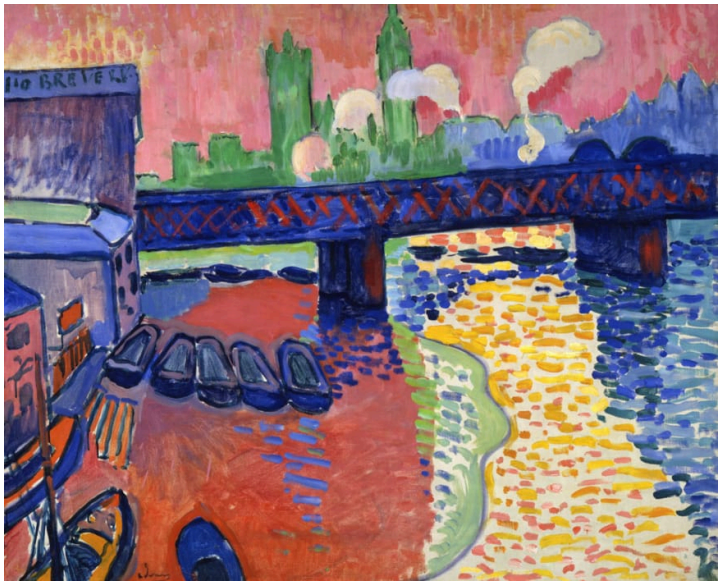


Figure 4.3.15: André Derain, *Charing Cross Bridge*, London, 1906, oil on canvas, 31 5/8 x 39 1/2 inches (**National Gallery of Art, Washington D.C.**)

Derain's *Charing Cross Bridge* is one of a series of paintings he was commissioned to make of London views. Claude Monet had recently exhibited an Impressionist series of London scenes, and Derain painted many of the same subjects in an aggressive Fauve style.



Figure 4.3.16: Claude Monet, *Charing Cross Bridge*, 1899, oil on canvas, 64.8 x 80.6 cm (**Thyssen-Bornemisza Museum, Madrid**)

Consistent with the Impressionist interest in recording specific atmospheric effects, Monet's *Charing Cross Bridge* depicts the boats, bridge, and buildings dissolving into a bright haze of foggy light and visible brushstrokes. Derain's painting, in stark contrast, makes no attempt to convey the effects of light in a realistic manner; instead, it is a riotous celebration of color and free brushwork. Bright reds, blues, and yellows dominate, with a glowing pale green shape indicating the distant Houses of Parliament.

Monet used delicate, textured brushstrokes to depict touches of light on the water, clouds of steam and swirls of fog. Derain's brushstrokes are like colored bricks representing the patterns of light and reflections on the water's rough surface. The sky, rendered with tightly packed vertical brushstrokes, is an apocalyptic orange-red, while the left side of the river is an even more intense shade of deep red with scattered light and dark blue strokes suggesting reflections.



Figure 4.3.17: Right: André Derain, *Charing Cross Bridge*, London, 1906, oil on canvas, detail (National Gallery of Art, Washington); left: Claude Monet, *Charing Cross Bridge*, 1899, oil on canvas, detail (Thyssen-Bornemisza Museum, Madrid)

Deep and bright blues outline the boats and buildings, and the bridge itself is a deep blue marked with a row of red of X's that slashes across the upper portion of the canvas. An area of yellow and orange brushstrokes on bare canvas creates a visual path of light on the river flowing under the bridge to the distant horizon. Flat pale clouds of smoke rise above the bridge like cartoon bubbles. The subject is recognizable, but the colors and simplifications of form render it hallucinatory. Next to Derain's wildly exaggerated vision, Monet's Impressionist view looks extremely refined and even old-fashioned with its nuanced rendering of reflected light and color.

Busy street scenes



Figure 4.3.18: André Derain, *Regent Street*, 1906, oil on canvas, 26 x 39 1/8 inches (**Metropolitan Museum of Art**)

Most of Derain's London paintings depict river views, but he also painted a crowded shopping street. In *Regent Street* the simplifications of color and form create a compelling image of the city's commercial district. Horse-drawn carriages, a bicycle, and pedestrians fill the roadway. We see shop signs and posters, flags and street lights. A man wearing advertising posters dominates the lower left corner, while fashionably dressed shoppers occupy the right as they move down the sidewalk towards us. Derain's Fauve colors and shapes are here an effective means to render the chaos of the modern city.



Figure 4.3.19: Raoul Dufy, *Posters at Trouville*, 1906, oil on canvas, 65 x 81 cm (MNAM, Centre Pompidou, Paris)

Raoul Dufy painted many scenes of the beach resorts in Normandy with bright colors and simplified forms. Rather than using the intense, often non-naturalistic colors of the leading Fauves — Matisse, Derain and Vlaminck — Dufy chose subjects that were themselves brightly colored, such as advertising billboards and the flag-decorated streets of Bastille Day. His approach was closer to Impressionism, but like his fellow Fauves he embraced simplified form, brilliant colors and direct visible brushwork.



Figure 4.3.20: Raoul Dufy, *The Street Decked with Flags*, 1906, oil on canvas, 81 x 65 cm (MNAM, Centre Pompidou, Paris)

André Derain, *The Dance*

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.3.21: André Derain, *The Dance*, 1906, oil on canvas, 70 3/4 x 90 inches (Fridart Collection)

André Derain's *The Dance* is an ambitious and remarkably eclectic painting that combines references to multiple European and non-European sources. The highly saturated palette of the primary colors (red, blue, and yellow), with the addition of the secondary green, is characteristic of **Fauvism**, a pictorial style associated with wild and unrestrained expression. In its attempt to synthesize a disparate collection of sources and references, *The Dance* testifies to the multi-layered, hybrid approach modern artists adopted as they attempted to create art works imbued with so-called **primitive** qualities.

Exotic and primitive motifs

At seven and a half feet wide, *The Dance* is as large as Henri Matisse's Fauve masterpiece ***Bonheur de Vie/Joy of Life***, painted the same year. The subjects of the two paintings, female figures cavorting in an imaginary landscape, are similar, and both paintings suggest a fundamental union between humans and nature. Matisse's references are, however, classical and Arcadian, while Derain's are more exotic and primitive.



Figure 4.3.22: Paul Gauguin, *Mahana no atua (Day of the God)*, 1894, oil on canvas, 26 7/8 x 36 inches (**Art Institute of Chicago**)

The Dance echoes the paintings of Paul Gauguin in both style and subject matter. Like Gauguin, Derain uses simplified forms and unmodulated areas of bright color in a composition that emphasizes flat, decorative qualities. The subject is overtly exotic with nude and partially nude women displayed in a fantastic landscape along with a huge scarlet macaw and a green snake. These

creatures allude to both their non-European native habitats and to an Edenic world where humans live in harmony with nature.

Derain also followed Gauguin in his eclectic combination of cultural references. However, unlike his predecessor, whose primitivist pastiches resulted from a sincere commitment to the discovery of universal symbols and spiritual forms, Derain's eclecticism is a more superficial adoption of varied exotic motifs. Art historians have identified references to Indian carved reliefs, African masks, Romanesque sculptures, European folk art, and Japanese prints in *The Dance*. The figure on the right is directly derived from another painting of "exotic" non-European women, **Eugène Delacroix's** *Women of Algiers*. The black woman on the right in Delacroix's imagined harem scene has become a racially ambiguous, mostly nude blonde woman with multi-colored skin in Derain's Fauve painting.



Figure 4.3.23: Eugène Delacroix, *Women of Algiers*, 1834, oil on canvas, 180 x 229 cm (Louvre Museum, Paris)

New and exotic forms of dance


Huit pages : CINQ centimes

Le Petit Parisien

SUPPLÉMENT LITTÉRAIRE ILLUSTRÉ

DIRECTION : 18, rue d'Enghien (10e), PARIS

Exposition Coloniale de Marseille

LES DANSEUSES DU ROI SISSOWATH AU PAVILLON DU CAMBODGE

Figure 4.3.24: Cambodian dancers at the Colonial Exposition, Illustration for *Le Petit Parisien*, June 17, 1906

The Dance belongs to a well-established tradition of imagined primitivist scenes in European art that feature sexualized images of non-European women. It is also specifically of its time in its focus on dance. At the turn of the 20th century there was widespread interest in non-western dance forms. International expositions often included performances of traditional court and folk dances from non-western countries. Derain saw the Cambodian court dancers at the 1906 Colonial Exposition in Marseille around the

time that he painted *The Dance*.

Modern dance also had its origins during this period. Dancers such as Loïe Fuller and Isadora Duncan rejected the stylized forms of classical ballet and focused on the body as a vehicle of direct, unfettered expression. Duncan saw her dancing as an expression of universal natural forces linked to **Ancient Greece**. Another popular dancer of the period, Ruth St. Denis, created "exotic" dances loosely based on Indian, **Egyptian**, and **Babylonian** mythology.



Figure 4.3.25: Right: Isadora Duncan dancing, 1903. Right: Ruth St. Denis in *Radha*, c. 1906 (New York Public Library)

Fauvism and African art

Cultural eclecticism is a hallmark of European modern art in the early years of the 20th century, and Derain and his fellow Fauves Maurice Vlaminck and Henri Matisse were significant contributors to the trend. They were among the first modern artists to acquire African masks and sculptures, and Derain visited ethnographic collections in Paris and London to see non-western artifacts. These became increasingly available for purchase during this period as a consequence of Europe's escalating investment in its overseas colonies.

With its combination of references to many different cultures and styles, Derain's *The Dance* is a prime example of the period's cultural eclecticism. Aggressive primary colors, simplified non-naturalistic forms, and an emphasis on decoration combines with eroticized images of women in nature to signify the primitive.



Figure 4.3.26: André Derain, *The Dance*, detail, 1906, oil on canvas, 70 3/4 x 90 inches (Fridart Collection)

For many modern artists the use of intense colors and rudimentary forms was considered a means to regain contact with the natural energies of the universe and express themselves directly. Their appreciation of the non-western works they collected was primarily formal (in other words, concerned with their appearance, and not their cultural context), and they adopted similar abbreviated and simplified forms in their own works.

Matisse remarked on the difference between the European approach to sculpting the human body and the African sculptures he saw in a Paris curio shop around 1905. European sculptors were interested in the naturalistic representation of musculature, while the African sculptures were "made in terms of their material, according to invented planes and proportions.[1]"

Primitivist styles and subjects

Both Matisse and Derain made sculptures of human figures that radically abstracted the body in response to the African sculptures they encountered. Derain's roughly-carved sandstone *Crouching Man* simplifies and reduces the human figure to a cube, using exaggerated forms to convey a mood of introspective despair.



Figure 4.3.27: André Derain, *Crouching Man*, 1907, sandstone, 13 x 11 x 10 1/4 inches (**Museum Moderner Kunst, Vienna**)

Matisse's more conventional *Reclining Nude* also uses simplification and exaggeration of body parts, as well as twisting the angle of the head, to explore alternative strategies for representing the human figure.



Figure 4.3.28: Henri Matisse, *Reclining Nude I (Aurora)*, 1907, cast in bronze c. 1912, 13 11/16 x 19 3/4 x11 inches (Albright-Knox Art Gallery, Buffalo)

Matisse's painting *The Blue Nude* was developed from similar formal concerns. The traditional European subject of the reclining nude, often associated with **Orientalist fantasies in the 19th century**, is here situated outdoors in a vaguely exotic setting suggested by the palm-like plants in the background. As in Matisse's sculpture, the shapes of the body are simplified and exaggerated to emphasize the buttocks and breasts.



Figure 4.3.29: Henri Matisse, *Blue Nude (Memory of Biskra)*, 1907, oil on canvas, 36 1/4 x 56 1/8 inches (Baltimore Museum of Art)

Matisse's materials—paint on canvas—are emphasized, as is the artist's labor. We see his brushstrokes and, in places, the canvas underneath the paint. Matisse has not covered up changes he made to the figure, giving us the sense that we are seeing a work still in progress — further enhancing our awareness of the painting's materiality. Subtitled *Memory of Biskra*, after a town in Algeria Matisse had visited, the painting is the result of an encounter between European erotic fantasy and abstracted forms derived from African sculpture.

In *Blue Nude* and *The Dance,* Matisse and Derain used a liberated Fauve approach to color and form to depict female figures in an exotic setting. They combined what was considered a crude and primitive style with references to so-called primitive cultures. The paintings demonstrate how closely the Fauve painters' concerns were bound up with both primitivist fantasies of enjoying leisure and women in tropical landscapes and the formal qualities associated with primitivism — simplified drawing, flattened space, and bright decorative color.

Notes:

1. Quoted in Sarah Whitfield, *Fauvism* (London: Thames and Hudson, 1991), page 161.

Henri Matisse

Henri Matisse, *Luxe, calme et volupté*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.1: Henri Matisse, *Luxe, calme et volupté*, 1904, oil on canvas, 37 x 46″ (Museé d'Orsay, Paris)

Key points:

- *Luxe, calme et volupté* borrows from the Neo-Impressionist style in its brushwork, but does not adopt Neo-Impressionism's approach to color.
- Rather, this painting anticipates the Fauves's imaginative use of expressive color.
- Color and form are key ways that early 20th-century artists began to abandon representation for abstraction.

Painted while the artist stayed with the pointillist painter, Signac, at his home in Saint-Tropez on the Côte d'Azur. Matisse's title comes from Charles Baudelaire's poem, "L'invitation au voyage (Invitation To A Voyage)" from his collection, *The Flowers of Evil*. "Luxe, calme et volupté" translates just as it sounds in English: "Luxury, calm, and voluptuous(ness)."

Henri Matisse, *Open Window, Collioure*

by DR. CHARLES CRAMER and DR. KIM GRANT

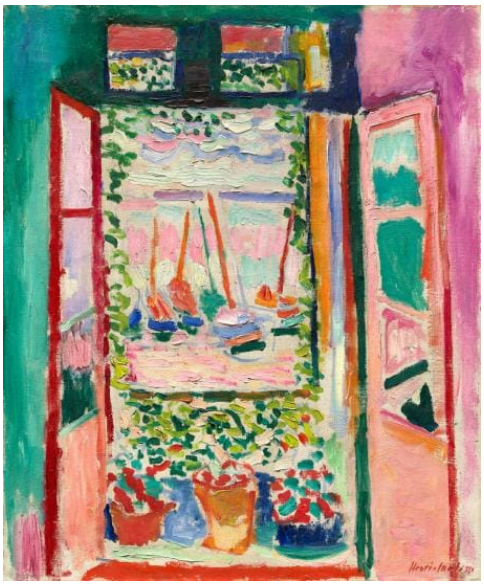


Figure 4.3.30: Henri Matisse, *Open Window, Collioure*, 1905, oil on canvas, 55.3 x 46 cm (National Gallery of Art, Washington)

An explosion of color

In Henri Matisse's *Open Window, Collioure* the casements of a large French window project toward us to reveal an explosion of brilliant Mediterranean color. The paint is applied very loosely; even in reproduction we can see almost every brushstroke. The painting looks as if it were made yesterday, and in some places (like the lower right where bare canvas is visible), seems unfinished. We can envision Matisse's working process brushstroke by brushstroke, and we are there with him responding with excitement to the wealth of color and light at a Mediterranean seaside town in summer.

Although the style implies a rapid or even slipshod painting process, *Open Window, Collioure* was carefully orchestrated in every aspect, from the composition to the color relationships and the paint application. The window is placed slightly off center to the left, which gives the composition a casual feeling, in keeping with the slapdash quality of the brushstrokes. Underpinning this seeming casualness, however, is a calculated structure of repeating and nested rectangles that creates both a strong surface pattern and a series of internal "windows."

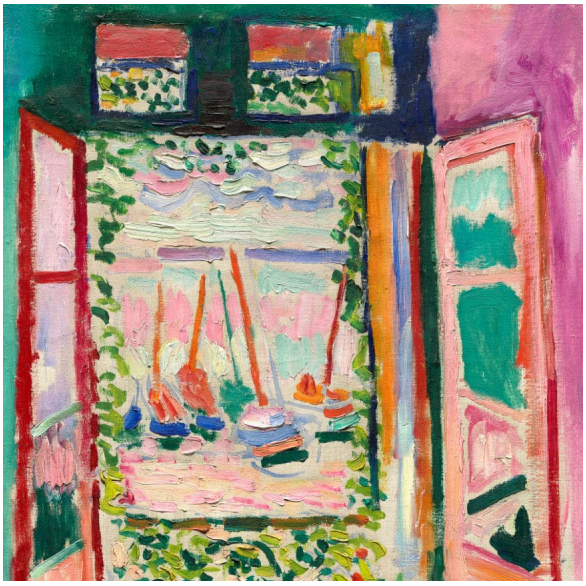


Figure 4.3.31: Henri Matisse, *Open Window, Collioure*, detail, 1905, oil on canvas, 55.3 x 46 cm (National Gallery of Art, Washington)

The brightest area of the painting, the central view of boats in harbor, is framed by some of the painting's darkest tones in both the literal window frame and a pattern of green leafy vines. Surrounding this central view are multiple subsidiary window panes.

Two transom windows at the top frame more views of the porch window and vines. Glass panes in the casement windows reflect both the view outside the French window and the colors of the walls.

Brilliant colors ricochet and echo across the canvas. Matisse uses complementary color contrasts throughout, setting off his glowing reds and pinks with cool greens. The walls are fuchsia and green, and the upper window panes of the casements reflect the opposing wall's color, enhancing the intensity of the hues by contrast. A similar mutually intensifying contrast of colors appears where the vertical stripe of vivid orange paint, perhaps representing a curtain, is brushed next to the dark ultramarine strip of the window frame. Varied patterns of pale pink and turquoise brushstrokes represent sea and sky in the view out the window.

Denying the illusion of depth

Open Window, Collioure engages with, and ultimately undermines, the post-Renaissance conception of a painting being like a window. Matisse's drawing of the window emphasizes its role as a framing device located in a three-dimensional space. The casements open inward, creating a perspectival view leading to the window opening. The balcony with flower pots on the floor is a shallow intermediate space between the room and the view of the harbor, which reaches to the horizon. However, all of these indications of spatial depth are negated by color and paint application, which emphasize the flat surface of the canvas and fail to create a convincing illusionistic scene. We never forget that we are looking at a painting and not out a window.

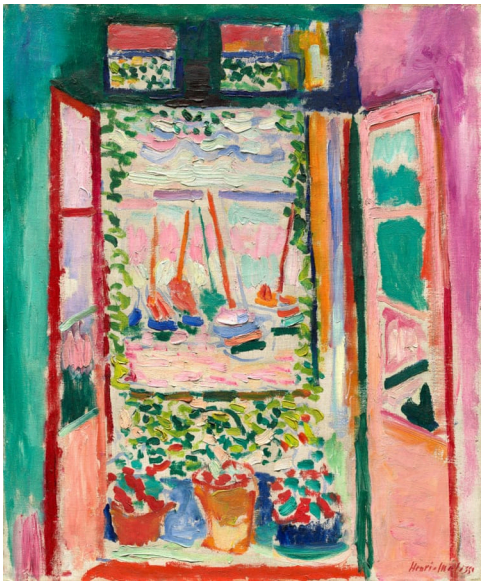


Figure 4.3.32: Henri Matisse, *Open Window, Collioure*, 1905, oil on canvas, 55.3 x 46 cm (National Gallery of Art, Washington)

The highly visible brushstrokes and areas of unpainted canvas are the most obvious way Matisse denies us the illusion of reality, but his use of color is also important. Not only is it extremely bright and flat, lacking the **chiaroscuro** modulations traditionally used to suggest volume and depth, it also repeatedly subverts clear differentiation of foreground and background. For example, the distant masts of the boats in the harbor and the much closer verticals of the window frames create a surface pattern of bright orange and red verticals. The more distant reds and oranges are not muted to indicate depth through atmospheric perspective. Similarly, the dark blue and green brushstrokes depicting the hulls of the boats are echoed by the dark blue and green paint strokes used to indicate edges of the window frames and various objects in the foreground.

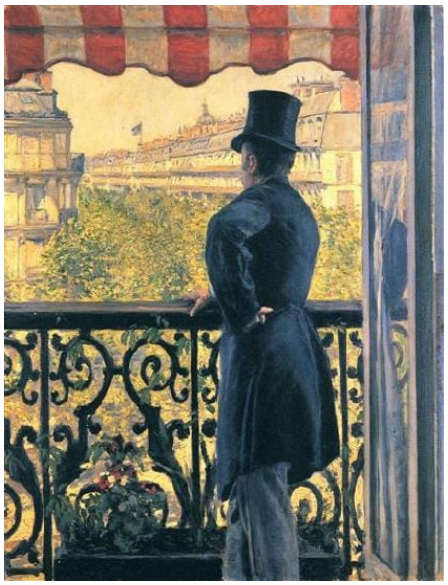


Figure 4.3.33: Gustave Caillebotte, *Man on a Balcony: Boulevard Haussmann*, 1880, oil on canvas, 116 x 89 cm (Private Collection)

A glance at Gustave Caillebotte's compositionally similar *Man on a Balcony: Boulevard Haussmann* shows how completely Matisse undermines the depiction of perspectival depth. Caillebotte's naturalistic scene clearly distinguishes between the darker dominating foreground space of the balcony and the vista of sunlit buildings receding down the boulevard. In Matisse's *Open Window, Collioure,* the distant harbor view dominates, and it is framed by the window as if it were itself a painting. It has no defined spatial relationship to the foreground, unlike Caillebotte's vista down the boulevard where we can determine the relation of the balcony to the view with precision.

The 1905 *Salon d'Automne*

Open Window, Collioure was one of several paintings Matisse exhibited with a group of friends at the 1905 *Salon d'Automne* in Paris. A sympathetic art critic, Louis Vauxcelles, inadvertently named the group when he described the effect of their brilliantly colored paintings hanging on the walls surrounding two classicizing sculptures as being like **Donatello** among the *fauves* (wild beasts). The name came to reflect the extreme public reaction to the paintings, which were widely considered disturbing and outrageous. Conservative critics mocked the paintings in the press, but the **Fauve** painters ultimately profited from the notoriety and found dealers, critics and collectors who supported their work.



Figure 4.3.34: Henri Matisse, *Woman with a Hat*, 1905, oil on canvas, 80.6 x 59.7 cm (San Francisco Museum of Modern Art)

Matisse was the leader of the group, and his *Woman with a Hat* was considered the most scandalous painting in the “fauve cage” at the exhibition. The use of brilliant complementary colors, prominent brushwork and seemingly unfinished areas is very similar to *Open Window, Collioure*, but their effect in this traditionally-composed portrait of a woman was unsettling.



Figure 4.3.35: Left: Berthe Morisot, *Summer’s Day*, detail, c. 1879, oil on canvas, entire painting 45.7 x 75.2 cm (The National Gallery, London); Right: Vincent van Gogh, *Self-Portrait*, 1899, oil on canvas, 65 x 54 cm (Musée d’Orsay, Paris)

The crude dabs of paint, harsh simplified features, and the rendering of the shadows on the face in brilliant turquoise were all startling, even for viewers used to the painterly abbreviations and bright colors of Impressionism and Post-Impressionism. The faces in Morisot’s Impressionist *Summer’s Day*, and van Gogh’s Post-Impressionist *Self-Portrait* lack realistic detail and call attention to the artists’ brushstrokes, but the color used in both paintings remains well within the range of naturalistic depiction compared to Matisse’s *Woman with a Hat*.

In addition to the aggressively non-naturalistic tones in the face, Matisse’s style in *The Woman with the Hat* is raw and disjunctive. The painting looks unfinished and unresolved, with some parts painted in heavy impasto and others barely brushed in. The Salon jury tried to persuade him to retract the painting from his submission, but Matisse refused, indicating that he believed the painting to be finished and ready for exhibition.

The expressive potential of color



Figure 4.3.36: Henri Matisse, P*ortrait of Mme. Matisse: The Green Line*, 1905, oil on canvas, 40.5 x 32.5 (Statens Museum for Kunst, Copenhagen)

Matisse's paintings in the 1905 *Salon d'Automne* with their disjunctive brushwork and tempestuous color were his most radical Fauve works. After the exhibition, Matisse continued to use bright non-naturalistic color, but his paint application became more consistent and his colors less chaotic. In *Portrait of Mme. Matisse: The Green Line* and ***Bonheur de Vivre*** the brilliant colors are organized into larger areas to maximize their intensity. Over the course of the next few years he became increasingly concerned with pictorial harmony.



Figure 4.3.37: Henri Matisse, *Bonheur de Vivre (Joy of Life)*, 1905-06, oil on canvas, 176.5 x 240.7 cm (The Barnes Foundation, Philadelphia)

In his 1908 "Notes of a Painter" Matisse wrote:

The entire arrangement of my picture is expressive . . .. Composition is the art of arranging in a decorative manner the diverse elements at the painter's command to express his feelings. In a picture every part will . . . play its appointed role. . . . A work of art must be harmonious in its entirety. . . .*Henri Matisse, "Notes of a Painter," [1908] trans. J. D. Flam, in Charles Harrison and Paul Wood, eds., Art in Theory 1900-2000 (London: Blackwell, 2003), pp. 70-71.*

Throughout his career Matisse was dedicated to the expressive potential of color: "My choice of colors is based on observation,

on sensitivity, on felt experiences. . . . I simply try to put down colors which render my sensation . . . a moment comes when all the parts have found their definite relationships . . .."\(^{[1]}\)

Although "Notes of a Painter" was written some years after Matisse painted *Open Window,* these passages indicate that he was balancing three different projects. He was attempting to be responsive to (1) the perceptual information he received from the motif, (2) the feelings that he got from it, and (3) the decorative formal qualities of the work of art itself. Keeping all three in play allows *The Open Window* to read simultaneously as a window into real space, a flat plane covered with harmonious color, and an expression of the joyful warmth of a Mediterranean day.



Figure 4.3.38: Henri Matisse,*Open Window at Collioure*, 1914, oil on canvas, 116.5 x 89 cm (MNAM – Centre Pompidou, Paris)

The Open Window was one of Matisse's most radical Fauve paintings, but it is also an example of his enduring dedication to expressive color and pictorial harmony. Matisse painted many windows throughout his career, including ***The Blue Window*** and ***The Piano Lesson***, and they reflect the variations in his style over time. *The Open Window* of 1905 represents the barely restrained exuberance of his Fauve period, while a second version of *Open Window at Collioure* painted in September 1914 just after the start of World War I conveys the mood of those dark days.

Notes:

1. Henri Matisse, "Notes of a Painter" [1908], trans. J. D. Flam, in Charles Harrison and Paul Wood, eds., Art in Theory 1900-2000, (London: Blackwell, 2003), pp. 70-71.

Additional resources:

The Open Window, Collioure at the National Gallery of Art, Washington DC

Henri Matisse, *Bonheur de Vivre*

by DR. BETH HARRIS and DR. STEVEN ZUCKER



Figure 4.3.39: Henri Matisse, *Bonheur de Vivre (Joy of Life),* 1905-06, oil on canvas, 176.5 x 240.7 cm (The Barnes Foundation, Philadelphia)

The Joy of Life

In 1906, Henri Matisse finished what is often considered his greatest Fauve painting, the *Bonheur de Vivre*, or the "*Joy of Life*." It is a large-scale painting depicting an Arcadian landscape filled with brilliantly colored forest, meadow, sea, and sky and populated by nude figures both at rest and in motion. As with the earlier Fauve canvases, color is responsive only to emotional expression and the formal needs of the canvas, not the realities of nature. The references are many, but in form and date, *Bonheur de Vivre* is closest to Cézanne's last great image of bathers.



Figure 4.3.40: Paul Cézanne, *The Large Bathers*, 1906, oil on canvas, 210 x 250.8 cm (Philadelphia Museum of Art)

Matisse and his sources

Like Cézanne, Matisse constructs the landscape so that it functions as a stage. In both works trees are planted at the sides and in the far distance, and their upper boughs are spread apart like curtains, highlighting the figures lounging beneath. And like Cézanne, Matisse unifies the figures and the landscape. Cézanne does this by stiffening and tilting his trunk-like figures. In Matisse's work, the serpentine arabesques that define the contours of the women are heavily emphasized, and then reiterated in the curvilinear lines of the trees.

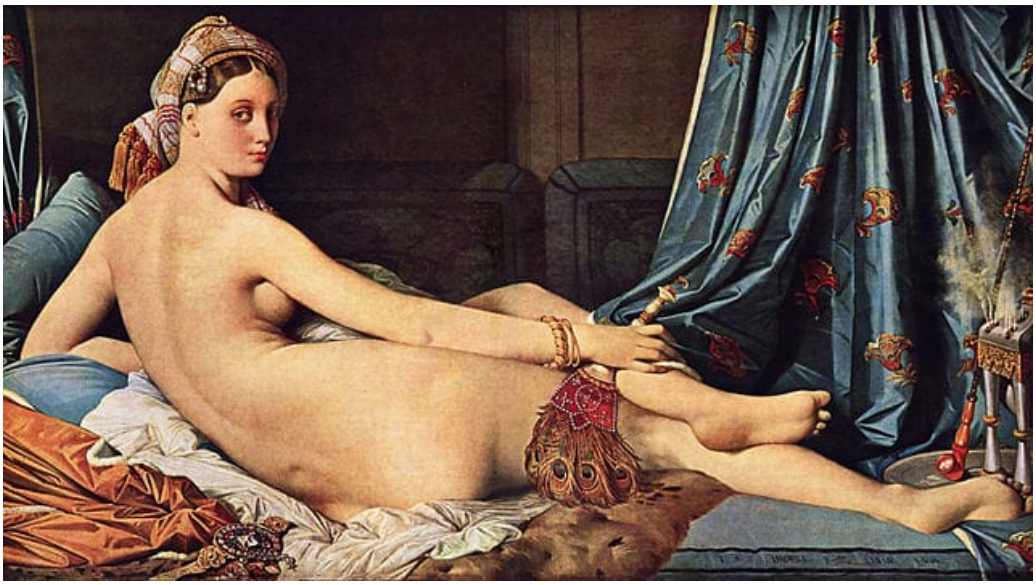


Figure 4.3.41: Jean-Auguste-Dominique Ingres, *La Grande Odalisque,* 1814, oil on canvas, 88.9 x 162.56 cm (Museé du Louvre, Paris)

Matisse creates wildly sensual figures in *Bonheur de Vivre*, which show how he was clearly informed by Ingres's odalisques and harem fantasies.



Figure 4.3.42: Titian, *Bacchananal of the Andrians*, 1523-26, oil on canvas, 175 x 193 (Museo del Prado, Madrid)

Additionally, Matisse references Titian. For like Titian's *Bacchanal of the Andrians*, the scene depicted in *Bonheur de Vivre* is an expression of pure pleasure. Here is a place full of life and love and free from want or fear. Instead of a contemporary scene in a park, on the banks of the Seine, or other recognizable places in nature, Matisse has returned to mythic paradise.

Radicalism, or how to color outside the lines

But do not be misled by his interest in myth—Matisse is not joining in with Bouguereau or any other Salon artist. This is the epitome of Fauvism, a radical new approach that incorporate purely expressive, bright, clear colors and wildly sensual forms. Matisse's painting s perhaps the first canvas to clearly understand Cézanne's great formal challenge, and to actually further the elder master's ideas. In fact, despite its languid poses, *Bonheur de Vivre* was regarded as the most radical painting of its day. Because of this, Matisse became known, briefly, as the most daring painter in Paris.



Figure 4.3.43: Henri Matisse, detail, *Bonheur de Vivre (Joy of Life),* 1905-06, oil on canvas, 176.5 x 240.7 cm (The Barnes Foundation, Philadelphia)

So what was daring about this canvas? Here is one key issue: unlike the paintings by Cézanne, Ingres, or Titian, Matisse's work does not depict forms that recede in the background and diminish in scale. If you study the figures in the foreground and the middle ground of *Bonheur de Vivre*, you will notice that their scale is badly skewed. The shift of scale between the player of the double flute (bottom center) and the smooching couple (bottom right) is plausible, if we take the musician to be a child, but what of the giants just behind them? Compared to the figures standing in the wings, who are obviously mature women (middle ground left), these center women are of enormous proportion. They are simply too big to make sense of within the traditional conventions of Western painting.

Perspective, patronage and Picasso

So why has Matisse done this? How could these shifts of scale make sense? Have we seen anything like this before? Well, in a sense we have. Cézanne's painting ruptured forms in order to accurately explore vision as experienced through time and space—in other words, forms look different depending on where we are in relation to them.

In fact, this exploration of vision through space is the key to understanding Matisse's work. By incorporating shifting perspectives, he brought this idea to a grand scale. Put simply, Matisse's shifting scale is actually the result of our changing position vis-à-vis the figures. As a result of his experimentation with perspective, the viewer relates differently to the painting and is required to "enter" the scene. It is only from the varied perspectives within this landscape that the abrupt ruptures of scale make sense.



Figure 4.3.44: Henri Matisse, detail, *Bonheur de Vivre (Joy of Life),* 1905-06, oil on canvas, 176.5 x 240.7 cm (The Barnes Foundation, Philadelphia)

The painting was purchased by a wealthy expatriate American writer-poet named Gertrude Stein and her brother, Leo Stein, who shared a home filled with modern art at 27 Rue de Fleurus, in Paris. This was also the location for Gertrude Stein's weekly salon. Here, Matisse, Apollinaire, the young and largely unknown Picasso and other members of the avant-garde came together to exchange ideas.

Stein was able to attract such a crowd not only because of her literary skills but because she often provided financial support to these nearly destitute artists. In fact, the Steins bought Matisse's *Bonheur de Vivre soon* after its completion and hung it in their dining room for all to see. One person who saw it there was Picasso. By all accounts the painting's fame was too much for the terribly competitive young Spaniard. He determined to out do Matisse, and he did with his 1907 canvas, *Demoiselles d'Avignon* (MoMA).



Figure 4.3.45: Pablo Picasso, *Les Demoiselles d'Avignon,* 1907, oil on canvas, 243.9 x 233.7 cm (The Museum of Modern Art, New York)

Picasso turned Matisse's sensuality into violent pornography. Matisse in turn responds to the challenge of what was then called "primitivism" with his own brand of aggression in his *Blue Nude*.



Figure 4.3.46: Henri Matisse, *The Blue Nude (Souvenir de Biskra),* 1907, oil on canvas, 92.1 x 140.3 cm (Baltimore Museum of Art)

Additional resources:

This painting at The Barnes Foundation

The Fauves from the National Gallery of Art Online Tour

Matisse at MoMA

Henri Matisse, *Dance I*

by DR. BETH HARRIS and DR. STEVEN ZUCKER



Figure 4.3.47: Henri Matisse, *Dance I,* 1909, oil on canvas, 259.7 x 390 cm (Museum of Modern Art, New York City)

In 1909 Matisse received an important commission. An extremely wealthy Russian industrialist named Sergei Shchukin asked Matisse for three large scale canvases to decorate the spiral staircase of his mansion, the Trubetskoy Palace, in Moscow. The large and well loved painting, *Dance I* at MoMA, is somewhat disingenously titled. Although it is full scale and in oil, Matisse did

not consider it more than a preparatory sketch. Yet a comparison between the initial and final versions is instructive. Matisse borrowed the motif from the back of the 1905-06 painting *Bonheur de Vivre*, although he has removed one dancer.



Figure 4.3.48: Henri Matisse, *Bonheur de Vivre (Joy of Life)*, 1905-06, oil on canvas, 176.5 x 240.7 cm (The Barnes Foundation, Philadelphia)

In *Dance I*, the figures express the light pleasure and joy that was so much a part of the earlier Fauve masterpiece. The figures are drawn loosely, with almost no interior definition. They have been likened to bean bag dolls because of their formless and unrestricted movements. The bodies certainly don't seem to be restrained by way. But don't let this childlike spontaneity fool you. Matisse works very hard to make his paintings seem effortless. Imagine for a moment, that instead of this childlike style, Matisse had decided to render this figures with the frozen density of Jacques Louis David. Would the sense of pure joy, the sense of play have been as well expressed? Matisse has done something that is actually very difficult. He has unlearned the lessons of representation so that he can create an image where form matches content.



Figure 4.3.49: Henri Matisse, detail, *Dance I*, 1909, oil on canvas, 259.7 x 390 cm (Museum of Modern Art, New York City)

The dancers inhabit a brilliant blue and green field. But what exactly does the green represent? Many people would quickly reply, "a grassy hilltop." Okay, but what then is the blue intended to represent? If I were lecturing at MoMA, as I often do, many listeners would offer that "the blue is the sky that rises above the hill." But others in my group might begin to look frustrated. One might then say, "that's not what I see, the blue is really water moving back into the distance."



Figure 4.3.50: Henri Matisse, detail, *Dance I,* 1909, oil on canvas, 259.7 x 390 cm (Museum of Modern Art, New York City)

What Matisse has done here, even in seemingly simple rendering, is use spatial ambiguity to explore one of the key issues in modern painting, the conflict between the illusion of depth and an acknowledgment of the flatness of the canvas. One final point here, did you notice the break in the circle? The hands of the two front dancers are parted. Matisse has been careful to allow this break only where it overlaps the knee so as not to interrupt the continuity of the color. Why do this? The part is often interpreted in two ways, as a source of tension that requires resolution or, as an invitation to us the viewer to join in, after all, the break is at the point closest to our position.



Figure 4.3.51: Henri Matisse, *Dance*, 1910, oil on canvas, 260 x 291 cm (The Hermitage, St. Petersburg)

The final version of *Dance* has a very different emotional character. It has been described as forbidding, menacing, tribal, ritualistic, even demonic. Drum beats almost seem to be heard as the simple pleasure of the original is overwhelmed. What causes these dramatic changes in mood? Beyond the color shift, which is pretty obvious, the figures of the 1910 canvas are drawn with more interior line, line which often suggests tension and physical power. See for instance, the back left figure. Another more subtle change occurs where the two back figures touch the ground. In the 1909 canvas, the green reaches up to the feet of the two back most dancers, in the 1910 canvas, something else happens, the green seems to compress under the dancer's weight. This subtle change creates either a sense of lightness or a sense of weight and contributes to the way we perceive each painting. So be careful before concluding that Matisse was actually drawing like a child, he knew exactly what he was doing.

Additional resources:

This painting at The Museum of Modern Art

Henri Matisse, *The Red Studio*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.2: Henri Matisse, *The Red Studio*, 1911, oil on canvas, 181 x 219.1 cm (Museum of Modern Art, New York). Speakers: Dr. Steven Zucker and Dr. Beth Harris

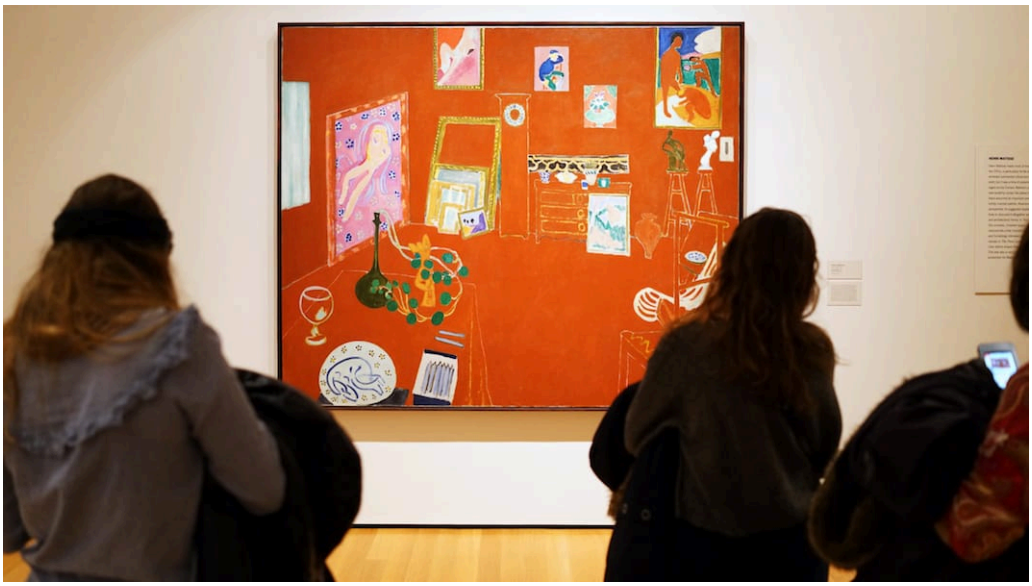


Figure 4.3.52: Henri Matisse, The Red Studio, 1911, oil on canvas, 181 x 219.1 cm (Museum of Modern Art, New York)

Dismantling spatial illusion

Since Manet (and Degas, Monet, and Cezanne), artists have sought to undermine the illusion of space that had ruled painting since about 1425. Spatial illusion was increasingly seen as a defect that reduced the integrity of painting. But as the earlier painters of the avant-garde have shown, ridding a painting of illusion is almost impossible. The audience is trained to expect three dimensional space and sees it given the opportunity. This is Matisse's challenge. He meets this challenge–the destruction of spatial illusion, in three stages.



Figure 4.3.53: Henri Matisse, *The Pink Studio*, 1911, oil on canvas, 181 x 221 cm (Pushkin Museum of Fine Art, Moscow)

The color red



Figure 4.3.54: Henri Matisse, *The Red Studio*, 1911, oil on canvas, 181 x 219.1 cm (Museum of Modern Art, New York)

Red is often thought of as the most aggressive color. It has the most punch, and that's what Matisse needed here. This canvas was a part of a series, there is, for instance, a *Pink Studio* too. But that canvas was concerned with different issues. Here, the red is an attempt to find a color that is forceful enough to resist the illusion of deep space by pushing to the surface. The red is, of course painted onto the flat canvas but actually fails to remain there visually. Instead, the red becomes the walls and furnishing of the room seen in space. Illusion triumphs–Matisse is thwarted.

Illusionism

This triumph of illusion is due in part to the linear perspective that defines the table, chairs, and the walls and floor of the studio. But look! Matisse has constructed some of the worst linear perspective ever seen. Receding lines should converge, but look at the chair on the lower right. The lines widen as they go back. And look to rear left corner of the room. The corner is defined by the edge of the pink canvas but above that painting, the line that must define the corner is missing! Matisse is literally dismantling the perspective of the room but it makes no difference, we still see the room as an inhabitable space. Illusion still triumphs.

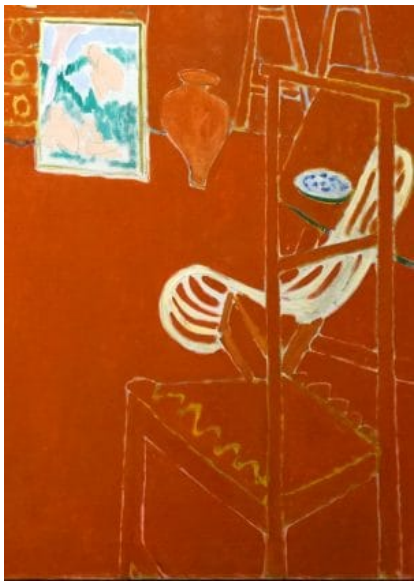


Figure 4.3.55: Chair (detail), Henri Matisse, *The Red Studio*, 1911, oil on canvas, 181 x 219.1 cm (Museum of Modern Art, New York)

Figure-Ground Relationship

Although it is very difficult to see in reproduction, if seen in person at MoMA, it is clear that the whitish lines that define form in the red field are not painted on top of the red. Instead, they are reserve lines. In other words, the white lines are actually the canvas below. Matisse painted the red planes up to the line on either side, leaving a narrow gap of white canvas in between. This is really IMPORTANT. Stay with me on this. The white line is actually emerging from below the red. It is beneath. The red is of course painted on top of the white canvas.

Okay, now pay attention. Matisse has realized that illusion is almost certain to triumph no matter how aggressively he tries to undermine it. We, as the audience, will see space if given the slightest opportunity. So if we see illusion at such a basic level, what hope does Matisse have of destroying it? In fact, his reserve line are his really brilliant solution. The chairs, the dresser, the clock, each object, or figure in *The Red Studio* is constructed out of the canvas below. At the same time, the ground which supports those figures, is constructed out of a plane of red that is physically above the canvas. What Matisse has done then is reverse the figure ground relationship. He has made the figure out of the ground (the canvas) and made the ground out of the figure (the red paint on top). When seen in person, the recognition of this does finally destroy illusion, Matisse triumphs!

Additional resources:

This painting at MoMA

Smarthistory images for teaching and learning:











Figure 4.3.56: More Smarthistory images...

Henri Matisse, *The Blue Window*

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.3: Video from The Museum of Modern Art.

Additional resources:

View this work in MoMA's collection

Henri Matisse, *Goldfish*

by CHARLOTTE WILKINS



Figure 4.3.57: Henri Matisse, *Goldfish*, 1912, oil on canvas, 146 x 97 cm (Pushkin Museum of Art, Moscow)

Goldfish were introduced to Europe from East Asia in the 17th century. From around 1912, goldfish became a recurring subject in the work of Henri Matisse. They appear in no less than nine of his paintings, as well as in his drawings and prints. *Goldfish*, 1912 belongs to a series that Matisse produced between spring and early summer 1912. However, unlike the others, the focus here centers on the fish themselves.

Color

The goldfish immediately attract our attention due to their color. The bright orange strongly contrasts with the more subtle pinks and greens that surround the fish bowl and the blue-green background. Blue and orange, as well as green and red, are complementary colors and, when placed next to one another, appear even brighter. This technique was used extensively by the Fauves, and is particularly striking in Matisse's earlier canvas *Le Bonheur de vivre*. Although he subsequently softened his palette, the bold orange is reminiscent of Matisse's fauvist years, which continued to influence his use of color throughout his career.

Golden age



Figure 4.3.58: Henri Matisse, *Bonheur de Vivre (Joy of Life),* 1905-06, oil on canvas, 176.5 cm × 240.7 cm (Barnes Foundation, Lower Merion, PA)

But why was Henri Matisse so interested in goldfish? One clue may be found in his visit to Tangier, Morocco, where he stayed from the end of January until April 1912. He noted how the local population would day-dream for hours, gazing into goldfish bowls. Matisse would subsequently depict this in *The Arab Café*, a painting he completed during his second trip to Morocco, a few months later.



Figure 4.3.59: Henri Matisse, *Le café Maure (Arab Coffeehouse),* 1911-13, oil on canvas, 176 x 210 cm (Hermitage Museum, St. Petersburg)

In a view consistent with other Europeans who visited North Africa, Matisse admired the Moroccans' lifestyle, which appeared to him to be relaxed and contemplative. For Matisse, the goldfish came to symbolize this tranquil state of mind and, at the same time, became evocative of a paradise lost, a subject—unlike goldfish—frequently represented in art. Matisse was referring back to artists such as Nicolas Poussin (for example, *Et in Arcadia ego*), and Paul Gauguin (who painted during his travels to places like Tahiti).



Figure 4.3.60: Nicolas Poussin, *Et in Arcadia Ego,* 1637-38, oil on canvas, 87 x 120 cm (Musée du Louvre, Paris)

The paradise theme is also prevalent in Matisse's work. It found expression in *Le Bonheur de vivre (The Joy of Life)*, and the goldfish should be understood as a kind of shorthand for paradise in Matisse's painting. The mere name "gold-fish" defines these creatures as ideal inhabitants of an idyllic golden age, which it is fair to say Matisse was seeking when he travelled to North Africa. It is also likely that Matisse, who by 1912 was already familiar with the art of Islamic cultures, was interested in the meaning of gardens, water and vegetation in Islamic art—as well as symbolizing the beauty of divine creation, these were evocations of paradise.

Metaphor for the studio



Figure 4.3.61: Paul Gauguin, *The Siesta (Atuona, Hiva Oa, Marquesas Islands),* c. 1892–94, oil on canvas, 88.9 x 116.2 cm (The Metropolitan Museum of Art, New York)

However, *Goldfish* was not painted in Morocco. Henri Matisse painted it at home, in Issy-les-Moulineaux, near Paris. Matisse had moved to Issy in September 1909 to escape the pressures of Parisian life. So what you see here are Matisse's own plants, his own garden furniture, and his own fish tank. The artist was drawn to the tank's tall cylindrical shape, as this enabled him to create a succession of rounded contours with the top and bottom of the tank, the surface of the water and the table. Matisse also found the goldfish themselves visually appealing. Matisse painted *Goldfish* in his garden conservatory, where, like the goldfish, he was surrounded by glass.

Contemplation

Matisse distinguished predatory observation from disinterested contemplation, the latter being his preferred approach. *Goldfish* invites the viewer to indulge in the pleasure of watching the graceful movement and bright colors of the fish. Matisse once wrote that he dreamt of “an art of balance, of purity and serenity, devoid of troubling or depressing subject matter, an art that could be [...] a soothing, calming influence on the mind, something like a good armchair that provides relaxation from fatigue.” This is precisely what Matisse wanted *Goldfish* to provide for the viewer.

Constructing pictorial space

The painting contains a tension created by Matisse’s depiction of space. The fish are seen simultaneously from two different angles. From the front, the goldfish are portrayed in such a way that the details of their fins, eyes and mouths are immediately recognizable to the viewer. Seen from above, however, the goldfish are merely suggested by colorful brushstrokes. If we then look at the plants through the transparent glass surface, we notice that they are distorted compared to the ‘real’ plants in the background.

Matisse paints the plants and flowers in a decorative manner. The upper section of the picture, above the fish tank, resembles a patterned wallpaper composed of flattened shapes and colors. What is more, the table-top is tilted upwards, flattening it and making it difficult for us to imagine how the goldfish and flowerpots actually manage to remain on the table. Matisse constructed this original juxtaposition of viewpoints and spatial ambiguity by observing Paul Cézanne’s still-life paintings. Cézanne described art as “a harmony parallel to nature”. And it is clear here that although Matisse was attentive to nature, he did not imitate it but used his image of it to reassemble his own pictorial reality. Although this can be confusing for the viewer, Matisse’s masterful use of color and pattern successfully holds everything together.

This painting is an illustration of some of the major themes in Matisse’s painting: his use of complimentary colors, his quest for an idyllic paradise, his appeal for contemplative relaxation for the viewer and his complex construction of pictorial space.

Additional Resources:

The Pushkin Museum of Art

Matisse’s Goldfish and Sculpture, MoMA

Matisse’s *Young Woman before an Aquarium*, Barnes Foundation

Henri Matisse, *The Piano Lesson*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.4: Henri Matisse, *The Piano Lesson*, 1916 (MoMA)

Key points:

- With its austere geometries and structured sense of balance, *The Piano Lesson* is sometimes seen as Matisse’s answer to

Cubism.

- The composition opposes the sensual, suggested by the sculpture in the left foreground, to discipline and order, implied by the geometric image of a woman in the upper right.
- This painting could serve as an allegory on art making, which requires balance between emotional expression and intellectual understanding.



Figure 4.3.62: Henri Matisse, *The Piano Lesson*, 1916, oil on canvas, 245.1 x 212.7 cm (The Museum of Modern Art, New York City)

This highly abstract painting is important because of its relation to the Cubist grid developed by Pablo Picasso and Georges Braque, because of its biographical aspects, and especially due to its thoughtful iconography (symbolic content).

A nostalgic image

This large flat gray painting can be a bit confusing at first. Let's begin with the boy in the lower right. He is the artist's son, Pierre Matisse, who grows up to become a famous art dealer in New York in the 1940s. It's worth remembering that 1916 was during world war one, the most devastating conflict Europe had yet known. When Henri painted this image, Pierre was actually mobilized. The painter did not know if his son would return. In a way then, this is a nostalgic image, Matisse has painted his son much younger then he actually was, perhaps recalling happier times. Maybe happy isn't really the right word since Pierre looks pretty miserable. Maybe I'm just remembering my own childhood piano lessons, but his is a look of worried concentration. A portion of his face even seems to reflect that instrument of the devil, commonly known as a metronome. Pierre sits at the piano well off to the side, trapped in the house even as the open French window (a floor-to-ceiling hinged window that opens onto a wrought iron railing) beckons. Finally, what is that very abstract truncated triangle of green? Often it is interpreted as ray of sun reaching across the lawn outside.

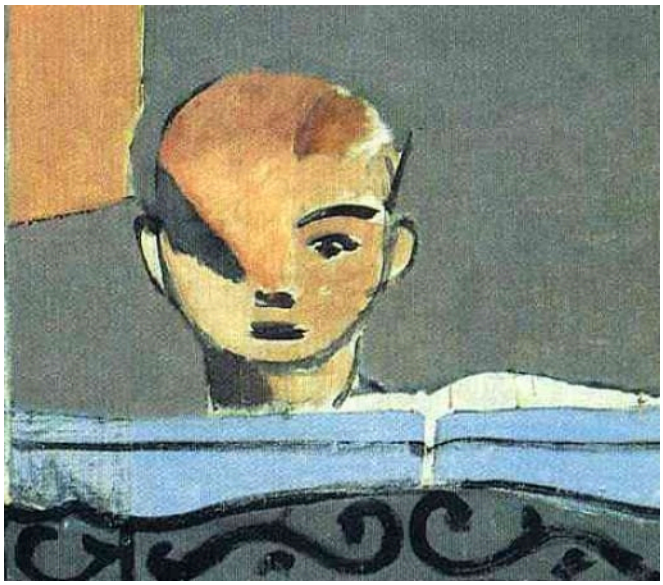


Figure 4.3.63: Detail, Henri Matisse, *The Piano Lesson*, 1916, oil on canvas, 245.1 x 212.7 cm (The Museum of Modern Art, New York City)

You can see why poor little Pierre is so attentive. His music teacher literally hovers above him, cold, distant, and aloof. What a wonderful contrast to the other female figure in the painting.While the teacher represents discipline through her rigid rectilinear form, the small bronze nude at the lower left is virtually all curves. This small sculpture by Matisse is meant to represent the creative spirit while the teacher represents discipline, and like two boxers between rounds, each is in her corner. But wait! Is the teacher really there? Space is so ambiguous that it is hard to tell if there is really a distant room for her to inhabit. In fact, there is not and she is not. This is Matisse's house in the suburb Issey-les-Moulineaux and this is a wall. The "teacher" is actually a painting by Matisse titled, *Woman on a High Stool (Germaine Raynal*), 1914 (MoMA).



Figure 4.3.64: Detail, Henri Matisse, *The Piano Lesson*, 1916, oil on canvas, 245.1 x 212.7 cm (The Museum of Modern Art, New York City)

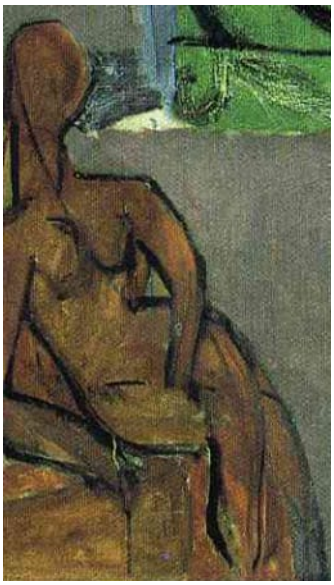


Figure 4.3.65: Detail, Henri Matisse, *The Piano Lesson*, 1916, oil on canvas, 245.1 x 212.7 cm (The Museum of Modern Art, New York City)

Matisse has transformed the original painting in order that Raynal play the part of the strict instructor, Matisse often created variations on themes that he had already treated. So, in fact, Matisse has created a painting of a painting and a painting of a sculpture. This suggests that perhaps *The Piano Lesson* is not only about Pierre and his childhood experiences but more importantly, the act of creation itself. Is Pierre actually a stand in for Henri? After all, music is a common metaphor for the visual arts.

A visual equivalent of music

Is Matisse then saying that art is the result of both sensual creativity (the sculpture) and strict discipline (the painting)–is the metronome that swings between the two, a mediator? And then what of the odd inclusion of the carved music stand which contains the brand of the piano, “PLEYEL” (which is read backwards as we see it)?



Figure 4.3.66: Detail, Henri Matisse, *The Piano Lesson*, 1916, oil on canvas, 245.1 x 212.7 cm (The Museum of Modern Art, New York City)

As you can see from the later and less abstract painting *Music Lesson*, Matisse has removed everything that is not essential from the 1916 canvas. So why then retain these letters? And why retain the playful swirling wrought iron fence? According to Jack Flam, a leading Matisse scholar and an old instructor of mine (and by the way, not very strict nor rectilinear), Matisse wants us to read the letters from right to left and then continue to read past the music stand by jumping to the curving iron fence which he believes

to be an abstract expression or visual equivalent of the music (art) that is being produced.



Figure 4.3.67: Henri Matisse, *The Music Lesson*, 1917, oil on canvas, 245.1 x 210.8 (The Barnes Foundation, Philadelphia)

Additional resources:

This painting at MoMA

Audio on this painting from MoMA

Smarthistory images for teaching and learning:



Figure 4.3.68: More Smarthistory images...

Henri Matisse, the illustrated book *Jazz*

by THE METROPOLITAN MUSEUM OF ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.5: Video from The Metropolitan Museum of Art

Expressionism

The term "Expressionism" first emerged as a way to classify new types of art that emphasized emotional impact over descriptive accuracy.

c. 1905 - 1914

Expressionism, an introduction

by SHAWN ROGGENKAMP

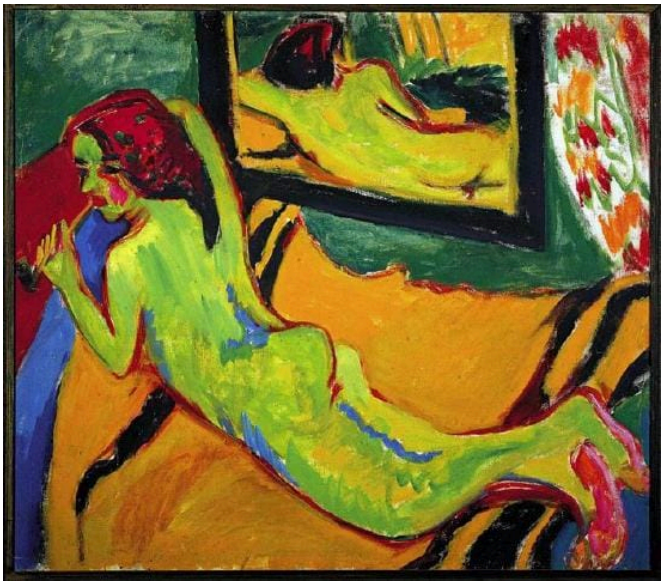


Figure 4.3.69: Ernst Ludwig Kirchner, Reclining Nude in Front of Mirror, 1909-1910, oil on canvas, 83.3 x 95.5 cm (Brücke-Museum, Berlin)

Imagine a painting where the magentas scream, the greens glare, and coarse brushstrokes become more ominous the longer you look at them. Paintings like this, where the artist uses color, line, and visible techniques to evoke powerful responses from the viewer date from the early twentieth century but continue expressive traditions that can be found throughout art's history (see, for example, **work** by Francisco Goya). When capitalized as "Expressionism," however, the term refers more specifically to an artistic tendency that became popular throughout Europe in the early twentieth century. Like many categories in art history, Expressionism was not a name coined by artists themselves. It first emerged around 1910 as a way to classify art that shared common stylistic traits and seemed to emphasize emotional impact over descriptive accuracy. For this reason, artists like **Edvard Munch** straddle the line between **Post-Impressionist developments** in late 19th century painting and early 20th century Expressionism. Likewise, the **Fauves** in France exhibited similar characteristics in their work and are often linked to Expressionism.

Expressionism in Germany



Figure 4.3.70: Ernst Ludwig Kirchner, *Manifesto*, 1906, woodcut, 28.8 x 22.2 cm, Künstlergruppe Brücke, Dresden

Though many artists of the early twentieth century can accurately be called Expressionists, two groups that developed in Germany, Die Brücke (The Bridge) and Der Blaue Reiter (The Blue Rider), are among the best known and help to define the style. Influenced in part by the spiritual interests of **Romanticism** and **Symbolism**, these artists moved further from the idealized figures and smooth surface of 19th century academic painting that can be seen in paintings by **Lawrence Alma-Tadema**, for example. Instead of depicting the visible exterior of their subjects, they sought to express profound emotional experience through their art. German Expressionists, like other European artists of the time, found inspiration in so-called "primitive" sources that included African art, as well as European medieval and folk art and others untrained in Western artistic traditions. For the Expressionists, these sources offered alternatives to established conventions of European art and suggested a more authentic creative impulse.

Die Brücke

In 1905, four young artists working in Dresden and Berlin, joined together, calling themselves Die Brücke (The Bridge). Led by Ernst Ludwig Kirchner, the group wanted to create a radical art that could speak to modern audiences, which they characterized as young, vital, and urban. Drawn from the writings of Friedrich Nietzsche, the nineteenth-century German philosopher, the name "Die Brücke" describes their desire to serve as a bridge from the present to the future. While each artist had his own personal style, Die Brücke art is characterized by bright, often arbitrary colors and a "primitive" aesthetic, inspired by both African and European medieval art. Their work often addressed modern urban themes of alienation and anxiety, and sexually charged themes in their depictions of the female nude.



Figure 4.3.71: Erich Heckel, *Fränzi Reclining*, 1910, woodcut, 35.6 x 55.5 cm (The Museum of Modern Art)

Their **first exhibition** was held in the showroom of a lamp factory in Dresden in 1906 for which they published a program of woodcut prints reflecting their interest in earlier traditions of German art. In the introductory broadsheet (above left), Kirchner made clear the group's revolutionary intentions. He proclaimed,

With faith in progress and in a new generation of creators and spectators we call together all youth. As youth, we carry the future and want to create for ourselves freedom of life and of movement against the long established older forces.
[1]

This optimism was not long-lived. Internal squabbling caused the group to dissolve in 1913 just prior to the start of the First World War.

Der Blaue Reiter



Figure 4.3.72: Vasily Kandinsky, Cover of *Der Blaue Reiter Almanac*, Piper Verlag, Munich, 1912

Based in the German city of Munich, the group known as Der Blaue Reiter lasted only from their first exhibition at the Galerie Thannhausen in 1911 to the outbreak of World War I in 1914. Created as an alternative to Kandinsky's previous group, the more conservative **Neuen Künstlervereinigung München** (New Artists Association of Munich or NKVM), Die Blaue Reiter took its name from the motif of a horse and rider, often used by founding member Vasily Kandinsky.

This motif appeared on the cover of the *Blue Rider Almanac* (left), published in May 1912, and reflects Kandinsky's interest in medieval traditions and the folk art of his Russian homeland. In contrast to Die Brücke, whose subjects were physical and direct, Kandinsky and other Die Blaue Reiter artists explored the spiritual in their art, which often included symbolism and allusions to ethereal concerns. They thought these ideas could be communicated directly through formal elements of color and line, that, like music, could evoke an emotional response in the viewer. Conceived by Kandinsky and Franz Marc, the almanac included essays by themselves and other German and Russian artists, musical compositions by Expressionist composers, such as Arnold Schönberg, and Kandinsky's experimental theater piece, "Der gelbe Klang" (The Yellow Sound). This range of content shows Der Blaue Reiter's efforts to provide a philosophical approach not just for the visual arts, but for culture more broadly. These ideas would become more fully developed at the Bauhaus where Kandinsky taught after the war (Marc died during the Battle of Verdun in 1916).



Figure 4.3.73: Franz Marc, *The Large Blue Horses*, 1911, oil on canvas, 41.6 × 71.3 inches (Walker Art Center)

Austrian Expressionism

While the Die Brücke and Der Blaue Reiter groups had relatively defined memberships, Expressionist artists also worked independently. In Vienna, Oskar Kokoschka and Egon Schiele stand out for paintings that show intense, often violent feeling and for their efforts to represent deeper psychological meaning.



Figure 4.3.74: Egon Schiele, *Self-Portrait with Chinese Lantern Plant*, 1912 (Leopold Museum, Vienna)

In the aftermath of the First World War, many artists in Germany felt that the forceful emotional style of Expressionism that had been so progressive before the war but had become less appropriate. **Neue Sachlichkeit** (New Objectivity) arose as a direct response to pre-war stylistic excess.

[1]Translated excerpt from Charles Harrison and Paul Wood, *Art in Theory, 1900-2000: An Anthology of Changing Ideas*, Oxford: Blackwell Publishing, 1993, page 65

Additional resources

Artists of Brücke: Themes in German Expressionist Prints (MoMA)

Der Blaue Reiter Almanac (MoMA)

The Blaue Reiter (Guggenheim)

Brücke Museum, Berlin (in German)

Fauvism on the Metropolitan Museum of Art's Heilbrunn Timeline of Art History

African Influences in Modern Art on the Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Expressionism as Nordic?

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.3.75: Left: Edvard Munch, *Despair (Sick Atmosphere at Sunset)*, 1892, oil on canvas, 92 x 67 cm (**Munch Museum, Oslo**); Edvard Munch, *The Scream*, 1893, pastel and tempera on cardboard, 91 x 73.5 cm (**National Art Gallery, Oslo**)

Edvard Munch's *The Scream* is recognized from Toledo to Timbuktu as a powerful visual expression of anxiety, but it had its genesis in a very specific place. As the artist recollected in a diary entry of 22 January 1892:

I was walking along the road with two friends – the sun went down – I felt a gust of melancholy – suddenly the sky turned a bloody red. I stopped, leaned against the railing, tired to death – as the flaming skies hung like blood and sword over the blue-black fjord and the city – My friends went on – I stood there trembling with anxiety – and I felt a vast infinite scream [tear] through nature.[1]

Munch was deeply affected by this incident and depicted it several times: first as *Despair* in 1892, and then in several different versions in different media under the title *The Scream*.

Munch's moment of anxiety occurred on a road along Ekeberg Hill overlooking Oslo. The wooden railing visible in the paintings and mentioned in his diary lined the steep cliffside of the fjord protecting Oslo's port. There is even some evidence that the famous blood-red, undulating sky that Munch associated with this feeling may also have been geographically specific. It closely resembles the pattern formed by polar stratospheric clouds visible almost exclusively in Northern Europe during the winter dusk.

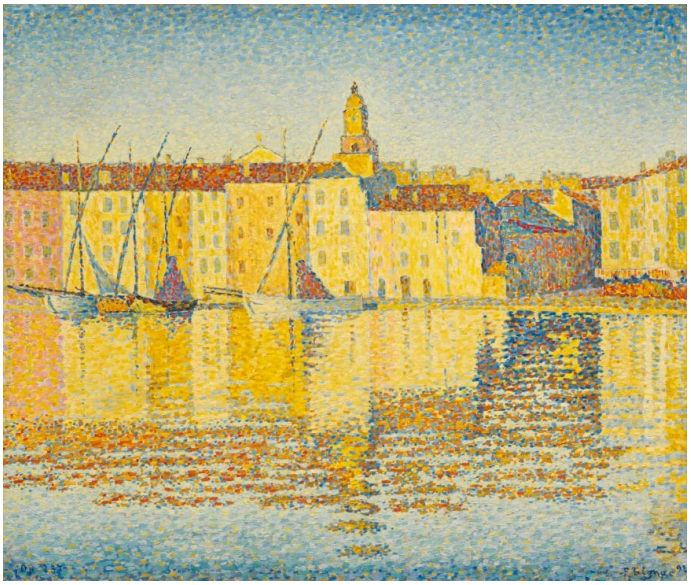


Figure 4.3.76: Paul Signac, *Houses in the Port of Saint-Tropez, Opus 237*, 1892, oil on canvas 46.5 x 55.3 cm (private collection)

Munch's vivid diary entry occurred in a very different location, however: Nice, in the south of France, where the artist was vacationing at the time. Even the relative warmth and bright sunshine of the French Mediterranean, evoked in this contemporary painting of Saint-Tropez by **Neo-Impressionist** artist Paul Signac, could not relieve Munch of the deep anxiety he remembered experiencing in the cold north.

Climatic determinism

This contrast between Norway and the south of France in terms of temperament as well as temperature illustrates what was once a commonplace of cultural geography: the idea that climate significantly shapes the psychological characteristics, not just of individuals, but of whole societies. Although this idea is currently discredited by its association with racist pseudo-science, it had widespread currency during the late nineteenth and early twentieth centuries. It was commonly believed that there was a major cultural divide in Europe between the sun-filled south, associated with temperate, Classical rationality, and the cold north, which was riddled with spiritual angst and melancholy.



Figure 4.3.77: Left: Ernst Ludwig Kirchner, *Street, Berlin*, 1913, oil on canvas, 120.6 x 91.1 cm (MoMA); right: Emil Nolde, *The Prophet*, 1912, woodcut, 50 x 36.5 cm (MoMA)

Even today, Expressionist art is primarily associated with northern Europe. Many Scandinavian and German Expressionist artists took great pride in their Nordic or Teutonic heritage and attempted to define and revive a distinctly Northern European artistic tradition that was fundamentally different from Mediterranean Classicism.

Classical versus Gothic

One champion of this idea was the German art historian Wilhelm Worringer, whose book *Form Problems in the Gothic* (1910) provided an important theoretical framework for German Expressionism. For Worringer, the Gothic was more than just a late Medieval style. There was a "latent Gothic" in the art of the Germanic tribes (called Goths) that fought against Rome, running through the distinctively Northern versions of the Renaissance and Baroque periods, and continuing into his own time. This tradition had, however, been overshadowed by Mediterranean Classicism, which had long been considered the aesthetic ideal. Northern Gothic art was seen as an incompetent attempt at naturalism, rather than a distinct tradition of its own.



Figure 4.3.78: Left: Purse lid from the Sutton Hoo ship burial, early 7th century, gold, garnet and millefiori, 19 x 8.3 cm (British Museum, London); Right: Leonardo da Vinci, *Vitruvian Man*, 1490, pen and ink wash over metalpoint on paper, 34.6 x 24.4 cm (Galleria dell'Accademia, Venice)

Worringer described Mediterranean Classical art as rational, beautiful, joyful, and tranquil, while he saw the Northern Gothic tradition as more spiritual and as having greater “depth, grandeur, and power.”[2] In a particularly vivid passage, Worringer contrasts the type of line preferred by each of these traditions. Classicism tends toward “beautiful, round, organically tempered curves” where the Gothic prefers a “stiff, angular, repeatedly interrupted, jagged line of [the] strongest expressive force.” This difference in style results from different temperaments of the Germanic versus Latin peoples:

As those line scrawls seem merely the release of an inner spiritual pressure, so the excitement, the convulsiveness, the fever, of northern drawing unquestionably throws a flashlight upon the heavily oppressed inner life of northern humanity.[3]

For Worringer, artistic style reveals the inner, psychological state, not just of the individual artist, but of an entire culture.

Woodcut prints and Expressionism

According to Worringer, even Nordic artists who adopted some Italian Classical characteristics, such as the German Renaissance printmaker Albrecht Dürer, remain fundamentally Gothic in their approach. Dürer’s woodcut prints embody the jagged, angular linearity and flat space that is characteristic of Worringer’s Gothic.



Figure 4.3.79: Left: Albrecht Dürer, *Four Horsemen*, from *The Apocalypse*, 1498, woodcut 14¼ x 11 (The Metropolitan Museum of Art); right: Karl Schmidt-Rottluff, *Did Christ not appear to you?*, 1918, woodcut, 32 x 74.2 cm (Yale University Art Gallery)

The German Expressionists deliberately revived the technique of woodcut printing because of this relatively crude, expressive style, as well as its nationalistic association with great German artists such as Dürer. Like Worringer, the German Expressionists saw a jaggedly angular, flat style as an authentic expression of their national tradition.

Both of these prints, furthermore, radiate the spiritual angst that Worringer associated with Nordic psychology. Dürer’s shows the four horsemen of the Apocalypse wreaking havoc in the world, while Schmidt-Rottluff’s Christ confronts the viewer with a face swollen and misshapen by torment. On his forehead the year 1918 is emblazoned in order to connect Christ’s suffering with the contemporary state of the world, then enmeshed in the first World War.

Emil Nolde and Expressionist nationalism

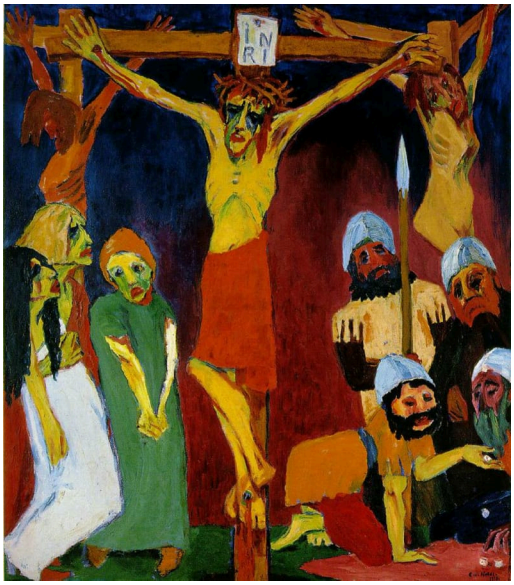


Figure 4.3.80: Emil Nolde, *Crucifixion*, from *The Life of Christ* (polyptych), 1911-12 (Neukirchen, Stiftung Seebüll Ada and Emil Nolde)

The German Expressionist Emil Nolde was particularly explicit in linking himself to a Nordic tradition. In his autobiography, Nolde wrote:

Glory be to our strong, healthy German art. [I much prefer] the holy German madonnas, invested with the soul of Grünewald and others, over the Latin, superficially presentable paintings of Raphael . . . All the arts of all the Mediterranean people share certain qualities . . . Our German art has glorious qualities of its own. We respect the art of the Latins; German art has our love. The Edda, the Isenheim Altar, Goethe's *Faust*, Nietzsche's *Zarathustra* . . . these proud, sublime works of Nordic Germanic peoples! These are eternal truths.[4]

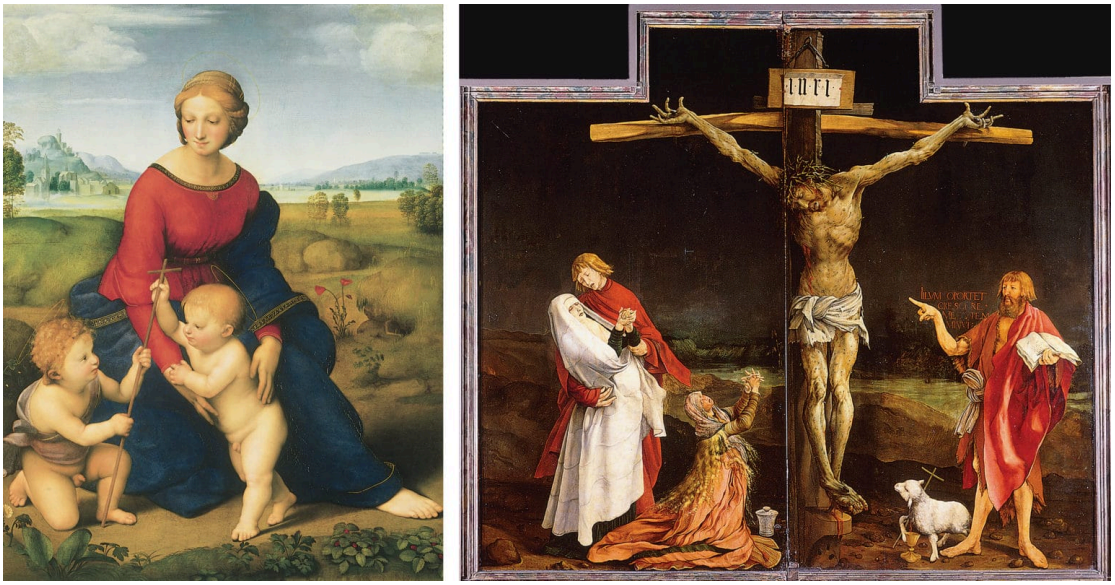


Figure 4.3.81: Left: Raphael, *Madonna of the Meadow*, 1506, oil on board, 113 x 88 cm (**Kunsthistorische Museum, Vienna**); right: Matthias Grünewald, *Crucifixion* from the *Isenheim Altarpiece*, 1512-16 (**Unterlinden Museum, Colmar, France**)

The psychological contrast that Nolde suggests between Matthias Grünewald's *Isenheim Altarpiece* and a Raphael Madonna could not be more pronounced. Not only is the latter, showing a Virgin and Child in a meadow, an inherently more tranquil subject than Grünewald's harrowing *Crucifixion*, we can also recognize some of Worringer's distinctions between Latin and Gothic forms. Raphael's painting emphasizes deep space, soft curves, and idealization, whereas Grünewald's altarpiece features flattened space, jagged, angular shapes, and dark, gruesome realism.

Coda: Expressionism and National Socialism

It is one of the great ironies of art history that the best-known propagandists of German nationalism, the Nazi party of the 1930s and 40s, supported Mediterranean Classicism rather than the Northern "Gothic" artistic tradition identified by Worringer and the Expressionists. Far from being celebrated as a native hero by the Nazis, Emil Nolde was issued a *Malverbot* (German for "forbidden to paint"), and 27 of his works were featured in the **Degenerate Art** exhibition that Hitler sponsored in 1937.

It should also be noted that these distinctions between "Mediterranean" and "Gothic" style depend upon a careful selection of examples, and that the extrapolation of those distinctions into temperamental, spiritual, or "racial" differences tends to be ideologically motivated. Regional differences can be identified in the history of art, but art historians today more commonly attribute them to conventional cultural traditions, rather than innate or climatologically-determined psychological or spiritual differences.

Notes:

1. Edvard Munch, entry from the 'Violet Diary,' Nice, 22 January 1892, as translated by Ingeborg Owesen in Charles Harrison and Paul Wood, eds., *Art in Theory, 1815-1900* (Oxford: Blackwell, 1998), p. 1044.
2. Wilhelm Worringer, *Form Problems of the Gothic*, unknown translator, (New York: G. E. Stechert, [1920]), pp. 43, 35.
3. Ibid., pp. 49-50.
4. Emil Nolde, *Jahre der Kämpf* (Berlin, 1934), as translated by Ernest Mundt in Herschel B. Chipp, ed., *Theories of Modern Art* (Berkeley, L.A. and London: University of California Press, 1968), p. 151.

Der Blaue Reiter

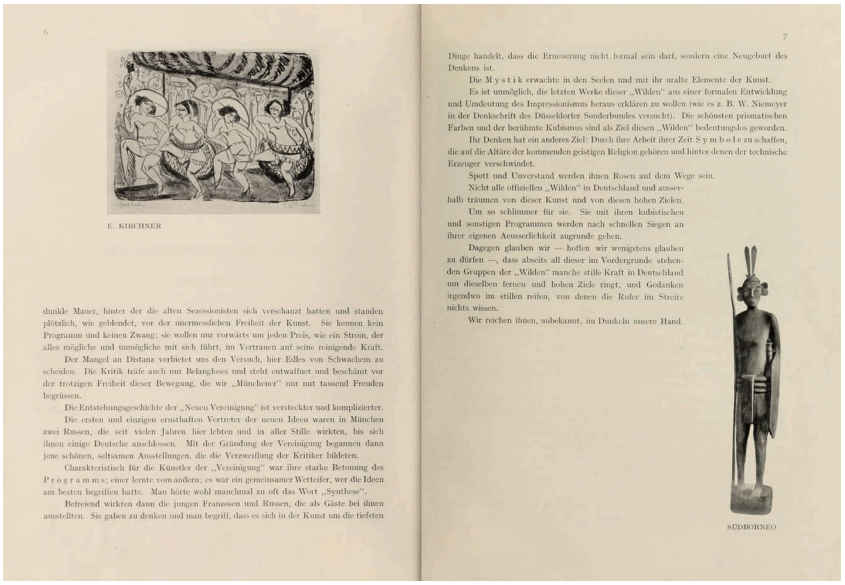
by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.3.82: Vasily Kandinsky, *Der Blaue Reiter Almanac* cover page with St. George, 1912

The 1912 art book *Der Blaue Reiter (The Blue Rider)* was originally intended to be a yearly "almanac" published by a Munich-based artists' collective of the same name. It is a fascinating document of the early-twentieth century **Expressionist** art scene, featuring a dozen essays on topics ranging from so-called primitive masks to the stage direction for an experimental "color-tone drama" called *The Yellow Sound*. Particularly interesting is the eclectic variety of its illustrations, which combine the work of modern artists such as **Ernst Ludwig Kirchner**, **Vincent van Gogh**, **Paul Cézanne**, and **Pablo Picasso** with **African** statues, **Chinese** ink painting, German folk art, **Renaissance woodcuts**, and Medieval sculpture.

An inner Renaissance



E. KIRCHNER

dunkle Mauer, hinter der die alten Sezessionisten sich verschanzt hatten und standen plötzlich, wie geblendet, vor der unermesslichen Freiheit der Kunst. Sie kennen kein Programm und keinen Zwang; sie wollen nur vorwärts um jeden Preis, wie ein Strom, der alles mögliche und unmögliche mit sich führt, im Vertrauen auf seine reinigende Kraft.

Der Mangel an Distanz verbietet uns den Versuch, hier Edles von Schwachem zu scheiden. Die Kritik träfe auch nur Belangloses und steht entwaffnet und beschämt vor der trotzigen Freiheit dieser Bewegung, die wir „Münchener" nur mit tausend Freuden begrüssen.

Die Entstehungsgeschichte der „Neuen Vereinigung" ist versteckter und komplizierter.

Die ersten und einzigen ernsthaften Vertreter der neuen Ideen waren in München zwei Russen, die seit vielen Jahren hier lebten und in aller Stille wirkten, bis sich ihnen einige Deutsche anschlossen. Mit der Gründung der Vereinigung begannen dann jene schönen, seltsamen Ausstellungen, die die Verzweiflung der Kritiker bildeten.

Charakteristisch für die Künstler der „Vereinigung" war ihre starke Betonung des P r o g r a m m s; einer lernte vom andern; es war ein gemeinsamer Wetteifer, wer die Ideen am besten begriffen hatte. Man hörte wohl manchmal zu oft das Wort „Synthese".

Befreiend wirkten dann die jungen Franzosen und Russen, die als Gäste bei ihnen ausstellten. Sie gaben zu denken und man begriff, dass es sich in der Kunst um die tiefsten

7

Dinge handelt, dass die Erneuerung nicht formal sein darf, sondern eine Neugeburt des Denkens ist.

Die M y s t i k erwachte in den Seelen und mit ihr uralte Elemente der Kunst.

Es ist unmöglich, die letzten Werke dieser „Wilden" aus einer formalen Entwicklung und Umdeutung des Impressionismus heraus erklären zu wollen (wie es z. B. W. Niemeyer in der Denkschrift des Düsseldorfer Sonderbundes versucht). Die schönsten prismatischen Farben und der berühmte Kubismus sind als Ziel diesen „Wilden" bedeutungslos geworden.

Ihr Denken hat ein anderes Ziel: Durch ihre Arbeit ihrer Zeit S y m b o l e zu schaffen, die auf die Altäre der kommenden geistigen Religion gehören und hinter denen der technische Erzeuger verschwindet.

Spott und Unverstand werden ihnen Rosen auf dem Wege sein.

Nicht alle offiziellen „Wilden" in Deutschland und ausserhalb träumen von dieser Kunst und von diesen hohen Zielen.

Um so schlimmer für sie. Sie mit ihren kubistischen und sonstigen Programmen werden nach schnellen Siegen an ihrer eigenen Aeusserlichkeit zugrunde gehen.

Dagegen glauben wir — hoffen wir wenigstens glauben zu dürfen —, dass abseits all dieser im Vordergrunde stehenden Gruppen der „Wilden" manche stille Kraft in Deutschland um dieselben fernen und hohen Ziele ringt, und Gedanken irgendwo im stillen reifen, von denen die Rufer im Streite nichts wissen.

Wir reichen ihnen, unbekannt, im Dunkeln unsere Hand.

SÜDBORNEO

Figure 4.3.83: *Blaue Reiter* pages with Ernst Ludwig Kirchner's *Four Women Dancing* and South Borneo statue, pp. 6-7

One of the editors of the book, the Russian artist Vasily Kandinsky, wrote of *Der Blaue Reiter*'s intent, "We aim to show by means of the variety of forms represented how the inner wishes of the artist are embodied."[1] This emphasis on the "inner" or subjective mental states of the artist, as opposed to the "outer" or objective experience of nature, is a central theme of Expressionist art theory.

In a preface to the group's first exhibition, Kandinsky similarly detects in his fellow artists "the signs of a new inner Renaissance."[2] The word "inner" distinguishes this new Renaissance from the **Italian Renaissance** of the 1400s, which saw the rise of a naturalistic style of representation that, many Expressionist artists contended, was only concerned with representing the outer appearances of material reality. The crude, almost childlike simplicity of the cover art for the *Almanac*, along with its Christian medieval imagery of the blue rider as Saint George, is a visual emblem of two of the groups' main themes that will be explored here: **primitivism** and **spirituality**.

An artists' collective

The members of the Blaue Reiter group, including Gabriele Münter, Franz Marc, Auguste Macke, Vasily Kandinsky, and Alexej von Jawlensky, banded together because they felt that the art establishment had shut them out of opportunities. In the modern period, like-minded artists would often form such cooperatives to sponsor their own exhibitions free from conservative art juries, as well as to provide for mutual support and the exchange of ideas. Among the art movements that got their start in this way were the **Impressionists**, the **Vienna Secession**, the **Fauves**, and another German Expressionist group, **Die Brücke**.



Figure 4.3.84: Auguste Macke, *St. George*, 1912

The name Der Blaue Reiter, as Kandinsky later somewhat flippantly suggested, was chosen because fellow artist Franz Marc liked horses and Kandinsky liked riders, and they both liked the color blue. The group's emblem was the Roman Christian soldier Saint George, who slew a dragon that was demanding human sacrifices.

The figure of the Blue Rider thus embodied the spiritual focus of the group as well as their belief that art plays an important social role in the struggle between good and evil. The intensified color and simple, almost childlike rendering of the same story by Auguste Macke is characteristic of the group's style, although as Kandinsky noted above, they recognized the great variety of ways in which "inner" states could be expressed.

Primitivism and spirituality

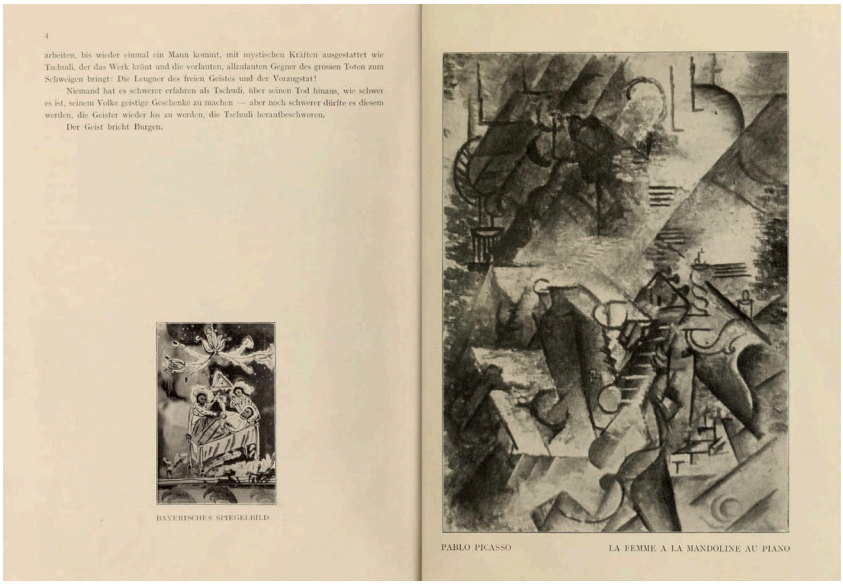


Figure 4.3.85: *Blaue Reiter* pages with Bavarian glass painting and Pablo Picasso's *Woman with Guitar by the Piano*, pp. 4-5

In addition to work by its members, the *Almanac* and the group's exhibitions featured works by Medieval, non-European, and untrained folk artists — all of which would have been identified at the time as "primitive.'" For example, the illustrations accompanying the first essay, "Spiritual Possessions" by Franz Marc, include a 15th-century German woodcut, a Chinese painting of cats, two drawings by children, and a German folk art glass painting alongside a recent **Cubist** painting by Pablo Picasso.

As Kandinsky suggested, what all of these disparate works have in common is their rejection or lack of knowledge of the post-

Renaissance Western tradition, with its emphasis on artistic naturalism, scientific knowledge, and technological progress. Starting in the 1700s, a growing number of artists and thinkers saw modern science, technology, and urban life as a threat to humankind's true spiritual vocation. The simple, even crude works of so-called "primitive" artists were seen as exemplars of an approach to both art and life that emphasized higher spiritual aims.

"I did not need nature to prompt me"



Figure 4.3.86: Left: Alexei von Jawlensky, *Self-Portrait*, 1905, oil on cardboard, 52 x 38 cm, private collection; right: Alexei von Jawlensky, *Savior's Face: Martyr*, 1919, oil on linen-finish paper on board, 32.5 x 25.4 cm, private collection

Although he studied painting with the Russian Realist **Ilya Repin**, Alexei von Jawlensky deliberately rejected his training in favor of a childlike simplicity and directness in his later works. For example, his 1905 *Self-Portrait*, while painterly and simplified, is a convincing likeness of the artist, with naturalistic proportions and chiaroscuro modeling. The coloring is bright, but based on close observation — warmer red tones appear on the cheeks, nose, and forehead, and cooler tones define the eyes, temples, and jawline.

The later work, *Savior's Face*, was part of a series of portraits called "mystical" or "abstract heads," which the artist noted were not executed from nature:

I sat in my studio and painted, and I did not need Nature to prompt me. It was enough for me to immerse myself in myself, to pray and prepare my soul to attain a religious state.

Cited in Jürgen Schultze, Alexej Jawlensky (Cologne, 1970), p. 39.

Here, the childlike simplicity of the work serves as a guarantor of the artist drawing, with naive directness, from an inner, mystical vision he has of the savior's face, rather than depicting external appearances.

Folk art

Many of the Blaue Reiter artists were particularly interested in folk artists who had no professional training in art. Kandinsky and Gabriele Münter encountered a common Eastern European type of folk art, Bavarian glass painting, when they left Munich for the small town of Murnau.



Figure 4.3.87: Gabriele Münter, *Still Life with St George*, 1911, oil on cardboard, 51.1 x 68 cm (Lenbachhaus, Munich)

Münter's *Still-Life with St George* is a composition of folk-art objects that she had collected. A theme of nature emerges in the flowers, chicken, and figurines of what appear to be walking peasants, while spiritual notes are sounded by the two statuettes of the Virgin Mary holding the Christ child, as well as Saint George in the upper left.

The style of the work reinforces these themes. Münter's blunt, heavy brushwork and crude drawing style matches the rough-hewn simplicity of the folk art objects she admired, while the highly saturated colors in the flowers, Saint George, and the rightmost Virgin Mary glow almost supernaturally against the dark, earthy tones of the rest of the work.

Music

The group's belief that art had to go beyond merely representing material reality also took inspiration from music. Several of the essays in the *Almanac* were about music, including one by experimental composer Arnold Schönberg, and the sheet music for three compositions was included at the end of the *Almanac*.



Figure 4.3.88: Vasily Kandinsky, ***Improvisation 28*** (second version), 1912, oil on canvas 111.4 x 162.1 cm (Solomon R. Guggenheim Museum, New York)

Kandinsky in particular admired the way that music stirred inner emotional and spiritual states through abstract means, by

combinations and sequences of sound, without attempting to imitate nature. Seeking a visual equivalent, Kandinsky theorized that painters could do the same by creating compositions of pure color and form. Although it would take several years before he was confident enough to produce pure-abstract works on this principle, Kandinsky gave his works musical titles such as “composition” and “improvisation” in order to encourage viewers to ignore their apparent subject matter and concentrate on their color harmonies.

The Blaue Reiter group was highly eclectic both in its influences and its output, but the core of the movement was based around the desire for a new Renaissance in art, one dedicated to expressing inner emotional and spiritual states, rather than simply reproducing the outer appearances of material objects. “Primitive” folk art and abstract musical compositions provided key models for their quest.

Notes:

1. Translated in Kenneth C. Lindsay and Peter Vergo, eds., *Kandinsky: Complete Writings on Art* (New York: Da Capo Press, 1994), p. 113.
2. Ibid.

Additional resources:

Read more about reverse-glass painting and Der Blaue Reiter artists

Ernst Ludwig Kirchner

Ernst Ludwig Kirchner, *Self-Portrait As a Soldier*

by SHAWN ROGGENKAMP



Figure 4.3.89: Ernst Ludwig Kirchner, *Self-Portrait as a Soldier*, 1915, oil on canvas, 69 x 61 cm (Allen Memorial Art Museum, Oberlin College)

Ernst Ludwig Kirchner’s *Self-Portrait As a Soldier* is a masterpiece of psychological drama. The painting shows Kirchner dressed in a uniform but instead of standing on a battlefield (or another military context), he is standing in his studio with an amputated, bloody arm and a nude model behind him. It is in this contrast between the artist’s clothing and studio space that we can read a complicated coming of age for an idealistic young artist.

Die Brücke

In 1905, Kirchner, together with several other young artists from Dresden founded the German Expressionist group *Die Brücke* (The Bridge). Kirchner created their manifesto, a woodblock print that was to be widely disseminated as a call to arms: “We call all young people together, and as young people, who carry the future in us, we want to wrest freedom for our actions and our lives from the older, comfortably established forces.”



Figure 4.3.90: Ernst Ludwig Kirchner, *Untitled*, 1906, set of two woodcuts, 28.8 x 22.2 cm (The Museum of Modern Art, New York)

Spurred on by their confidence and their belief that they lived in an age of great change, the *Brücke* artists set about creating an entirely new way of being artists. Kirchner was a great admirer of the German philosopher Friedrich Nietzsche. Nietzsche’s book, *Thus Spoke Zarathustra* uses the bridge as a metaphor for the connection between the barbarism of the past and the modernity of the future. The *Brücke* artists considered themselves the inheritors of this idea, and created art that looked to the past and the future at once.

Another important influence on the *Die Brücke* artists was so-called “primitive” art (art and ritual objects from ancient cultures or nonwestern societies, particularly in Africa and Central Asia). This art was perceived to be more honest and direct, more natural than work produced by artists from industrialized Western European nations. There was also interest in the so-called “folk art” of Europe, particularly the art and craft found among rural populations. It is important to note that Germany remained a major colonial power in Africa through the First World War. There is, therefore, a complex heirarchy that frames this cultural appropriation. While uncomfortable from the perspective of the 21st century, it is nevertheless undeniable that this “primitive” aesthetic (despite the fact that it is a modernist construction), had a strong impact on Expressionist art.



Figure 4.3.91: Ernst Ludwig Kirchner, *Striding into the Sea,* 1912, oil on canvas, 149 x 195 cm (Staatsgalerie, Stuttgart)

The *Brücke* artists were inspired to adopt the "natural" state that they perceived in "primitivism" in their lives and their art. Paintings created outside, in nature, together with the unidealized nudes were hallmarks of the group's work. The roughly sketched, long forms and tapered limbs of the nude model in *Self-Portrait as a Soldier* is representative of the style of Kirchner's nudes from this period and can be seen in his prints as well as paintings.

Although the *Brücke* disbanded in 1913, two years before *Self-Portrait As a Soldier*, each artist continued to develop individually and Kirchner's *Self-Portrait* dates from one of his most highly regarded periods of artistic production. Just a few years earlier he painted his iconic and dark Berlin street scenes (*Potsdamer Platz* and *Street, Berlin*), which employ a similar "primitive" style jarringly set into a modern metropolis. The young artist was coming into his own, but everything in Kirchner's world was about to be interrupted by a cataclysmic event: the First World War.

Kirchner and the War

Kirchner volunteered to serve as a driver in the military in order to avoid being drafted into a more dangerous role. However, he was soon declared unfit for service due to issues with his general health, and was sent away to recover. *Self-Portrait* was painted during that recovery. These circumstances distinguish the 1915 canvas from other avant-garde projects of the period such as Otto Dix's print series *The War* (1924), in which the artist depicted the horrors he had witnessed first hand. Kirchner never fought, and this painting is instead an exploration of the artist's personal fears.

The severed hand in *Self-Portrait As a Soldier* is not a literal injury, but a metaphor. This differentiates it in important ways from other depictions of wartime amputees, such as Dix's many representations of wounded veterans designed to shame politicians with a grotesque view of the soldiers who were abandoned when they were no longer considered "useful" to the nation. Kirchner's is a metaphoric, self-amputation—a potential injury, not to the body—but to his identity as an artist.



Figure 4.3.92: Ernst Ludwig Kirchner, *Self-Portrait with Model*, 1907/26, oil on canvas, 150.5 x 100 cm (Hamburger Kunsthalle)

Self-Portrait As a Soldier can perhaps be best understood by comparing it with an earlier painting by the artist with similar subject-matter, his *Self-Portrait with Model* (1907/26). Here, a rounder, healthier-looking Kirchner stands confidently in his studio in a jaunty striped robe. He holds a brush and palette and seems to be wearing less clothing than the model seated behind him, clearly suggesting a sexual relationship. Even the warm colors give the work a sensuous atmosphere. This is the artist at the height of youthful confidence. Compare that with the sallow, angular artist we see in the *Self-Portrait as a Soldier*. The later painting features darker, colder colors, and the glassy-eyed model looks more like a carved statue than an actual person. Even the skinny, limp cigarette seems to stand in opposition to the robust pipe that the artist smokes in the earlier portrait. Kirchner the soldier stands impotently in his studio, surrounded with everything he would need to make art, were he able to do so.

The Aftermath

During the war, Kirchner suffered from alcoholism and drug abuse and for a time his hands and feet were partially paralyzed. In a

sense his fears about the war were self-fulfilling. Kirchner recovered and his work was exhibited internationally to much acclaim during the interwar period.

Adolf Hitler persecuted artists who painted in a style that he considered outside of the Aryan ideal soon after he became Chancellor of Germany in 1933. The Degenerate Art (Entartete Kunst) exhibition of 1937 was a grand spectacle that the Nazis organized to mock the modernist art they hated. This was a humiliating time for Kirchner. At least thirty-two of his works were exhibited in the Degenerate Art exhibition. In addition, more than 600 of his works were removed from public collections. He committed suicide in 1938.

Additional Resources:

This painting at the Allen Memorial Art Museum

A biography of the artist from Oxford University Press at MoMA

Ernst Ludwig Kirchner, *Street, Dresden*

by DR. JULIANA KREINIK, DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.6: Ernst Ludwig Kirchner, *Street, Dresden,* oil on canvas, 1908 (Museum of Modern Art, New York)

Key points:

- *Street, Dresden* emphasizes the dynamism of urban life in Germany in the early twentieth century, depicting the swirling crowds and electric lights of the modern city.
- It recalls the isolation and psychological angst explored by earlier nineteenth-century artists, but reflects the twentieth-century move toward greater expressionism in color and open brushwork.
- Kirchner and other Die Brücke artists were influenced by Nietzsche's ideas about breaking apart morality and conventions in modern Germany.

Additional resources:

View this work in MoMA's collection

Expressionism and city life from MoMAlearning

Smarthistory images for teaching and learning:

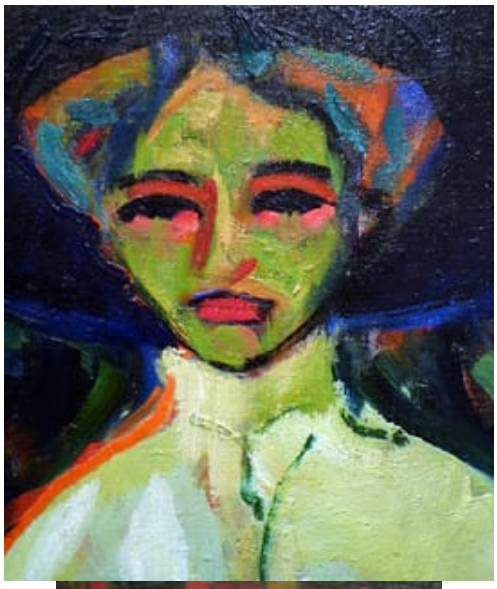








Figure 4.3.93: More Smarthistory images...

Ernst Ludwig Kirchner, *Street, Berlin*

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.7: Video from The Museum of Modern Art

Additional resources:

View this work in MoMA's online collection

Emil Nolde, *Young Couple*

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.8: Video from The Museum of Modern Art

Alexej von Jawlensky, *Young Girl in a Flowered Hat*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.9: Alexej von Jawlensky, *Young Girl in a Flowered Hat*, 1910, oil on cardboard (Albertina, Vienna)

Key points:

- This painting exemplifies the open brushwork, bright and jarring colors, bold outlines, and simplified forms that characterize Expressionism.
- Similar to Gauguin and Kandinsky, Jawlensky believed rural and folk culture were more authentic than established European traditions.
- Painted on cardboard, *Young Girl in a Flowered Hat* contrasts the raw, unaffected quality of Jawlensky's technique to the delicate sophistication of his modern subject.

Vasily Kandinsky

Kandinsky, Apocalypse, Abstraction

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.3.94: Vasily Kandinsky, *Small Pleasures*, 1913, oil on canvas, 110.2 x 119.4 cm (Solomon R. Guggenheim Museum, New York)

At first glance, Vasily Kandinsky's *Small Pleasures* appears to be an abstract painting of organic lines and blotches of bright primary and secondary colors. At the center of the composition is an inverted U surrounded by undulating, serpentine lines that frame amorphous shapes and bursts of color. What are we to make of this?



Figure 4.3.95: Vasily Kandinsky, *With Sun*, 1910, glass painting, 30.6 x 40.3 cm (Städtische Galerie im Lenbachhaus)

One clue is found in a painting Kandinsky made three years earlier, in which we see the same basic composition with much clearer subject matter. The inverted U is a hill, on top of which is a city with tall towers capped by onion domes (common in Kandinsky's homeland of Russia). Waves (in blue) and fires (in yellow and orange) surge around the base, where a couple lies on the ground. Three horsemen ride up the left-hand side of the hill, while on the right three men attempt to flee in a red rowboat.

Apocalypse

This imagery is identifiable as a scene from the Apocalypse, the end of the world as described in the biblical Book of Revelation. According to St. John the Divine, before the second coming of Christ ushers in a spiritual paradise there will be a period of terrible destruction. Angels will sound their trumpets, the four horsemen of the apocalypse (war, plague, famine, and death) will be loosed, the sun will be blacked out, and the moon will become bloody. A hail of fire will burn the world, while a flood of bitter waters will drown its inhabitants (Revelation 6-9). This is what is depicted, albeit obliquely, in *Small Pleasures*. Between 1909 and 1913, Kandinsky painted the Apocalypse a number of times.



Figure 4.3.96: Vasily Kandinsky, *All Saints I*, 1911, glass painting, 34.5 x 40.5 cm (Städtische Galerie im Lenbachhaus)

In *All Saints I*, we can easily discern an angel on the left sounding a trumpet, flood waters rising, and fires raging, while souls emerge from their graves to be judged. Saint George, the emblem of Kandinsky's art group **Der Blaue Reiter**, appears just below the angel's arm with a number of Eastern Orthodox Christian saints, including Vladimir, Boris, and Gleb.

Out of this devastation, signs of new hope and new life emerge. A dove under the angel's trumpet refers to the story of Noah's flood, a prior destruction of the world by God in an attempt to purify it. Christ on the cross in the background promises resurrection after death, as do a phoenix and butterfly on the far right. (According to legend, the phoenix emerges from the ashes of its dead parent, and butterflies emerge reborn from the cocoon of the caterpillar).

In the upper left, we see a walled city with dome-capped towers next to another emblem of rebirth: the rising sun. This city is the "new Jerusalem" (Revelation 21:2), the "shining city on the hill" mentioned in Christ's Sermon on the Mount, an echo of the promise that in the afterlife, the meek shall inherit the earth and reign with him in heaven (Matthew 5; Psalm 37).

Kandinsky's interest in apocalyptic subject matter is related to his belief that humankind was on the verge of a cataclysmic change from the current, materialistic epoch to an "Epoch of the Great Spiritual." Such millenarian beliefs were not uncommon at the time, particularly within the occult spiritualist movement of **Theosophy**.

Primitivism



Figure 4.3.97: Unknown artist, *Anna Teaching Mary*, glass painting, early 19th century (Museum für Volkskultur in Württemberg, Waldenbuch)

Another influence on Kandinsky's work at this time was **primitivism**. Both *All Saints I* and *With Sun* were *hinterglasmalerei*, or paintings executed on the underside of glass. This technique was unusual for professional artists, but was common in folk art in Russia and southern Germany, where Kandinsky was living at the time. Kandinsky was introduced to Russian folk art when he went on an ethnological expedition to the Vologda region in northern Russia in the 1890s. He continued to look to art by amateur, Medieval, non-western and other so-called primitive artists for examples because he felt that the naturalistic style taught in professional art academies was suited only to representing the external appearances of things.

Kandinsky believed that the artist should act as a sort of shaman (originally a Russian-Siberian concept, it is worth noting) — a channel to the spiritual realm, and ultimately a guide to help lead society into the coming Epoch of the Great Spiritual. He found in folk art such as icon painting and *hinterglasmalerei* a non-naturalistic style better suited to his spiritual themes and ambitions.

This devotion to art associated with primitivism and spirituality also helps to explain Kandinsky's preference for a very simplified drawing style. In *hinterglasmalerei*, objects are rendered in an almost childlike fashion: easily recognizable, but highly schematic, with no effort to imitate the exact appearances of what is represented.

Toward abstraction



Figure 4.3.98: Vasily Kandinsky, *All Saints I*, 1911, oil and gouache on cardboard, 50 x 64.8 cm (Städtische Galerie im Lenbachhaus)

There is a second, oil and gouache on board version of *All Saints I* that is much more abstract than the earlier version on glass. In this second painting we can barely recognize any of the subject matter, except by comparing it to the original version. Usually artists work from a quick sketch to increasingly refined detail. Why did Kandinsky do the opposite? If these paintings are intended to be about the apocalypse, why does he make their subject matter so difficult to see?



Figure 4.3.99: Vasily Kandinsky, *Small Pleasures*, 1913, oil on canvas, 110.2 x 119.4 cm (Solomon R. Guggenheim Museum, New York)

The answer is twofold. First, Kandinsky hides his imagery because recognizing the objects depicted in a painting keeps the viewer's mind anchored in our current, materialistic world of things. Stripping away the representational details of objects and reducing them to simpler, abstracted forms helps to prepare viewers for the new, spiritual epoch.

At the same time, however, Kandinsky recognizes that viewers need guidance. The purely spiritual would be incomprehensible to those who have lived all of their lives in the material world. So, in effect, he tries to have it both ways. He starts with depictions of recognizable objects and uses universal themes from mythology and religion in the comforting style of folk painting for the sake of familiarity. Then he abstracts that imagery until the psychological process of recognizing material objects in the work becomes secondary, or even subconscious. For Kandinsky, the real content of the painting should come from the work's formal qualities: its use of color, line, and compositional rhythms.

Color vibrations

In his treatise *Concerning the Spiritual in Art*, Kandinsky gives special attention to color's ability to communicate, not just sensually, but also spiritually:

> **Generally speaking, color is a power which directly influences the soul. Color is the keyboard, the eyes are the hammers, the soul is the piano with many strings. The artist is the hand which plays, touching one key or another, to cause vibrations in the [viewer's] soul.**
>
> *Vasily Kandinsky, Concerning the Spiritual in Art, trans. M. T. H. Sadler (New York 1977), p. 25.*

The analogy to music here is telling. Kandinsky believed that music was a more advanced form of art than painting precisely because it was more "abstract." Music moves us emotionally and spiritually through pure form (**sound vibration**), without directly representing any real-world content. He believed visual artists could do the same through color vibrations, and make painting a truly spiritual art form.



Figure 4.3.100: "The astral body of the average man," from Annie Besant and C. W. Leadbeater, *Man Visible and Invisible* (New York, 1903), plate X

The notion that spiritual states can be conveyed through color patterns would have been familiar to many people in the early-twentieth century. **Theosophists** believed that certain privileged seers were able to perceive color auras that show a person's emotional and spiritual condition. The illustration above represents the "astral body" surrounding an "ordinary lower middle-class man," for example.

Synesthesia



Figure 4.3.101: “A ringing chorus by Gounod,” from Annie Besant and C. W. Leadbeater, *Thought Forms* (London, 1901), plate G

For Kandinsky, the close connections and even transferability among color, music, and spirituality were probably enhanced because he experienced a phenomenon known as synesthesia. This is a condition where sensory “wires” in the brain are in effect crossed, so that a person may experience a color as a sound, or taste as a texture. The English language recognizes this phenomenon in phrases such as “loud color” or “sharp cheese.” In another Theosophical treatise on spiritual auras, there is a striking illustration of synesthesia in the form of an abstract cloud of color emerging from a church tower, illustrating the color equivalent of what is being sung within, “a ringing chorus by [the composer Charles] Gounod.”



Figure 4.3.102: Vasily Kandinsky, *Small Pleasures*, 1913, oil on canvas, 110.2 x 119.4 cm (Solomon R. Guggenheim Museum, New York)

When we look at Kandinsky’s *Small Pleasures*, then, we may subconsciously recognize some of the apocalyptic imagery, and that may help guide us to the spiritual content of the work. But according to Kandinsky, we should not be distracted by any material objects represented. The higher, spiritual content of the work is better communicated through pure form, through the color vibrations he carefully orchestrated to resonate in our souls.

Additional resources:

Read *Man Visible and Invisible* at the Internet Archive

Vasily Kandinsky, *Improvisation 28* (second version)

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.10: Vasily Kandinsky, *Improvisation 28* (second version), 1912, oil on canvas, 111.4 x 162.1 cm (Solomon R. Guggenheim Museum, New York)

Smarthistory images for teaching and learning:



Figure 4.3.103: More Smarthistory images...

Vasily Kandinsky, *Klänge (Sounds)*

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video $PageIndex11$: Video from The Museum of Modern Art.

Additional resources:

This book and German Expressionism at MoMA

Franz Marc and the animalization of art

by DR. CHARLES CRAMER and DR. KIM GRANT



Figure 4.3.104: Franz Marc, *Grazing Horses IV (The Red Horses)*, 1911, oil on canvas, 121 x 183 cm (Harvard Art Museums)

I am trying to heighten my sense of the organic rhythm of all things, trying to empathize pantheistically with the shivering and coagulating of blood in nature, in trees, in animals, in the air ... I see no happier means to the animalization of art than the animal painting.*Franz Marc, "Über das Tier in der Kunst," translated in Vivian Endicott Barnett, ed., Franz Marc and August Macke 1909-1914 (Munich, London and New York, 2018), p. 48.*

Franz Marc's 1910 call for the "animalization of art" stakes out the ground that he would harvest for the most fertile and productive years of his career. Before his early death in World War I, Marc used animal paintings to express a pantheistic vision of the harmony between animals and their natural environment.

Pantheism

Pantheism (literally "all-God-ism") is the belief that God is not separate from the universe that he created, but identical with it, immanent within it like "shivering and coagulating blood in nature, in animals, in the air." Probably the most famous statement of the pantheist creed is that of the English Romantic poet William Wordsworth. In his 1798 poem *Lines written a few miles above*

Tintern Abbey, Wordsworth notes his feeling of a presence “deeply interfused” in nature “that impels / All thinking things, all objects of all thought, / And rolls through all things.”



Figure 4.3.105: Franz Marc, *The World Cow*, 1913, oil on canvas, 70.7 x 141.3 cm, (MoMA)

As Marc noted in a 1915 letter to his wife, his own pantheism arose specifically from his disgust with modernity and human beings. Lamenting the “progress-hungry spirit of modern centuries,” Marc wrote: “People with their lack of piety, especially men, never touched my true feelings. But animals with their virginal sense of life awakened all that is good in me.”[1] Marc’s form of primitivism went further than that of his fellow Expressionists. They looked to the lives of peasants and so-called primitive cultures for inspiration; Marc looked all the way back to a state of nature before humankind even existed.

Expression through color and form

Marc’s animalization of art did not simply entail naturalistic paintings of animals in unspoiled landscapes. Already in *The World Cow* and *Grazing Horses IV*, we can see Marc intensifying the color and simplifying the drawing of his subjects, a tactic he takes even further in *Large Blue Horses*.



Figure 4.3.105: Franz Marc, *Large Blue Horses*, 1912, oil on canvas, 41-5/8 x 71-5/16 inches (Walker Art Center)

In all of these works, Marc uses primary and secondary colors in their most intensely saturated state. Bright red or blue animals

graze in vibrant pastures of reds, greens, and yellows underneath rainbow skies. While the proportions, anatomy, and postures of the animals are accurate (he made a living teaching animal anatomy for a time), Marc has increasingly abstracted their forms toward basic, almost geometric shapes that echo into the distant landscape.



Figure 4.3.106: Robert Delaunay, *Sun, Tower, Airplane*, 1913, oil on canvas, 132.08 x 131.13 cm (Albright-Knox Art Gallery)

These are pictorial strategies that Marc initially picked up in encounters with works of the Impressionists and Van Gogh while on a trip to Paris in 1907, and then with Robert Delaunay's **Simultanist** works in a subsequent trip in 1912. However, where Delaunay celebrated modern subjects, Marc avoided them. And despite the stylistic similarities between the two artists, there are crucial differences in intent.

How does a deer see the world?

The fracturing and fragmentation in Delaunay's works are reflective of human perceptual tendencies: the way present sense-experiences awaken simultaneous echoes of past viewings in the mind. Marc expressly wished to avoid making paintings about human perception. Why reject painting corrupt human beings, and then execute works that reflect a specifically human way of looking at the world? In an essay entitled, "How does a Horse see the World?" Marc asks,

What does the doe have in common with the view of the world as it appears to people? Does it make any reasonable or artistic sense to paint the doe as it appears on our retina — or in the manner of the Cubists because we feel the world to be cubistic? Who says the doe feels the work to be cubistic? It's the doe that feels, therefore the landscape must be "doelike."[2]

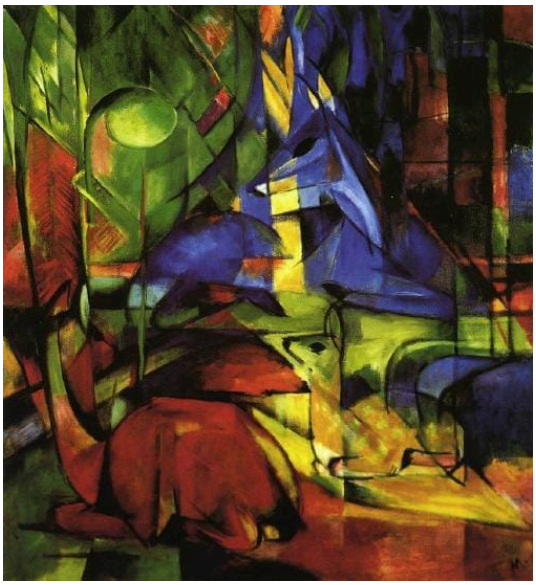


Figure 4.3.107: Franz Marc, *Deer in the Forest II*, 1914, oil on canvas, 110 x 100 cm (Staatliche Kunsthalle Karlsruhe)

It is of course impossible to know how a deer sees the world, but the distortion of form and intensification of color may be an attempt to represent the world as a deer sees it — as continuous with (and not separate from) herself. These more rectilinear, faceted works still reflect Marc's desire to integrate animal and landscape. The angular fragments that make up the bodies of the three deer extend and echo into the surrounding forest, with the blue, red, green, and yellow colors scattered prismatically throughout.

Color and energy

Another way to look at Marc's project is not in terms of objects or the perception of them, but rather in terms of energy and forces. Marc's description of pantheism as an "organic rhythm," as "the shivering and coagulating of blood in nature" suggests that the animals and landscape elements themselves are just temporary "coagulations" of matter and energy that are in a constant cycle of birth, life, death, decay, and rebirth. What is permanent and what permeates is the energy coursing through this cycle, expressed in the vibrancy of Marc's color and the rhythms of his compositions.



Figure 4.3.108: Franz Marc, *Yellow Cow*, 1911, 140.7 x 189.2 cm (Solomon R. Guggenheim Museum, NY)

Marc's color theory, as inchoate as he acknowledged it to be, suggests such a reading:

Blue is the male principle, severe and spiritual. Yellow is the female principle, gentle, cheerful and sensual. Red is matter, brutal and heavy, the color that has to come into conflict with, and succumb to the other two. For instance, if you mix blue — so serious, so spiritual — with red, you intensify the red to the point of unbearable sadness, and the comfort of yellow, the color complementary to violet, becomes indispensable ...[3]

The gendering of colors, and especially the association of male with spiritual and female with sensual, is obviously sexist. It is also dubious to assert that colors have such specific and absolute meanings. Red surely signifies something very different in Edvard Munch's ***The Scream*** than it does in Henri Matisse's ***Joy of Life***.

But we can generalize Marc's theory to a series of coherent underlying propositions. Colors are not necessarily gendered, but they are generative in the sense that they can be endlessly recombined into new colors or new creations. Viewing colors and color combinations can induce sensations and moods: cheerfulness, heaviness, sadness, and so on. These colors and moods are sometimes harmonious, but sometimes clashing and in conflict.

It is a painter's job to deploy the emotive and generative qualities of colors in order to produce formal tensions and harmonies that convey various psychological states. This provides an interesting new way to look at his work: one more focused on abstract qualities of design than the subject matter.

Toward abstraction

In the same letter where he talks about how he turned to animals as a more pure subject than humankind, Marc continues, "But then I discovered in [animals], too, so much that was ugly and unfeeling ... Trees, flowers, the earth all showed me every year more and more of their deformity and repulsiveness — until now, suddenly, I have become fully conscious of nature's ugliness and impurity." In response to this new consciousness, Marc says his art changed as well: "Instinctively, by an inner compulsion, my presentation became more schematic or abstract."[4]



Figure 4.3.109: Franz Marc, *Fighting Forms*, 1914, oil on canvas, 91 x 131 cm (Bavarian State Painting Collections, Munich)

In his last major works, the representational content is almost impossible to identify, and Marc's paintings read as abstract interactions between primal spiritual forces, embodied in form and color. Titles such as *Fighting Forms* and *Playful Forms* reinforce this reading.

When World War I broke out in 1914, Marc was drafted into the German army as a cavalryman. Because of his painting skills, he was put to work for a time camouflaging artillery, and he amused himself by developing patterns inspired by Manet and Kandinsky. Unfortunately, he was later sent to the front, and died in the battle of Verdun on 4 March 1916 — ironically just days before orders came to withdraw him from combat as a notable artist.

Notes:

1. Franz Marc, letter, 12 April 1915, as translated in Herschel B. Chipp, *Theories of Modern Art* (Berkeley, L.A. and London, 1968), p. 182.
2. Franz Marc, "How does a Horse see the World?" translated in Herschel B. Chipp, *Theories of Modern Art* (Berkeley, L.A. and London, 1968), pp. 178-79.
3. As translated in Shearer West, *The Visual Arts in Germany, 1890-1937: Utopia and despair* (Manchester and New York, 1988), p. 71.
4. As translated in Chipp, p. 182.

Egon Schiele

Egon Schiele, *Seated Male Nude (Self-Portrait)*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.11: Egon Schiele, *Seated Male Nude (Self-Portrait)*, 1910, oil and gouache on canvas, 152.5 × 150 cm (Leopold Museum, Vienna)

Key points:

- Schiele's choice to paint himself in such expressive terms demonstrates his interest in focusing on the self and subjective experience.
- The expressive contortions of the body reflect sculptural traditions of the past, but Schiele's figure lacks the heroicism of male nudes by artists such as Michelangelo.
- His depiction of the fragmented and emaciated body in *Seated Male Nude*, as well the red details and the lack of any surrounding context, suggest a heightened intensity of the figure's physical and psychological experience.

Smarthistory images for teaching and learning:







Figure 4.3.110: More Smarthistory images...

Nazi looting: Egon Schiele's *Portrait of Wally*

by DR. ERIN THOMPSON and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.12: Egon Schiele, *Portrait of Wally Neuzil*, 1912, oil on panel, 32 × 39.8 cm (Leopold Museum, Vienna) Speakers: Dr. Erin Thompson and Dr. Beth Harris

Additional resources:

"Two Schiele Drawings Ordered Returned to Heirs of Nazi Victim," *The New York Times*, April 6, 2018

Egon Schiele, *The Hermits*

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.3.13: Egon Schiele, *The Hermits*, 1912, oil on canvas, 71-1/4 x 71-1/4″ (Leopold Museum, Vienna)

Key points:

- The use of gold and fractured appearance of the background recall religious art of the medieval period, uniting the spiritual concerns of the past with the psychic interests of the modern age.
- Schiele's visible use of paint creates an agitated feeling, reflecting Expressionism's interest in our inner states of anxiety and tension.
- The figure on the right could reference the older Austrian artist Gustave Klimt. Since he has no eyes, he may also symbolize a prophet who possesses inner vision.
- Schiele described *The Hermits* as a poetic summary of his own experience, perhaps implying that the artist serves as a prophet in the modern age.

Smarthistory images for teaching and learning:





Figure 4.3.111: More Smarthistory images...

This page titled 4.3: Fauvism + Expressionism is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 10.3: Fauvism + Expressionism by Smarthistory is licensed CC BY-NC-SA 4.0.

4.4: MARK ROTHKO

4.4.1: No. 210/No. 211 (Orange), 1960
4.4.2: No. 3/No. 13
4.4.3: The Case for Mark Rothko
4.4.4: Mark Rothko (at MoMA)
4.4.5: Restoring Rothko

This page titled 4.4: Mark Rothko is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Smarthistory.

4.4.1: No. 210/No. 211 (Orange), 1960

by DR. MARGARET C. CONRADS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.4.1.1: Mark Rothko, *No. 210/No. 211 (Orange)*, 1960, oil on canvas, 175.3 x 160 cm (Crystal Bridges Museum of American Art). Speakers: Dr. Margi Conrads and Dr. Steven Zucker

This page titled 4.4.1: No. 210/No. 211 (Orange), 1960 is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Dr. Margaret C. Conrads and Dr. Steven Zucker, "Mark Rothko, No. 210/No. 211 (Orange), 1960," in Smarthistory, April 6, 2017, accessed August 17, 2020, smarthistory.org/rothko-orange/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.4.2: No. 3/No. 13

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.4.2.1: Mark Rothko, *No. 3/No. 13*, 1949, oil on canvas (Museum of Modern Art, New York)

Smarthistory images for teaching and learning:



Click on image for larger picture (External link to flickr)

This page titled 4.4.2: No. 3/No. 13 is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Dr. Beth Harris and Dr. Steven Zucker, "Mark Rothko, No. 3/No. 13," in Smarthistory, November 25, 2015, accessed August 17, 2020, https://smarthistory.org/mark-rothko-no-3no-13/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.4.3: The Case for Mark Rothko

by THE ART ASSIGNMENT

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.4.3.1: Speaker: Sarah Urist Green

This page titled 4.4.3: The Case for Mark Rothko is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by The Art Assignment, "The Case for Mark Rothko," in Smarthistory, April 9, 2018, accessed August 17, 2020, https://smarthistory.org/the-case-for-mark-rothko/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.4.4: Mark Rothko (at MoMA)

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.4.4.1: Video from **The Museum of Modern Art**

This page titled 4.4.4: Mark Rothko (at MoMA) is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by The Museum of Modern Art, "Mark Rothko (at MoMA)," in Smarthistory, January 30, 2016, accessed August 17, 2020, https://smarthistory.org/mark-rothko-at-moma/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.4.5: Restoring Rothko

by TATE

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.4.5.1: Video from **Tate**.

This page titled 4.4.5: Restoring Rothko is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Tate, "Restoring Rothko," in Smarthistory, January 30, 2016, accessed August 17, 2020, https://smarthistory.org/restoring-rothko/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.5: Color Field (1950s-1960s)

Introduction

Color field painting is closely associated with Abstract Expressionism, a movement whose beginnings were centered in New York City. The style of the color field was based on large spaces of a solid color, color its objective, color divorced from the pursuit of a specific context, color, itself the subjective concept. Artists created a new style, freed from figuration without a background, exploiting the dominance of color over space, the background and foreground becoming one. The solidity of color, or the direction of a line, took precedent in their painting. Artists Mark Rothko, Clyfford Still, and Barnett Newman are credited for the beginnings of color field painting. Rothko believed his large blocks of color created patterns to appeal and communicate with a person's emotions. He stated,

> "I'm not an abstractionist.... I'm not interested in relationships of color or form or anything else.... I'm interested only in expressing basic human emotions—tragedy, ecstasy, doom, and so on—and the fact that lots of people break down and cry when confronted with my pictures show that I communicate those basic human emotions.... The people who weep before my pictures are having the same religious experience I had when I painted them. And if you ... are moved only by their color relationships, then you miss the point!"[1]

Still was known for his use of strong colors in a textural style, a bright, jagged juxtaposition of colors flashing across the canvas. He is thought of as the first color field painter. At the time, Newman was searching for the concept of absolute beauty instead of comparative beauty, and he painted broad areas of flat color punctuated by thin lines he viewed as streaks of cosmic light. Newman called his thin lines "zips." The carefully organized lines or zips delineated the spatial arrangement of his painting.

Artists started to focus on the consistency of their colors, eliminating any traces of brushstrokes. One of the characteristics defining color field art is the smoothness of the paint without texture. The basic technique was based on how the paint was applied on large, flat areas of color. Many artists employed a method of staining with diluted paint mixed in buckets and poured onto the raw canvas. The paint was also brushed, rolled, or sprayed on the canvas, each artist developing their procedures. Initially, mixing and diluting oil paint was challenging; however, acrylic paint became widely available during this period, making the paint easier to use and less damaging to the cotton duck canvas surface. Acrylics were a mixture of a binder, pigment, and water, the paint drying faster than oils, able to be thinned with water, and ideal for the staining technique.

Mark Rothko

Mark Rothko (Markus Yakovievich Rothkowitz) (1903-1970) was born in Latvia, part of the Russian Empire. His father, a pharmacist, was engaged in political activities, a dangerous activity for a Jew in Russia. In 1913, the family moved to the United States to avoid the problems erupting in Russia. Rothko did well in school, spoke four languages, and became active in issues supporting worker's rights. He spent two years at Yale University before dropping out. When Rothko went to New York, he noticed students drawing a model, became interested in art, and found a tutor to teach him painting. He became friends with local artists who convinced him to pursue art as a career, work disliked by his family who wanted Rothko to find an occupation with better monetary reward. He married in 1932 and held his first one-person show. Rothko became an American citizen in 1938 because he thought the rise of the Nazis and Hitler might provoke the United States to deport Jews back to Europe.

Although Rothko's early work was based on current art movements, he was always influenced by color, and his Surrealistic paintings in the 1940s incorporated his experimentation with color and color blocks. During this period, he divorced his wife. He journeyed to California, where he met Clyfford Still, an abstract painter who highly influenced Rothko, changing his style from Surrealism to his signature style, "multiforms." He painted large blocks of contrasting and complementary colors on large-scale canvases, wanting the viewer to be enveloped by the life-sized images with a feeling of intimacy and awe, a spiritual experience. He thought small paintings did not bring the involvement to the viewer. Rothko found great commercial success and commissions from major companies. Despite his artistic and critical success, he became deeply depressed, drank heavily, and left his wife. In 1970, plagued by alcoholism and depression, he committed suicide.

Rothko used a thin layer of pigment combined with a binder and applied it to bare canvas, followed by multiple thinned oil coatings. Using quick brushstrokes, he developed deep overlapping colors. Researchers, using modern techniques, revealed how he modified his paint. Rothko "used synthetic substances such as oil-modified alkyd and acrylic resins alongside traditional

materials, including egg, glue, and dammar resin, which are fast-drying and allowed him to apply subsequent layers within hours."[2] He also added phenol-formaldehyde so the layers did not run together. Rothko created a compositional organization for his paintings based on two or three colors arranged in various horizontal bars. The strength of each color generated a "halo" effect around each color, developing a translucency. His diluted paint saturated the canvas and stained the fibers. *Black, Red over Black on Red* (6.3.1) *and Black, Ochre, Red over Red* (6.3.2) demonstrate his use of intense, juxtaposed colors. In the first painting, the black appears to float on top of the red/black background, and in the second painting, the ochre seems recessed into the background of the stronger colors.

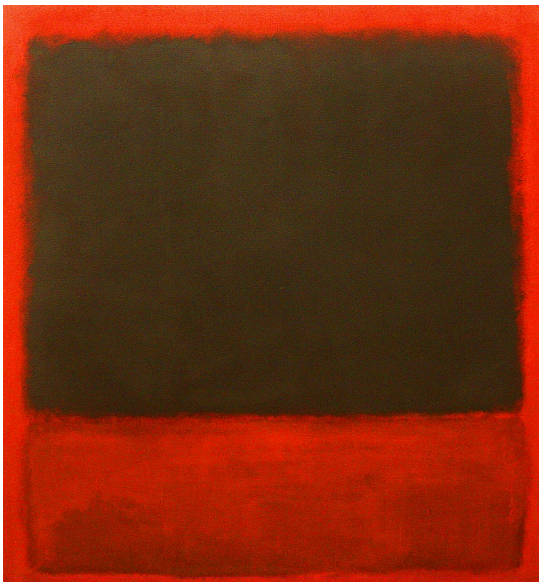


Figure 4.5.1: Black, Red over Black on Red (1964, oil on canvas, 205 x 193 cm) by f_snarfel, CC BY-NC 2.0



Figure 4.5.2: Black, Ochre, Red over Red (1957, oil on canvas, 252.7 x 207 cm) by rocor, CC BY-NC 2.0

Green, Blue, Green on Blue (6.3.3) uses different colors with the same effects, the open question of which space is dominant or background or other relationships. Rothko named many of his color field paintings after the colors he used for a specific work.

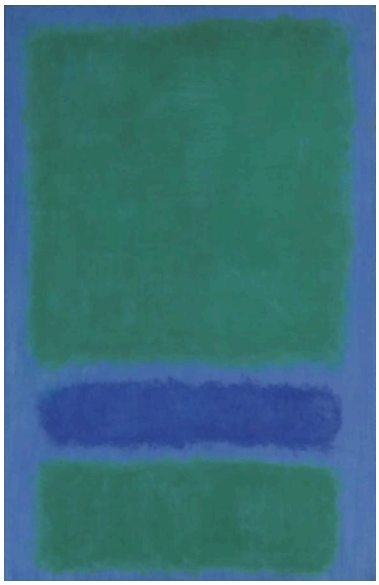


Figure 4.5.3: Green, Blue, Green on Blue (1968, acrylic on paper laid on canvas, 102.9 x 67.3 cm) by estudio campo baeza, CC BY-NC 2.0

No. 5/No. 22 (6.3.4) is an anomaly from Rothko's other color field paintings as the solid red band slashing across the canvas is broken by three undulating light lines. The horizontal lines were made by scraping through the paint with a blunt tool. When the painting was closely examined, researchers found the lines were repainted and re-scored numerous times, bunching in one area, stretching out on the edges, demonstrating Rothko's belief in the importance of how the lines were placed. Rothko always wanted to build emotion into the artwork and did not want his work viewed only for their spectral affiliations. He said, "If you are only moved by color relationships, then you miss the point. I'm interested in expressing the big emotions—tragedy, ecstasy, doom."[3]

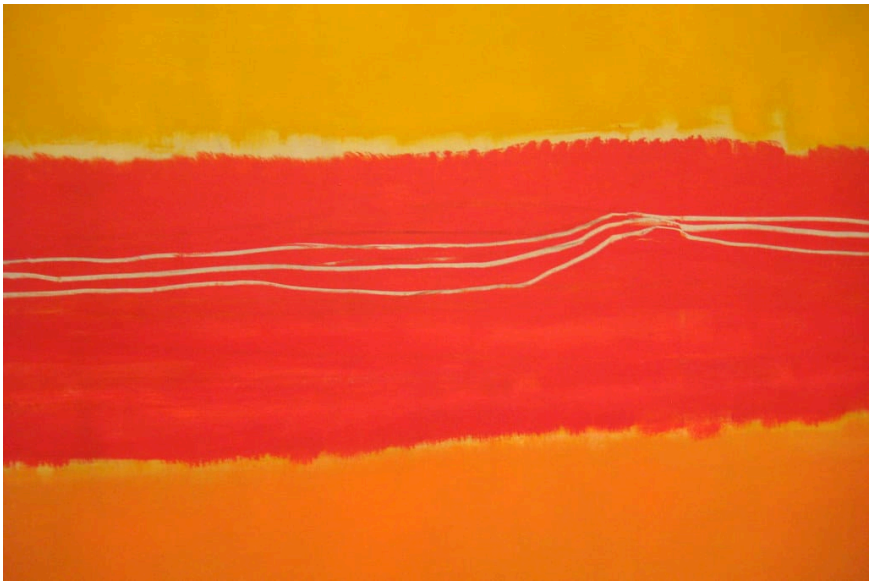


Figure 4.5.4: No. 5/No. 22 (1950 oil on canvas, 297 x 272 cm) by wallyg, CC BY-NC-ND 2.0

Clyfford Still

Clyfford Still (1904-1980) was born in North Dakota and lived in Canada and Washington as a child and through his early years, receiving a Master of Fine Arts degree at Washington State College. He married around 1930 and had two daughters. In 1941, he moved to California, where he met Mark Rothko, who introduced him to the prestigious galleries and the world of Abstract Expressionism. He still went to New York for several years, divorced his wife, and remarried before moving to Maryland, where he lived the rest of his life relatively isolated from the art world. Although he was credited as the first significant artist to abandon figuration, he did not participate in the major city art scenes, preferring the isolation of Maryland. Still did not believe audiences were ready for his kind of art. The Still Museum Director, Dean Sobel, wrote, "He felt the art world was full of self-serving

professionals who had become nothing but a drain on his creative energies."[4] Still frequently refused invitations to exhibit his work and turned down commissions, managing his career from Maryland, far from New York.

Still traveled between California and New York, he developed a unique style using large canvases covered with color punctuated by jagged shapes. The canvas had a dominant color of a deep impasto applied with a palette knife and a contrasting accent color to create tension and conflict. His paintings are reminiscent of the regions he lived in as a child, with vast terrain interspersed with craggy formations. Still referred to the irregular, vertical, linear forms as lifelines. *1947-Y-No. 2* (6.3.5) and *1949-A-No.1* (6.3.6) are examples of Still's use of color, high contrasted dark reds and black against areas of lighter yellow, white, or orange. The jagged lifelines flare throughout the painting.



Figure 4.5.5: 1947-Y-No. 2 (1947, oil on canvas, 176.5 x 149.9 cm) by Cea, CC BY 2.0



Figure 4.5.6: 1949-A-No.1 (1949, oil on canvas, 236.2 x 200.7 cm) by Cea, CC BY 2.0

1952-A (6.3.7) and *Untitled* (6.3.8) follow Still's style with a significant change in palette. *1952-A* was composed of robust colors and minimal contrast. The ragged blue lifeline formations are still visible in the thickly troweled dark paint. *Untitled* effectively used different tones of yellow over most of the canvas as a subtext to the striking black and red configuration dropping down from the corner. He left the canvas blank on the side of the painting except for the single dark, jagged lines. His strong vertical movement on the broad expanses of color brought a relentless force to Still's work.



Figure 4.5.7: 1952-A (1952, oil on canvas, 300 x 269 cm) by rverc, CC BY 2.0



Figure 4.5.8: Untitled (1957, oil on canvas, 287 x 375 cm) by rocor, CC BY-NC 2.0

Barnett Newman

Barnett Newman (1905-1970) was born in New York City; his parent's Jewish immigrants who came from Poland. Initially, he went to City College in New York and studied Philosophy, graduating in 1927. Newman worked as a teacher and writer, was considered an intellectual, and even tried to run for mayor. In the 1930s, Newman switched to painting, supposedly based on Expressionism; however, he destroyed the early work as obsolete and continued throughout his career to destroy any work not meeting his ideals. Newman's wife, whom he married in 1936, was an art teacher. In the 1940s, Newman's work had a surrealist style; then, he experimented with fields of color, originally variegated like the other Abstract Expressionists. However, he disregarded the more expressive brushwork for the flat, solid color paintings. Newman had to explain this new concept of solid, hard-edged areas of color, one of the first artists to use the techniques. He was not interested in how people labeled his work and had his view and claimed, "to start from scratch, to paint as if painting never existed before." Newman saw his work as forms of thought and the experience of being alive and individual.[5] In1945, he wrote about the theoretical goals of the proper abstract painter to move beyond earlier art movements, transcending the decorative elements of art into the abstraction of intellectual and conceptual art. Through one of the galleries, Newman became friends with Mark Rothko and Clyfford Still, all three influencing the abstract world of art.

Working with flat, solid colors, Newman added thin vertical lines he titled "zips." *Onement I* (6.3.9) was one of his first color field paintings with the zip line, his signature mark, using the vertical line to create the spatial regions of the painting. The painting was a solid field of Indian Red intersected with a zip line of light cadmium red he applied with a palette knife.



Figure 4.5.9: Onement I (1948, oil on canvas and oil on masking tape on canvas, 69.2 x 41.2 cm) by wallyg, CC BY-NC-ND 2.0

In Latin, Newman's title for his painting *Vir Heroicus Sublimis* (6.3.10) is translated, "Man, heroic and sublime." Newman created this oversized work to be sublime, wanted the viewer to stand near the painting to develop an experience similar to meeting someone. "It's no different, really, from meeting another person. One has a reaction to the person physically. Also, there's a metaphysical thing, and if a meeting of people is meaningful, it affects both their lives."[6] Newman used the impactful single color, letting the viewer respond to the color. His narrow zip bands intersected the color, the dark and light vertical stripe contrasting with the single massive color and giving scale to the painting.

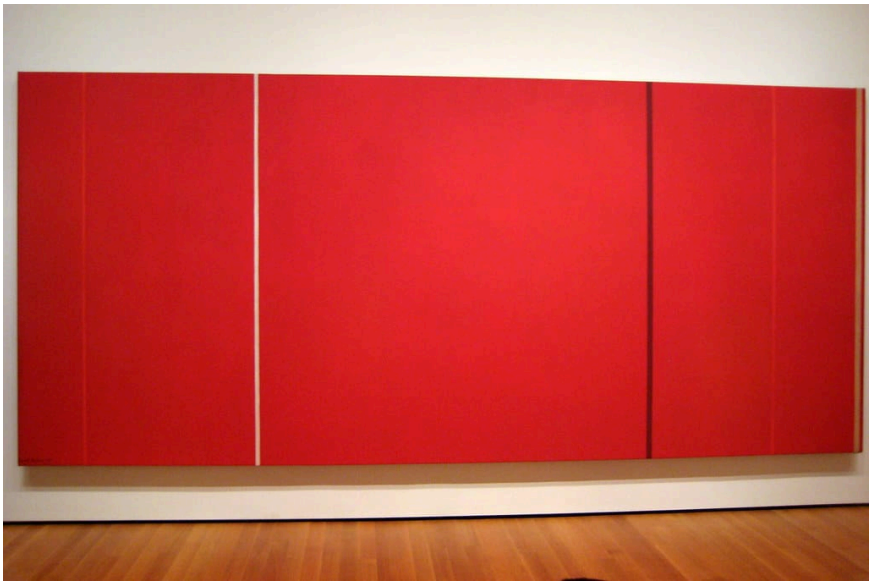


Figure 4.5.10: Vir Heroicus Sublimis (1950-51, oil on canvas, 242.2 x 541.7 cm) by wallyg, CC BY-NC-ND 2.0

Frank Stella

Frank Stella (1936-) was born in Massachusetts, attended elite schools, and graduated from Princeton University, where he majored in history, influenced by Stephen Greene, a legendary teacher. Stella was married twice and had five children with his second wife. He moved to New York in 1958 and was attracted to the new Abstract Expressionist paintings, especially Jasper

John's work of flags. Stella wanted to experience the idea of painting full time. He was opposed to the concept of expressively using paint and instead focused on the idea of the flatter surfaces seen in Barnett Newman's work. Stella's *Black Paintings* gained him quick fame and new concepts of what art is and needs to include, excluding the essentials of religion, psychology, political views, and other human frailties. Stella always believed, "What you see is what you see,"[7] bringing the concept of minimalism to the world. In the sixties, Stella became a leader in the art world with his flamboyant color and reductive forms.

The *Black Paintings* were his first expression of the picture as the object instead of a representation. Stella applied flat matte black paint in bands with brushes used by house painters leaving fuzzy thin, U-shaped pinstripes unpainted on the canvas. *Marriage of Reason and Squalor II* (6.3.11) repeated the geometric patterns on a flat surface with minimal brushstrokes. The repetition of lines developed and emphasized two dimensions while shocking people with its simplicity. The *Black Paintings* repetitive geometric lines and the unembellished simplicity set the stage for the concept of minimalism and the idea of a viewer interacting with the artwork instead of a visual scene.

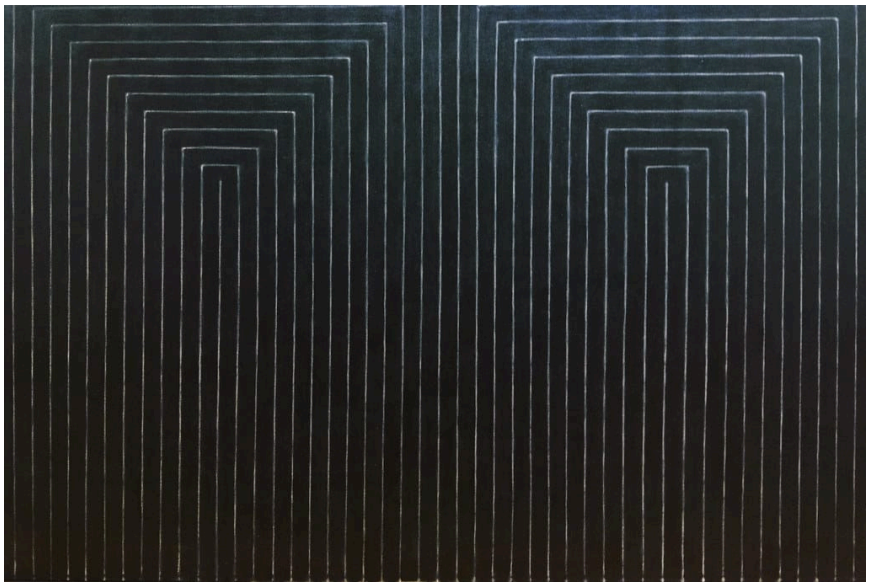


Figure 4.5.11: Marriage of Reason and Squalor II (1959, Enamel on canvas) by Derek Mead, CC BY-NC-ND 2.0

Empress of India (6.3.12), part of his Notched-V series, was created from four canvases shaped into chevrons with a simple color palette of browns and ochers. Stella said, "when you have four vectored V's moving against each other, if one jumps out, you dislocate the plane and destroy the whole thing entirely." [8] The limited palette and arrangement of the parts bring the interplay of movement while maintaining balance.

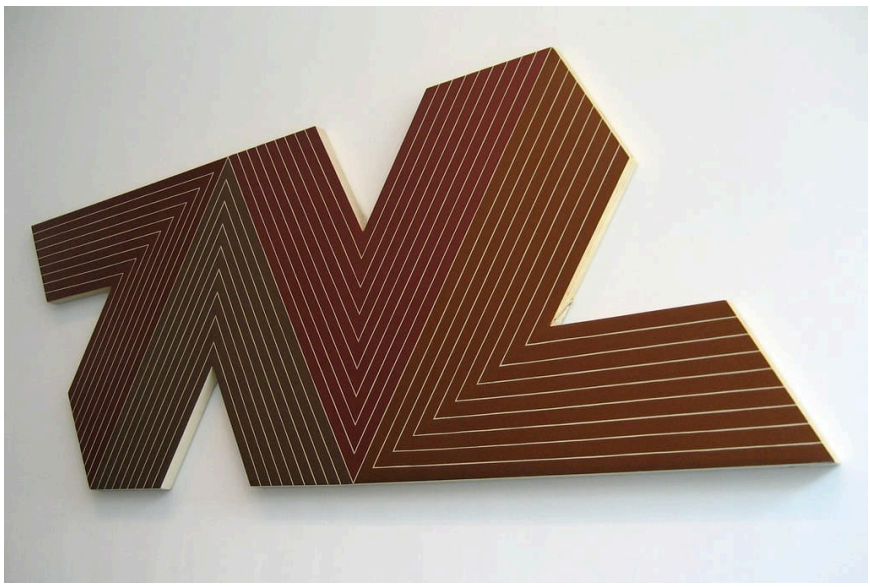


Figure 4.5.12: Empress of India (1965, Metallic powder in polymer emulsion paint on canvas, 195.6 x 548.6 cm) by wallyg, CC BY-NC-ND 2.0

Stella produced his *Protractor* series in 1967, artwork with broad, sweeping arcs, intersecting and overlapping, changing the concept of the shape of traditional art. The glowing, bright acrylic paint followed the lines of the canvas arcs. The *Protractor* paintings were large, innovative, and sculptural, paintings playing with the illusion of space based on a very flat surface appearing to have multi-faceted dimensions. Stella had visited Iran and was interested in the patterns of the pathways found in the ancient cities, so he named the series after some of the ancient cities. He painted the series over three years, producing ninety-three paints based on thirty-one different configurations. *Hagamatana II* (6.3.13) was apportioned over five distinct sections, each adjoined by curved strips of intersecting colored lines. The brightly colored lines simultaneously belong to different sections, challenging the viewers. He also used color, changing the focal colors on each side from black to red, the center brown box bringing both sides together. The basic lines were drawn on a small scale with a protractor.



Figure 4.5.13: Hagamatana II (1967, Polymer and fluorescent polymer paint on canvas, 305.4 x 458 cm) by pedrosimoes7, CC BY 2.0

Clesiphon I (6.3.14) was named for a city near Baghdad, Iran. Stela used three unique designs: interlaces, rainbows, and fans based on their basic shapes; the half circle and circle in *Clesiphon I* became the primary units, the interlacing lines moving through the painting. The series was overly large and architectural as the bright fluorescent colors were usually applied in one coat.

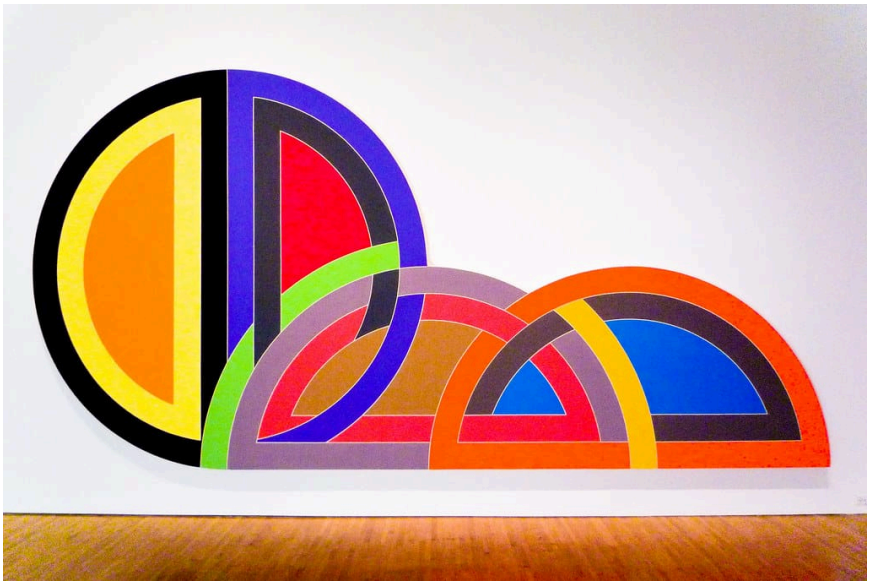


Figure 4.5.14: Ctesiphon I (1968, Polymer and polymer fluorescent paint on canvas, 304.8 x 609.6 cm) by Roman Königshofer, CC BY-ND 2.0

Anne Truitt

Anne Truitt (1921-2004) was born in Maryland before moving to North Carolina as a teenager. In college, she pursued a degree in psychology and graduated from Bryn Mawr College in 1943 before working in a hospital psychiatric ward. By the late 1940s, she decided to change careers and enrolled in art classes at the Institute of Contemporary Art in Washington, D. C. She married James Truitt in 1947 until 1971, when they were divorced. Truitt started her art career with figurative sculptures. At a museum, she encountered Barnett Newman's work and was inspired by the simplicity and subtlety of color modulation, a turning point for her career. Truitt's first sculptures were made of wood-based on forms of memories of fences in her childhood. Her sculptures were created from wood and then painted with multiple layers of acrylic in monochromatic color. The sculptures were usually hollow and weighted to maintain their positions. Her painting process was extensive and time-consuming; the first layer was gesso, followed by multiple layers of paint, sometimes over thirty layers. Truitt was careful with her brushstrokes; each application of paint alternated between horizontal and vertical, each layer sanded to achieve a purity of color and finish. Truitt also created a large set of pencil and ink drawings, wrote books, and taught at the University of Maryland.

Truitt's use of a broad color palette was reflected in the installation of *In The Tower* (6.3.15), ranging from deep colors of red and black to the paler yellow and lavender. She did not apply multiple layers of one color. Instead, she used different mixed colors, observing how translucent or opaque the color was and which layer to apply the color. She believed some base colors allowed the top colors to achieve perfection and become alive. The individual columns ranged in height and color, none of them exactly alike.



Figure 4.5.15: In the Tower (paint on wood) by C-Monster, CC BY-NC 2.0

In *Green: Five* (6.3.16), Truitt used oil-based enamel on wood instead of acrylic. The tower appears black; however, multiple layers were applied to achieve the finished color. She mainly used yellow, scarlet, lavender, light blue, black and white, believing colors were organic and living, creating a feeling of "aliveness" in the colors.[9]



Figure 4.5.16: Green: Five (1962, oil (semi-gloss enamel) on wood, 149.8 x 38.1 x 17.78 cm) by rocor, CC BY-NC 2.0

Jules Olitski

Jules Olitski (1922-2007) was born in Ukraine, as Jevel Demikovsky. His father was executed shortly before he was born, and the family relocated to America when he was a year old. When his mother remarried, he was given the last name of his stepfather. Olitski displayed his artistic abilities early, even winning an art prize in high school, continuing his education at the National Academy of Design and Beaux Arts Institute in New York. After his time in the army during World War II, he studied in Europe and returned to New York. He was married and started exhibiting in different shows; his work was based on heavily textured abstracts. In 1960, he began to use dyes, staining large regions of the canvas with bright colors. Five years later, he developed a technique of applying layers of color and then dragging portions of acrylic paint on the changed borders. He used spray paint to cover large areas, building multiple layers of a different color to progressively alter the hues and values, the chromatic shifts of color, and significant advances in spray and stain paintings. Initially, he applied the paint with rollers or brushes before using the spray gun to add thin layers of paint saturating the surface. *Color in Voyage* (6.3.17) is banded by circular forms, each color unique and contrasted with other segments. The bright blue in the center contends with each of the different bright colors.

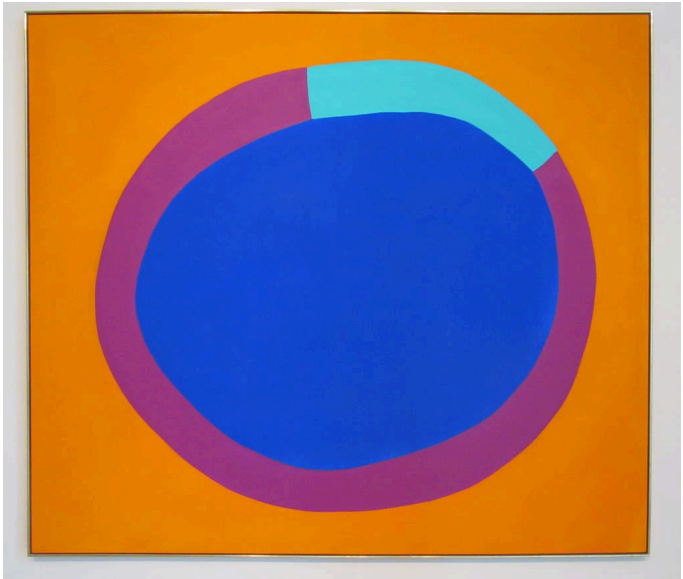


Figure 4.5.17: Voyage (1962, Acrylic on canvas) by rocor, CC BY-NC 2.0

Burn and Glitter (6.3.18) demonstrate Olitski's spray paint techniques to develop misty images. The multiple layers of thin, almost transparent colors helped create an opacity along with a transparent look. The possibility of the bright red is muted under the

added layers of multiple colors, an open field filled with color from the outside inward.



Figure 4.5.18: Burn and Glitter (1966. Acrylic on canvas, 294.64 x 220.98 cm) by c_nilsen, CC BY-NC-SA 2.0

Morris Louis

Morris Louis (1912-1962) was born in Maryland, his parents' emigrants from Russia. He attended school in Maryland and won an art competition and a four-year scholarship to the Art Institute. His first significant art project was helping on a Public Works Art Project in Baltimore before moving to New York in 1936. He consistently painted scenes of workers and the poverty surrounding him before returning to Baltimore in 1943. He married in 1947, a time he began to use the new type of paint called Magna, the only paint he ever used after that. He worked with the paint makers, and they created a special acrylic resin mixable with mineral spirits or turpentine. The paint was used by artists in stain painting, achieving specific effects by pouring colors directly from the can. Magna colors were vivid, bright, and more intense than standard water-based acrylics. Louis and the other color field artists had simplified the concept of what is a finished painting. He specifically eliminated any compositional representations and left large regions of the unfinished canvas. He used lines of fluid paint in a repetitive formation of solid planes

One of Louis' most famous series was *Unfurled*. He used unprimed canvas, adding the paint to flow down the surface without brushstrokes. He was one of the prominent artists to develop the flowing, thin pigment as the paint billowed in rivulets down the canvas. *Delta Kappa* (6.3.19) was part of the series on the oversized canvas. The multi-colored rivulets move from the sides of the canvas to the bottom, not meeting and leaving the center blank. The colors soaked into the canvas, maintaining the purity of the flat colors. The work was complex; the artist only had one pass to pour the lines and have them flow correctly.



Figure 4.5.19: Delta Kappa (1960, (Acrylic Resin (Magna on Canvas), 262.3 x 370.8 cm) by Gandalf's Gallery, CC BY-NC-SA 2.0

Louis also created a series called *Stripe, Pungent Distances* (6.3.20), one of the paintings in the group. He generally hung the canvas on the wall and used turpentine-thinned paint as it flowed and soaked into the canvas. The adjacent, narrow stripes became more distinct as the color ran down the canvas. Louis represented color for its visual qualities, using an unpredictable method without brushes.



Figure 4.5.20: Pungent Distances (1960s Magna on canvas) 231.8 x 150.5 x 3.2 cm) by rocor, CC BY-NC 2.0

By the end of the late 1960s, color field painting was fragmenting into smaller definitions, each with unique characteristics, reducing artwork into severely minimalistic images. Color field became a starting point for the Minimalists who took the ideas of color and shapes into their pure basic form, eliminating any non-essential features.

---

[1] Doss, E. Makes Me Laugh, Makes Me Cry, Feelings and American Art, *American Art*, 25/3 (Fall 2011), p. 2.

[2] Qiu, J. Rothko's methods revealed. *Nature* 456, 447 (2008). https://doi.org/10.1038/456447a

[3] Retrieved from https://www.moma.org/collection/works/80566 (28 October 2020)

[4] Ichikawa, A., A New Clyfford Still Documentary Explores the Life and Work of the Enigmatic Abstract Expressionist, *Art*

in America, March 25, 2020, retrieved from https://www.artnews.com/art-in-america/features/lifeline-clyfford-still-dennis-scholl-abstract-expressionism-1202680523/ (20 October 2020)

[5] John P. O'Neill, ed. *Barnett Newman: Selected Writings and Interviews*. (New York: Alfred A. Knopf, 1990), 192.

Retrieved from https://www.moma.org/artists/4285#fnref:2 (30 October 2020)

[6] Retrieved from https://www.moma.org/collection/works/79250 (30 October 2020)

[7] Retrieved from https://www.newyorker.com/magazine/2015/11/09/big-ideas-the-art-world-peter-schjeldahl (28 October 2020)

[8] Retrieved from https://www.moma.org/collection/works/79806 (29 October 2020)

[9] Retrieved from https://editions.lib.umn.edu/panorama/article/in-the-tower/ (30 October 2020)

This page titled 4.5: Color Field (1950s-1960s) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Deborah Gustlin and Zoe Gustlin (ASCCC Open Educational Resources Initiative).

4.6: BARNETT NEWMAN

4.6.1: Onement, I
4.6.2: Barnett Newman at MoMA
4.6.3: The Painting Techniques of Barnett Newman
4.6.4: Representation and abstraction- looking at Millais and Newman

This page titled 4.6: Barnett Newman is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Smarthistory.

4.6.1: Onement, I

by DR. STEVEN ZUCKER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.6.1.1: Barnett Newman, *Onement, I*, 1948, oil on canvas, 27 1/4 x 16 1/4" / 69.2 x 41.2 cm (Museum of Modern Art, New York)

Smarthistory images for teaching and learning:



Click on image for larger picture (External link to flickr)

This page titled 4.6.1: Onement, I is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Smarthistory.

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.6.2: Barnett Newman at MoMA

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.6.2.1: Video from The Museum of Modern Art

This page titled 4.6.2: Barnett Newman at MoMA is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by The Museum of Modern Art, "Barnett Newman," in Smarthistory, January 29, 2016, accessed August 17, 2020, https://smarthistory.org/barnett-newman/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.6.3: The Painting Techniques of Barnett Newman

by THE MUSEUM OF MODERN ART

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.6.3.1: Video from The Museum of Modern Art

This page titled 4.6.3: The Painting Techniques of Barnett Newman is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by The Museum of Modern Art, "The Painting Techniques of Barnett Newman," in Smarthistory, January 29, 2016, accessed August 17, 2020, https://smarthistory.org/the-painting-techniques-of-barnett-newman/..

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.6.4: Representation and abstraction- looking at Millais and Newman

by SAL KHAN, DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.6.4.1: *Vir Heroicus Sublimus*, 1950-51 (MoMA)

What's "heroic" about a painting that looks like a craft project on HGTV? This comparison suggests an answer.

Smarthistory images for teaching and learning:



Click on image for larger picture (External link to flickr)



Click on image for larger picture (External link to flickr)

This page titled 4.6.4: Representation and abstraction- looking at Millais and Newman is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Smarthistory.

- 10.11: Postwar American art (I) by Smarthistory is licensed CC BY-NC-SA 4.0.

4.7: Op Art (1960s – 1970s)

Introduction

Op Art was a new form based on the exploitation of illusions and different optical effects of how an image was perceived. Op Art is the short form of Optical Art, a style of abstraction challenging the viewer's visual acuity. In 1957, neuroscientist Donald M. MacKay created the illusion based on a series of radial lines (MacKay rays), producing the perception of shimmering motion from the angled lines. The artist Victor Vasarely, one of the originators of the style, studied science and art and combined the concepts of color and optics to create images appearing to move, alter or expand. At first, Vasarely experimented with visual tricks like trompe-l'oeil before moving to geometric abstraction and recognition as the grandfather of Op Art.

The form was usually mathematically based, using repetitive color and arrangements to develop into vibrating, changing effects. The background and foreground relationships became chaotic with exaggerated 3-dimensional depths. Op Art pushed the concepts of perception, confusing the eye through multiple optical effects, angles, and materials. The artist used precise calculations and measurements based on geometric forms to produce the illusionary perception in an image. Color, grids, and patterns defined and created the illusional positive space and negative areas. Many of the images were based on black and white, as others used bright contrasting colors to develop the illusional motion of static patterns. Artists used straight or curved lines to establish the idea of undulation, volume, or spiraling movement. Op Art used optical illusions and incorporated the concepts of kinetics; the static work moved from a seemingly fixed position into a dimensional and moving object by interacting with the viewer's eye and perceptions in the retina.

Victor Vasarely

Victor Vasarely (1906-1997), born in Hungary, studied at medical school before transferring to art school and enrolling in the private school *Mühely* (workshop) based on Bauhaus concepts. In 1930, he married another student and had two sons. Shortly after they married, they moved to Paris, where he worked as a graphic designer. He experimented with different designs and ideas using geometric forms, multiple materials, colors, and perspectives. One of his first images depicted two zebras intertwined, their black and white stripes against the black background became the earliest example of Op Art. Although Vasarely experimented with other styles and movements, by 1947, he focused on the geometric abstraction of shapes, lines, color, and perspective. One reviewer of Vasarely's work stated, "The Moving eye in the moving body must work to pick out and interpret a variety of changing, juxtaposed orders, like the shifting configurations of a Victor Vasarely painting. It is the unity that maintains but only just maintains, control over the clashing elements which compose it. Chaos is very near, its nearness, but its avoidance gives force."[1] Vasarely developed a methodology of using a set of colors and then creating lines and shapes for the color system he termed his 'artistic alphabet.' Each series was based on a different alphabet or color plan.

Supernovae (6.7.1) is an early work of Vasarely, a vertical, abstract painting in black and white. Supernovae were stars constantly changing, an idea he used for his series of black and white canvases, altering the viewer's perception based on geometric principles and movement. He created 1,161 black squares inside the grid of thin white lines.[2] At the top left of the image, the black squares shift and form a black cruciform, while on the upper right side, the black squares are smaller and from a white diagonal cross. Some parts of the work have circles inside the squares, the circles increasing in size as they move across the painting. About a third of the way from the top, one row contains black rhomboids appearing to float. Supernovae appear to be moving and changing, optical changes based on the chromatic density and shapes seen by the viewer's eye. Vasarely believed the perception of motion was achieved by the aggressive ways the geometric structures appear to the retina.

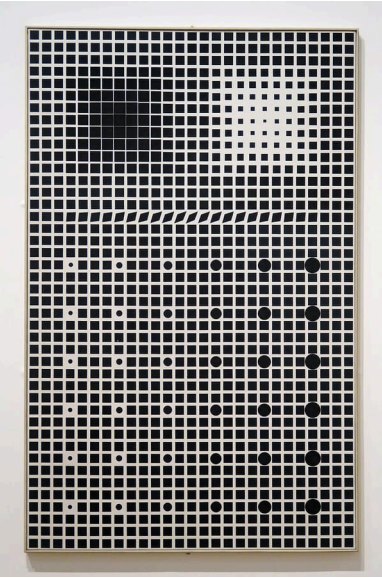


Figure 4.7.1: Supernovae (1959-61, oil on canvas, 241.9 x 152.4 cm) by Sally Payne, CC BY-NC-ND 2.0

Vasarely aggressively incorporated color into his optically illusionary paintings in the 1960s with vivid squares and luminous circles, creating images appearing concave and rotating or convex and moving in waves, all becoming part of the signature patterns of Vasarely and Op Art. He named many of his series after distant galaxies, stars, or constellations. In the Vega series, he used convex and concave distortions, combining cubes and squares into grid-like patterns to bring the pulsating rhythm of the nighttime skies. Vasarely used the two-dimensional platform of a primary grid to create three-dimensional images by reducing or expanding the grid sections, transforming squares and circles into rhombuses and ellipses. *Vega-gyongly-2* (6.7.2) appears as a rotating ball in the middle of the flat grid. Vasarely added additional movement with the white squares the viewer chases throughout the painting. Changing the size of the circles or squares created the multi-dimensional view of a surface appearing to be warped.

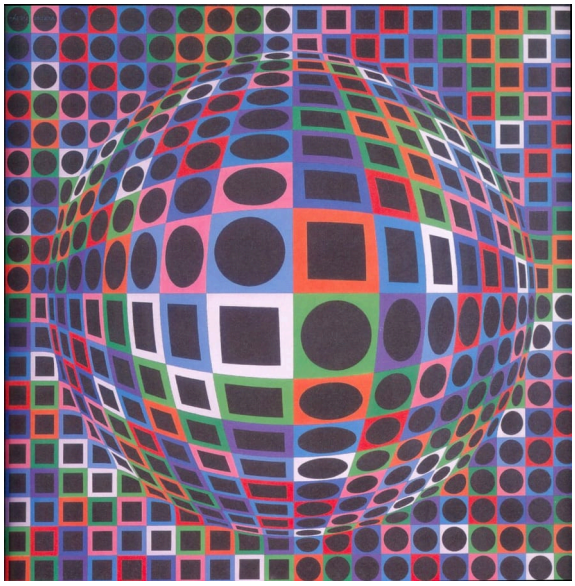


Figure 4.7.2: Vega-gyongly-2 (1971, acrylic on board, 80 x 80 cm) by oddsock, CC BY 2.0

Sange 3076 (6.7.3) was based on squares to form cubes. Vasarely used his color system or alphabet to define the patterns. The color palette is simple and set against a dark background. The color and position represent each unit, red appearing the dominant color as used only to define the square, or is white the prominent color as it bounces around the image. The eye also moves to the small black squares devoid of color. Vasarely used color to move the viewer around the painting and the dimensional cubes stacked in multiple combinations adding to the numerous location changes of the cubes.

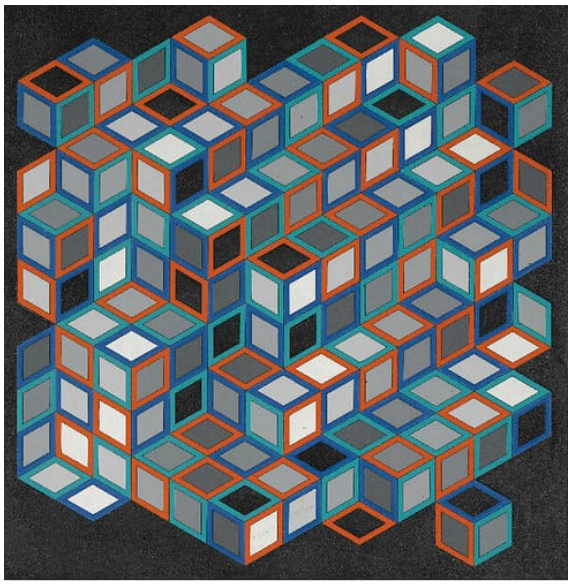


Figure 4.7.3: Sange 3076 (1980, acrylic on vellum laid on panel, 52.5 x 51.7 cm) CC BY 2.0

Vasarely's *Gestalt* series was a reflection of his fascination with hexagons. The paintings have an ethereal yet three-dimensional design based on cellular-like forms and structures. *Axens* (6.7.4) uses two prominent basic colors of blue and purple. The colors varied as they moved through space to create the illusion of a deep concave area, a light at the end of a tunnel. The only shape he used was the hexagon, each one smaller in progression. The broader dimensions of the bottom sides of the blue hexagons and the smaller sizes of the bottom of the purple hexagons create the deep depth of the image. Vasarely explored geometry, shapes, depth, movement, and color throughout his life, whether he was painting, sculpting, or planning architectural structures. As technology and computers developed, he exploited the programs to assist his designs ahead of his time. He worked into his old age, continuing to invent and generate new ideas.

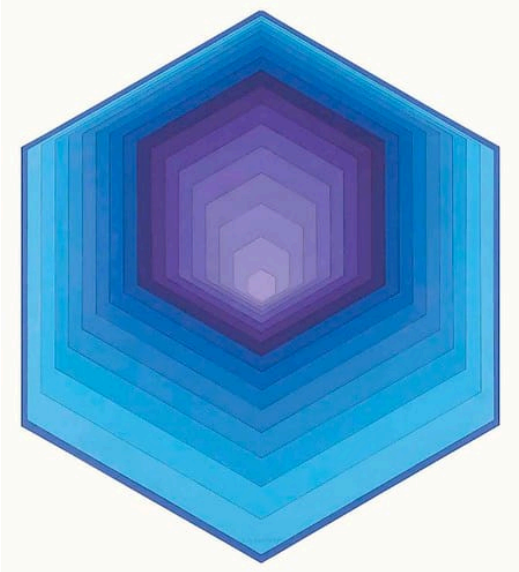


Figure 4.7.4: Axens (1980, acrylic on panel, 92 x 81 cm) by Cea, CC BY 2.0

Bridget Riley

Bridget Riley (1931-) was born in London, England. Her father owned his own printing business before World War II when he served in the army. As with many families during the war, Riley, her mother, and her sister moved to the countryside in Cornwall to avoid the blitz. She liked to explore the coastline noting how reflections occurred in rock pools and the effects of the sunlight on the changing colors of the water. After the war, Riley studied art at Cheltenham Ladies' College, Goldsmiths College, and the Royal College of Art. Riley worked as an illustrator for an advertising agency when her father was seriously injured in a car accident, and

she suffered a mental breakdown. Riley moved back to London, taught art at a girl's school, and explored different art styles. She experimented with figurative, Impressionist, and Pointillist art styles before developing her signature style of Op Art in the 1960s. Riley focused on using black and white for her geometric patterns creating images to disorient the eye into seeing movement and color. In addition to black and white, she used gray tones and placed the geometric shapes in curves, adding movement and optical variances. Riley traveled to multiple countries, favoring the bright colors and patterns found in Egypt and India. By 1967, Riley incorporated color in lines to produce a shimmering effect in tessellating patterns, highly contrasting colors. She thought of her work as inspired by nature, not in realistic forms; instead, as she said, "For me nature is not landscape, but the dynamism of visual forces-an event rather than an appearance."

Metamorphosis (6.7.5) presents an ambiguity to the viewer of the progressive movement as the circles are applied with different gray tones against the white background. Using circles, she changes the shapes as the circles move across the image. Riley carefully designed the shape of each circle and cut the patterns to ensure accurate proportions. Op Art became a significant part of the 1960s culture, the patterns, and illusions integral to the fashion and design industries. Riley was one of England's celebrity artists. 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"[3] During the early 1960s, Riley only used black and white to create imaginative and sensory images.

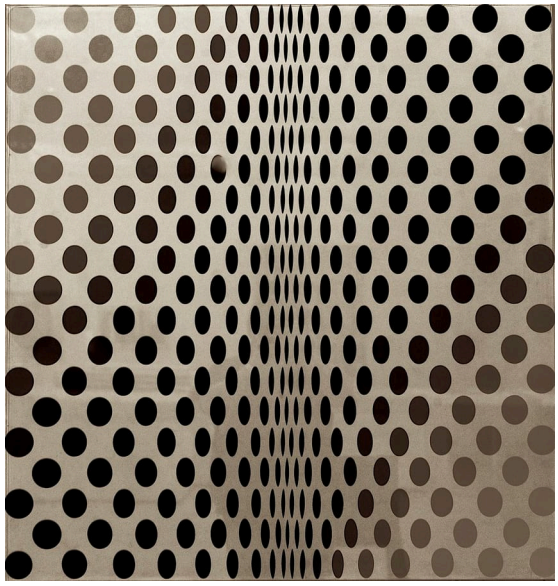


Figure 4.7.5: Metamorphosis (1964, wood and liquid suspension, 108 x 112.2 cm) by pedrosimoes7, CC BY 2.0

In *Arrest 2* (6.7.6), Riley uses lines and multiple tones of black to white to bring the illusion of movements. The pale gray lines in the middle of the painting are bordered by heavy dark lines, forming the appearance of a channel to some viewers. In her black and white works, she wanted to eliminate any concept of representational art instead of using visual shapes to excite the retinal emotions.



Figure 4.7.6: Arrest 2 (1965, acrylic on linen, 195 x 190.5 cm) by jondresner, CC BY-NC-SA 2.0

In 1967, Riley began to introduce color into her work, using the relationships of color and its changing qualities as a basis for her work. Her series in color was *Cataract*, and she described how difficult the move to color was; geometric shapes were constant, and color brought a sense of instability based on the presentation of adjunct colors. In *Cataract 3* (6.7.7), Riley used lines, a stable shape, to position the color to produce the illusion of movement. The broad or thin lines appear as ribbons waving across the canvas. She used two extreme colors of turquoise and vermilion for contrast, positioning the colors to bring a luminosity to the rippling image through the center; grays at the top and bottom accent the movement through the middle of the work. Although Riley's black and white images were internationally respected, she wanted to continue to explore the use of color. She spent time studying Georges Seurat's use of Pointillism and how adjunct colors affect each other.

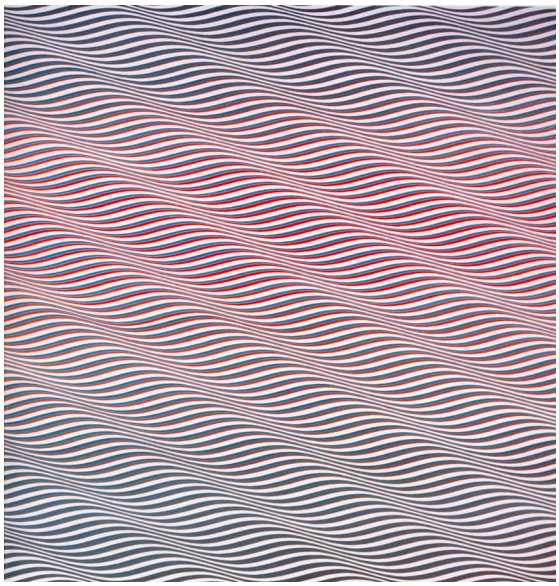


Figure 4.7.7: Cataract 3 (1967, emulsion PVA on linen, 221.9 x 222.9 cm) by oddsock, CC BY 2.0

Orient IV (6.7.8) was based on her expanded sense of color and how linear structures of different colors next to each other created the concept of motion when viewed by the viewer's eye. She also began using stripes in most of her paintings, believing stripes allowed color to constantly change the viewer's perception. Riley usually made a pattern with small strips of paper to test different color combinations before painting on a large canvas, evaluating how the colors brought the feeling of motion.

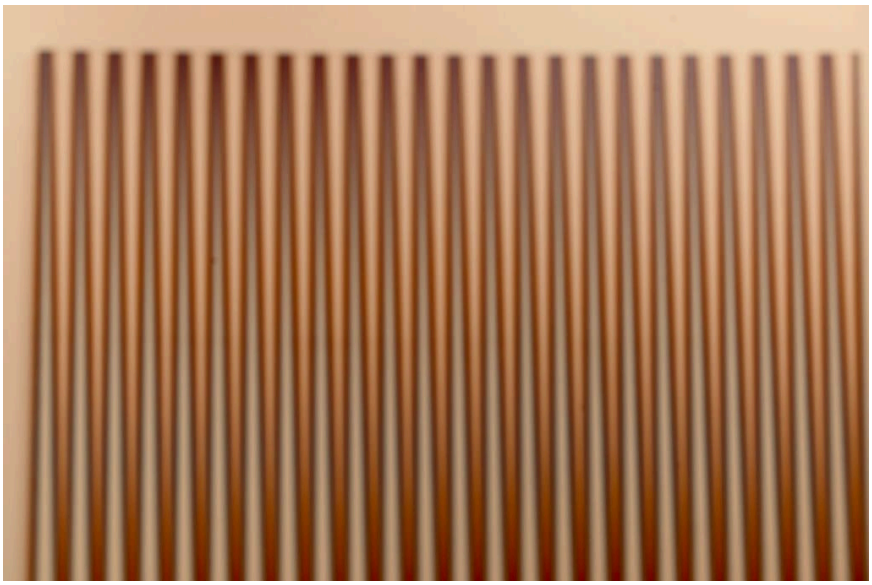


Figure 4.7.8: Orient IV (1970, acrylic on canvas, 223.5 x 323 cm) by pedrosimoes7, CC BY 2.0

Edna Andrade

Edna Andrade (1917-2008), born in Virginia, was encouraged from an early age to draw and paint and graduated from the University of Pennsylvania with a degree in Fine Arts. After World War II, she went to Europe and learned the modernism of the Bauhaus movement, concepts that influenced her designs and abstractions. Andrade married in 1941, and they moved to Philadelphia, where Andrade lived and painted. Early in her career, she created abstract landscapes before working on propaganda material during World War II for the organization that became the CIA, work she considered mundane and expected of women at the time. Andrade talks about herself as the unliberated housewife of the period. Andrade divorced her husband in 1960 and only then began painting the works she is known for, fully engaging in her ideas of illusionary or Op Art, geometrical shapes generally based on squares and unique color juxtapositions. Some of her work is almost psychedelic appearing, seemingly lines moving on the painting. Andrade felt her work was a visual experience without any particular story and believed the eye was easily upset when viewing conflicting color spectrums and sophisticated geometric patterns. Andrade's use of contrasting and repeated colors placed next to each other defined the rhythm and movement of the painting, almost a hypnotic sensation. She moves the eye around the painting in constant motion, no place to rest.

Blue Cross with Red (6.7.9) assaults the eye with the deep blue background filled with broken lines of deep red. The lines bend to move the viewer around the painting while continually returning to the strength of the red square in the middle. Andrade believed only a few basic shapes in combination with color develop symmetry and rhythm in the painting.

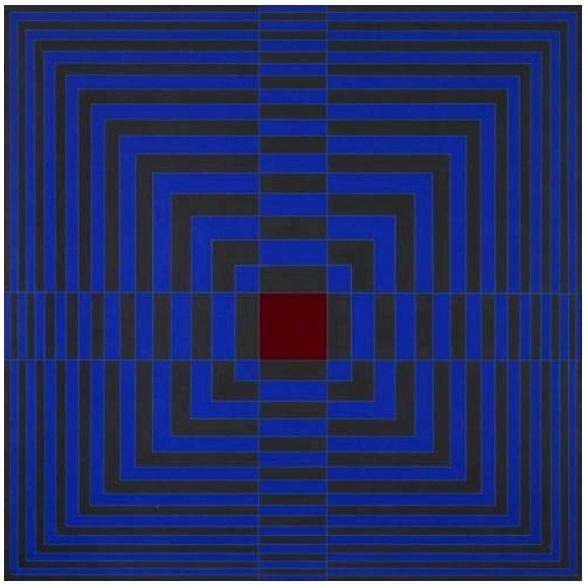


Figure 4.7.9: Blue Cross with Red (1968, acrylic on canvas, 93.2 x 93.2) by dr vaxon, CC BY 2.0

Untitled (Metallic Square 3) (6.7.10) demonstrates her belief in the symbolic significance of fundamental shapes. The simple line, bent and moved at incremental positions combined with basic opposing colors, generates the perspective of orderly movement in a chaotic environment.

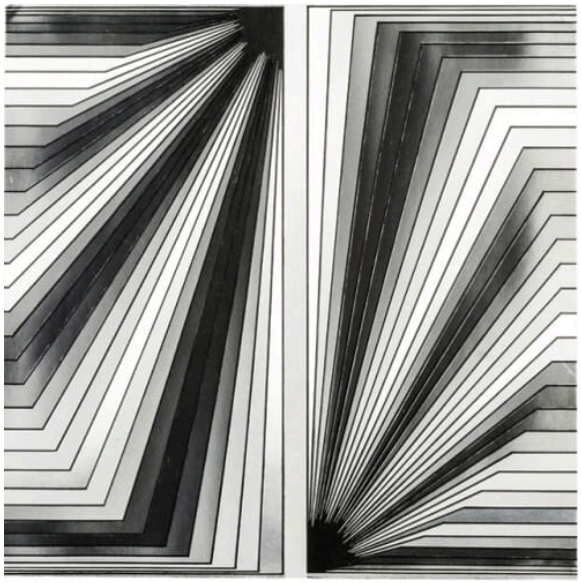


Figure 4.7.10: Untitled (Metallic Square 3) (1972, screenprint on aluminum foil paper) by dr vaxon, CC BY 2.0

While *Blue Cross with Red* appears as lines generating out from the middle square and *Untitled* has a maze-like appearance, *Turbo 1-65* (6.7.11) uses what seems to appear as lightning bolts radiating from the center. The bright red lines against the opposing green give the perception the lines bend and expand as they move outwards, the bold contrasting colors conveying the rhythmic patterns.

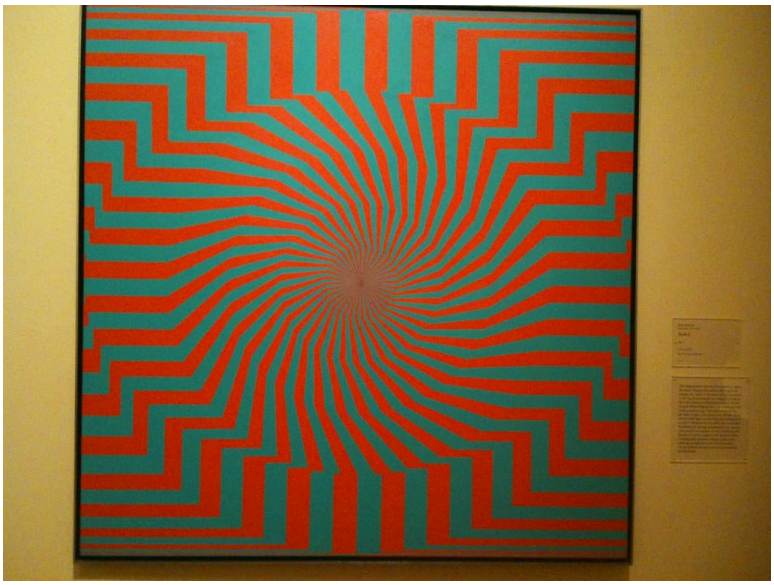


Figure 4.7.11: Turbo 1-65 (1965, oil on canvas, 127 x 127 cm) by Jagrap, CC BY-NC 2.0

Richard Anuszkiewicz

Richard Anuszkiewicz (1930-2020) was born in Pennsylvania; his father, a Polish immigrant, worked in a paper mill. Anuszkiewicz first studied art at the Cleveland Institute of Art before attending Yale University, where he received a Master of Fine Arts. He is viewed as one of the early proponents and founders of Op Art. In a gallery show in New York, an art reviewer stated, "The drama-and that feels like the right work-is in the subtle chemistry of complementary colors, which makes the geometry glow as if light were leaking out from behind it."[4] Anuszkiewicz used highly concentrated colors to define his geometric figures, frequently based on nested rectangular or square forms. He believed applying different intensive and juxtaposed colors created the effect of optically changing colors, his shapes appearing to pulsate.

Anuszkiewicz used patterns and parallel colored lines to form his illusionary images based on perceptive ambiguity. In *Orange, Rose, Magenta Knot* (6.7.12), the variegated colors create their relationships, accenting the geometric patterns integrated with the slender, thin lines. The magenta delineating lines are spaced closely together near the boundaries, the contrasting color bringing a shimmering perspective to the work. Each fluted line is meticulously aligned as they move closer or farther from each other, giving an illusion of a curved surface.

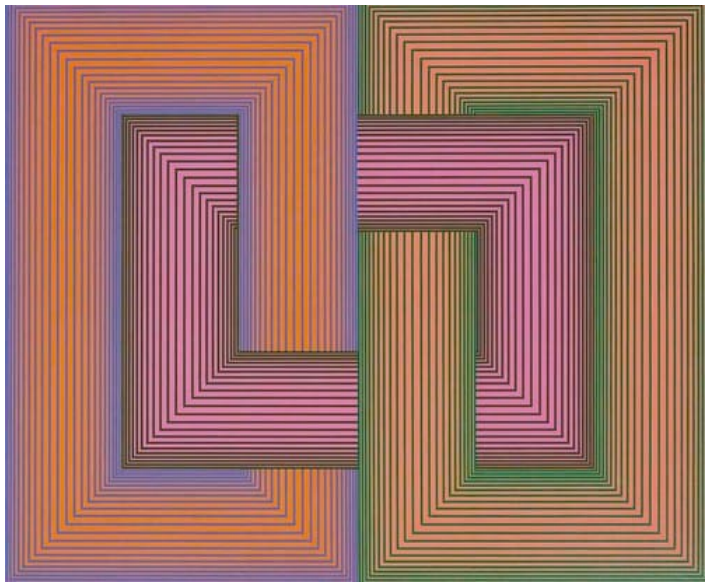


Figure 4.7.12: Orange, Rose, and Magenta Knot (1986, acrylic on canvas, 152.4 x 182.9 cm) by Cea, CC BY 2.0

Deep Magenta Square (6.7.13) is from a series of works he painted based on a large square as the central image, the lines emanating from behind the square, giving the square the appearance of floating. The complementary colors of purple and yellow lines vibrate against one another developing the impression of a light source behind the solid square. The highly contrasted colors adjacent to each other give the colors added intensity. Anuszkiewicz liked the square as a focal point on his canvases and stated: "I think any time you put something right in the middle of the canvas, it gives people a sort of contemplative experience drawing in and coming out."[5]

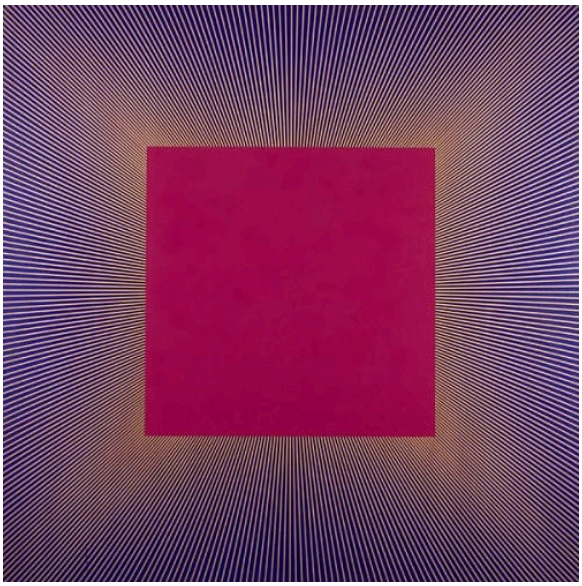


Figure 4.7.13: Deep Magenta Square (1978, acrylic on panel, 123.19 x 123.19 cm) by dr vaxon, CC BY 2.0

Marina Apollonio

Marina Apollonio (1940-) was born in Trieste before she moved to Venice as a child. She attended the Accademia di Belle Arti di Venezia to study art, creating her first work in 1963. She preferred the depersonalization of Op Art instead of the more expressive Abstract Expressionism, using industrial metal materials for her artwork. Apollonio produced her work based on the concepts and relationships of parallel lines, using combinations of elementary forms and mathematical rigor. The two-dimensional work became imaginative three-dimensional of concentric circles appearing to fluctuate and spin in motion. Her large work is laid on the floor, the flat surface of strong parallel lines drawing the viewer physically into the painting. Much of her work was black and white; however, she also used contrasting colors. *Spazio Ad Attivazione Cinetica 6B* (6.7.14) demonstrates Apollonio's use of mathematics, geometry and visual materials. Using the contrasting colors of black and white, the overly large work invites the viewer inside the painting; the flat surface appears to undulate into mini hills, slowly spinning. The Guggenheim Museum stated: "After choosing a primary shape, for instance, a circle, the artist would study its structural possibilities so that she could make it active, all the while striving to garner the maximum result via minimal means. This process was not at all tainted by subjectivity."[6] By the 1980s, Apollonio no longer made new artwork, only dedicating her time to research and writing.



Figure 4.7.14: Spazio Ad Attivazione Cinetica 6B (1966, vinyl (original work: steel, wood, PVC, 508 x 706.1 cm) CC BY-SA 4.0

In the 1960s, the vertigo-inducing artworks became the rage. The illusionistic paintings filled the galleries and museums, yet abruptly, Op Art was no longer in vogue, almost a craze tumbling into disfavor. Some critics called the art gimmicky and shallow, not serious. However, Op Art outlasted these critics, and analysis of the works demonstrates a unique ability to perceive patterns, geometric shapes, and juxtaposed, highly contrasting colors to create spectacular work involving the viewers in the dynamics of the paintings.

---

[1] August Heckscher, *The Public Happiness,* New York: Antheneum Publishers, 1962, p. 289

Found in Voelker, W. (1982). Behind the False Fronts: Alleys Come Out of Hiding. *Landscape Architecture, 72*(6), 71-73. Retrieved November 9, 2020, from http://www.jstor.org/stable/44671485

[2] Retrieved from https://www.tate.org.uk/art/artworks...ernovae-t00676

[3] Retrieved from http://www.op-art.co.uk/bridget-riley/

[4] Cotter, H., Art in Review; 'Something Happened', *New York Times*, Section E, December 15, 2000, p. 4

[5] Retrieved from https://www.theartstory.org/artist/anuszkiewicz-richard/artworks/

[6] Retrieved from https://burnthewater.org/2016/05/29/marina-apollonio-spazio-ad-attivazione-cinetica-6b/

(16 December 2020)

This page titled 4.7: Op Art (1960s – 1970s) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 6.7: Op Art (1960s – 1970s) by Deborah Gustlin and Zoe Gustlin is licensed CC BY 4.0.

4.8: Tessellations

Learning Objectives

1. Apply translations, rotations, and reflections.
2. Determine if a shape tessellates.

The illustration shown above (Figure 4.8.1) is an unusual pattern called a Penrose tiling. Notice that there are two types of shapes used throughout the pattern: smaller green parallelograms and larger blue parallelograms. What's interesting about this design is that although it uses only two shapes over and over, there is no repeating pattern.

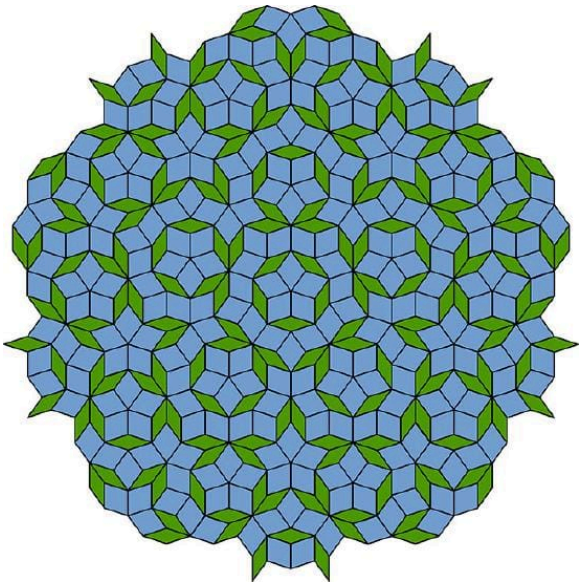


Figure 4.8.1: Penrose tiling represents one type of tessellation. (credit: "Penrose Tiling" by Inductiveload/Wikimedia Commons, Public Domain)

In this section, we will focus on patterns that do repeat. Repeated patterns are found in architecture, fabric, floor tiles, wall patterns, rug patterns, and many unexpected places as well. It may be a simple hexagon-shaped floor tile, or a complex pattern composed of several different motifs. These two-dimensional designs are called regular (or periodic) tessellations. There are countless designs that may be classified as regular tessellations, and they all have one thing in common—their patterns repeat and cover the plane.

We will explore how tessellations are created and experiment with making some of our own as well. The topic of tessellations belongs to a field in mathematics called transformational geometry, which is a study of the ways objects can be moved while retaining the same shape and size. These movements are termed *rigid motions* and s*ymmetries*.

Who Knew?: M. C. Escher

A good place to start the study of tessellations is with the work of M. C. Escher. The Dutch graphic artist was famous for the dimensional illusions he created in his woodcuts and lithographs, and that theme is carried out in many of his tessellations as well. Escher became obsessed with the idea of the “regular division of the plane.” He sought ways to divide the plane with shapes that would fit snugly next to each other with no gaps or overlaps, represent beautiful patterns, and could be repeated infinitely to fill the plane. He experimented with practically every geometric shape imaginable and found the ones that would produce a regular division of the plane. The idea is similar to dividing a number by one of its factors. When a number divides another number evenly, there are no remainders, like there are no gaps when a shape divides or fills the plane.

Escher went far beyond geometric shapes, beyond triangles and polygons, beyond irregular polygons, and used other shapes like figures, faces, animals, fish, and practically any type of object to achieve his goal; and he did achieve it, beautifully, and left it for the ages to appreciate.

Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

M.C. Escher: How to Create a Tessellation

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

The Mathematical Art of M.C. Escher

Tessellation Properties and Transformations

A regular tessellation means that the pattern is made up of congruent regular polygons, same size and shape, including *some type of movement*; that is, some type of transformation or symmetry. Here we consider the rigid motions of translations, rotations, reflections, or glide reflections. A plane of tessellations has the following properties:

- Patterns are repeated and fill the plane.
- There are no gaps or overlaps. Shapes must fit together perfectly. (It was Escher who determined that a proper tessellation could have no gaps and no overlaps.)
- Shapes are combined using a transformation.
- All the shapes are joined at a vertex. In other words, if you were to draw a circle around a vertex, it would include a corner of each shape touching at that vertex.
- For a tessellation of regular congruent polygons, the sum of the measures of the interior angles that meet at a vertex equals 360°.

In Figure $4.8.2$, the tessellation is made up of squares. There are four squares meeting at a vertex. An interior angle of a square is 90° and the sum of four interior angles is 360°. In Figure $4.8.3$, the tessellation is made up of regular hexagons. There are three hexagons meeting at each vertex. The interior angle of a hexagon is 120°, and the sum of three interior angles is 360°. Both tessellations will fill the plane, there are no gaps, the sum of the interior angle meeting at the vertex is 360°, and both are achieved by translation transformations. These tessellations work because all the properties of a tessellation are present.

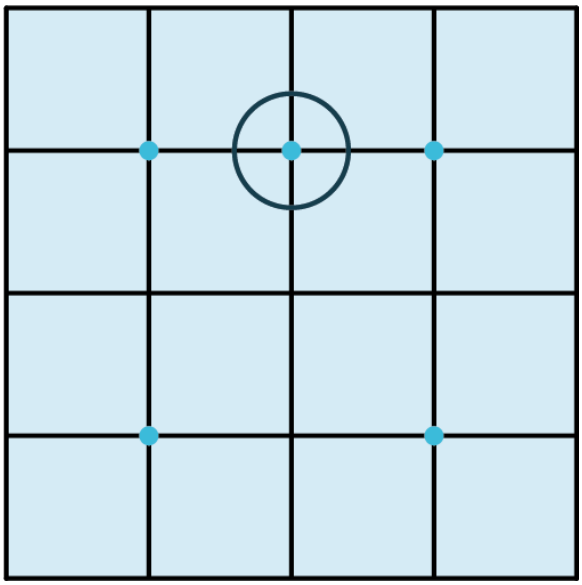


Figure 4.8.2: Tessellation – Squares

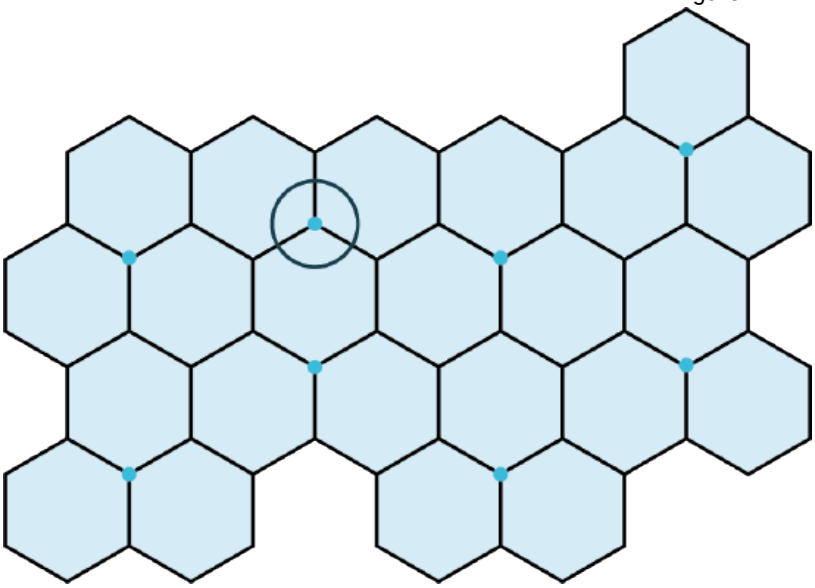


Figure 4.8.3: Tessellation – Hexagons

The movements or rigid motions of the shapes that define tessellations are classified as translations, rotations, reflections, or glide reflections. Let's first define these movements and then look at some examples showing how these transformations are revealed.

Translation

A translation is a movement that shifts the shape vertically, horizontally, or on the diagonal. Consider the trapezoid ABCDFigure 10.104. We have translated it 3 units to the right and 3 units up. That means every corner is moved by the number of units and in the direction specified. Mathematicians will indicate this movement with a vector, an arrow that is drawn to illustrate the criteria and the magnitude of the translation. The location of the translated trapezoid is marked with the vertices, A′B′C′D′,A′B′C′D′, but it is still the exact same shape and size as the original trapezoid ABCDABCD.

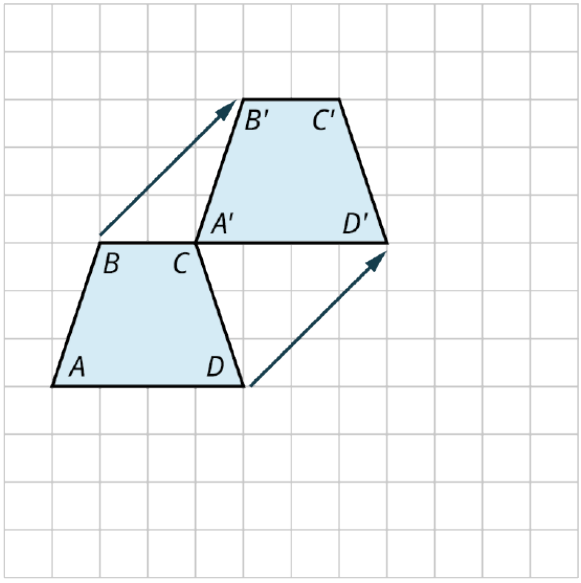


Figure 4.8.4: Translation

Example 4.8.1: Creating a Translation

Suppose you have a hexagon on a grid as in Figure 10.105. Translate the hexagon 5 units to the right and 3 units up.

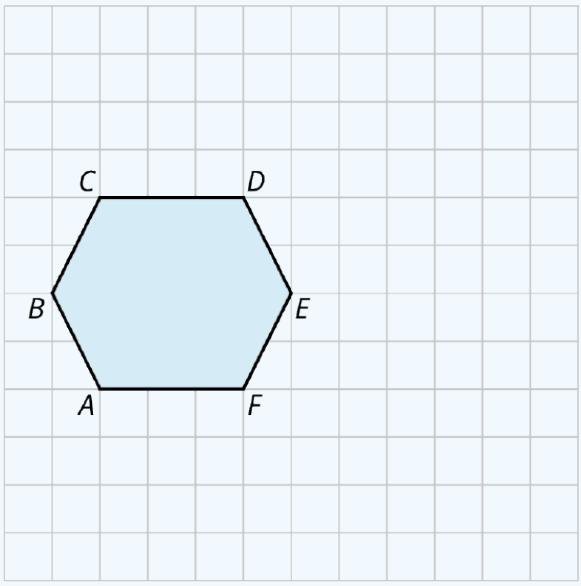


Figure 4.8.5

Answer available at the end of this section.

Your Turn 4.8.1

Translate the hexagon with points A', B', C', D', E', F' 6 units down.

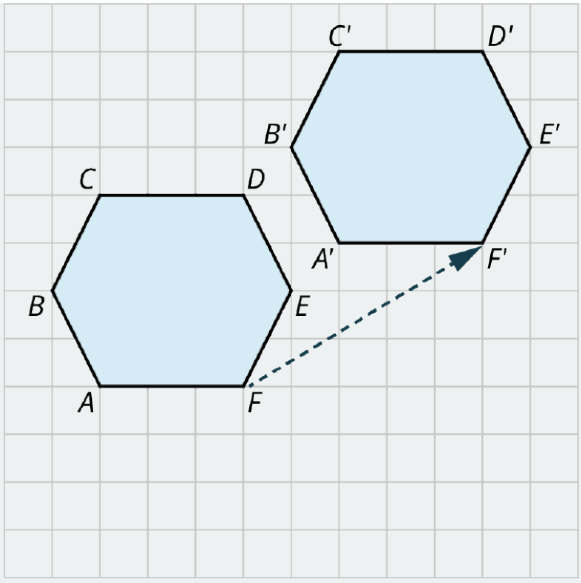


Figure 4.8.7

Rotation

The rotation transformation occurs when you rotate a shape about a point and at a predetermined angle. In Figure 4.8.8, the triangle is rotated around the rotation point by 90◦,90◦, and then translated 7 units up and 4 units over to the right. That means that each corner is translated to the new location by the same number of units and in the same direction.

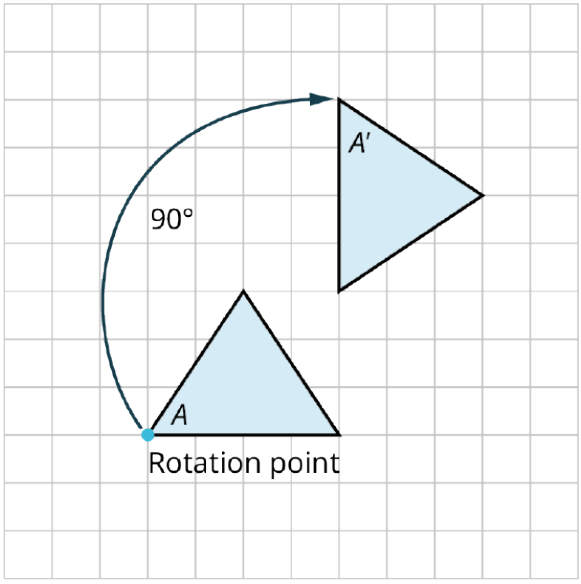


Figure 4.8.8: Rotation

We can see that ΔAΔA is mapped to ΔA′ΔA′ by a rotation of 90◦90◦ up and to the right. If rotated again by 90◦90◦, the triangle would be upside down.

Example 4.8.2: Applying a Rotation

Figure 4.8.9 illustrates a tessellation begun with an equilateral triangle. Explain how this pattern is produced.

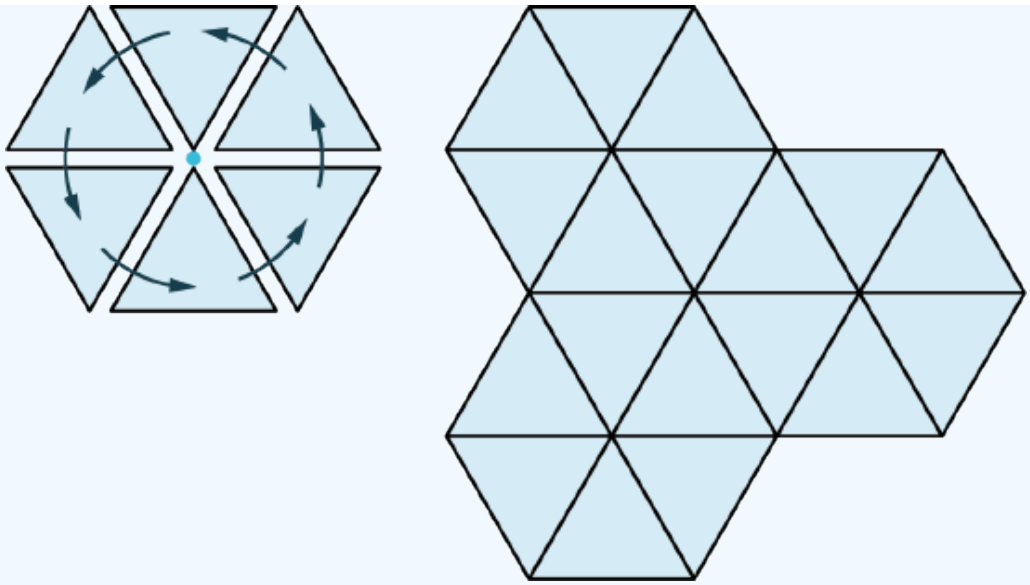


Figure 4.8.9

Answer available at the end of this section.

Your Turn 4.8.2

Starting with the triangle in the figure shown, explain how the pattern on the right was achieved.

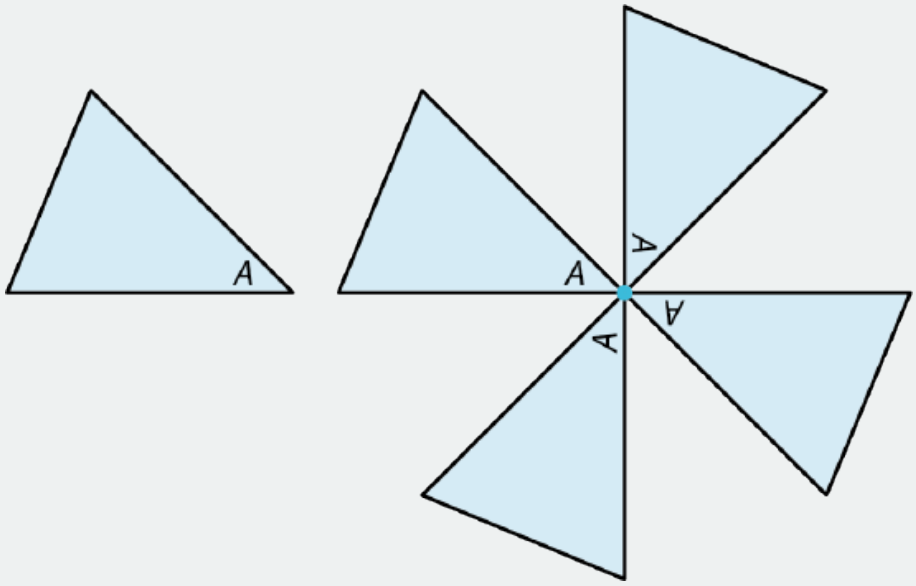


Figure 4.8.10

Reflection

A reflection is the third transformation. A shape is reflected about a line and the new shape becomes a mirror image. You can reflect the shape vertically, horizontally, or on the diagonal. There are two shapes in Figure 4.8.11. The quadrilateral is reflected horizontally; the arrow shape is reflected vertically.

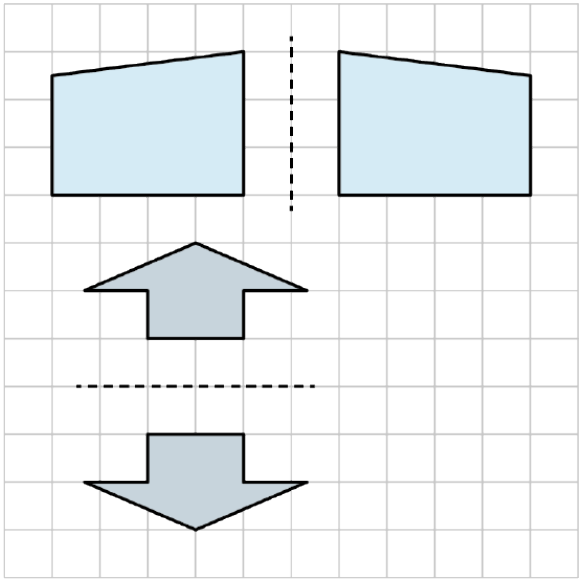


Figure 4.8.11: Reflection

Glide Reflection

The glide reflection is the fourth transformation. It is a combination of a reflection and a translation. This can occur by first reflecting the shape and then gliding or translating it to its new location, or by translating first and then reflecting. The example in Figure 4.8.12 shows a trapezoid, which is reflected over the dashed line, so it appears upside down. Then, we shifted the shape horizontally by 6 units to the right. Whether we use the glide first or the reflection first, the end result is the same in most cases. However, the tessellation shown in the next example can only be achieved by a reflection first and then a translation.

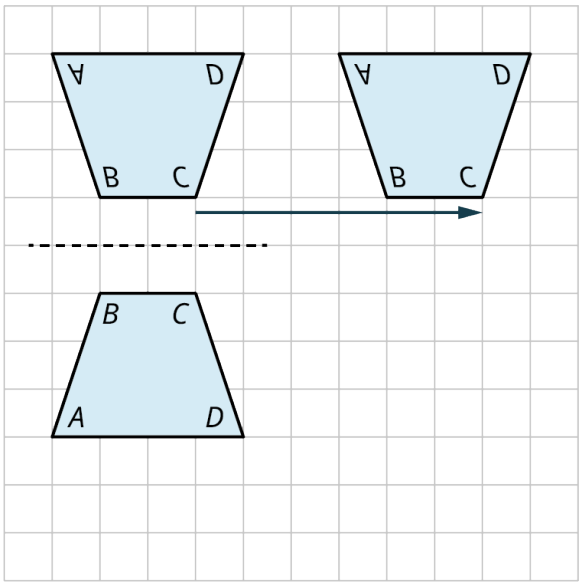


Figure 4.8.12: Glide Reflection

Example 4.8.3: Applying the Glide Reflection

An obtuse triangle is reflected about the dashed line, and the two shapes are joined together. How does the tessellation shown in Figure 4.8.13 materialize?

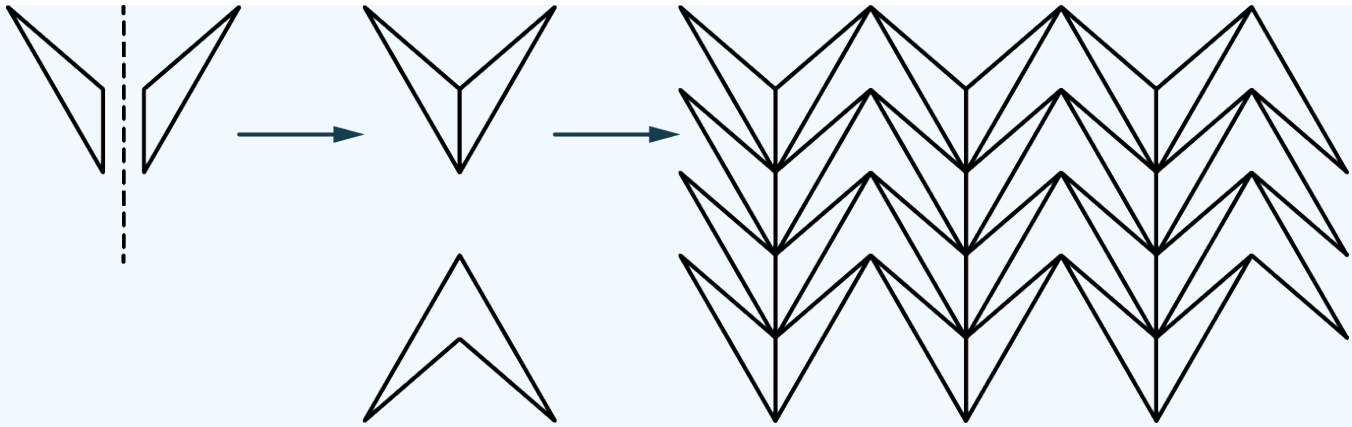


Figure 4.8.13

Answer available at the end of this section.

Your Turn 4.8.3

Explain how this tessellation of equilateral triangles could be produced.

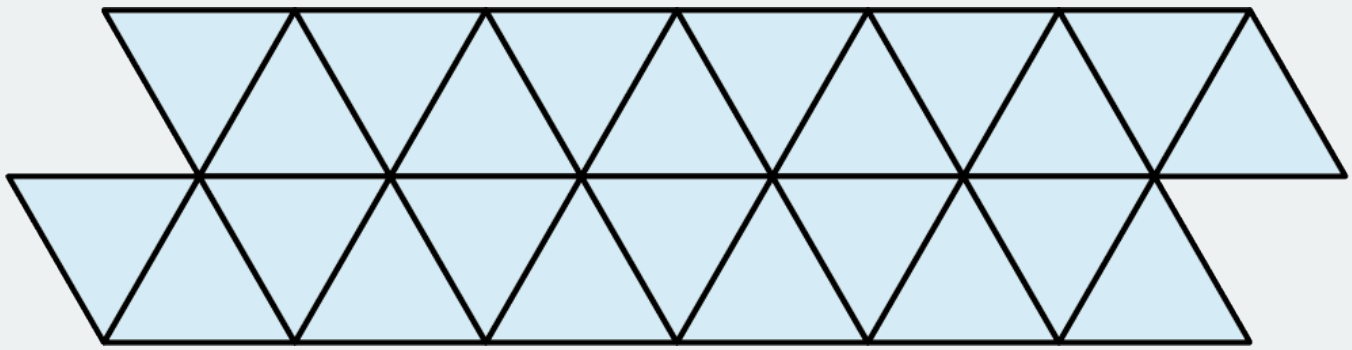


Figure 4.8.14

Example 4.8.4: Applying More Than One Tessellation

Show how this tessellation (Figure 4.8.15) can be achieved.

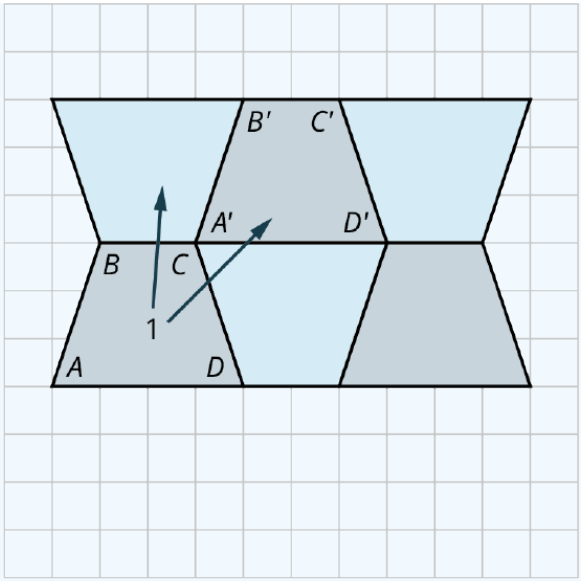


Figure 4.8.15

Answer available at the end of this section.

Your Turn 4.8.4

How does this tessellation of the squares come about?

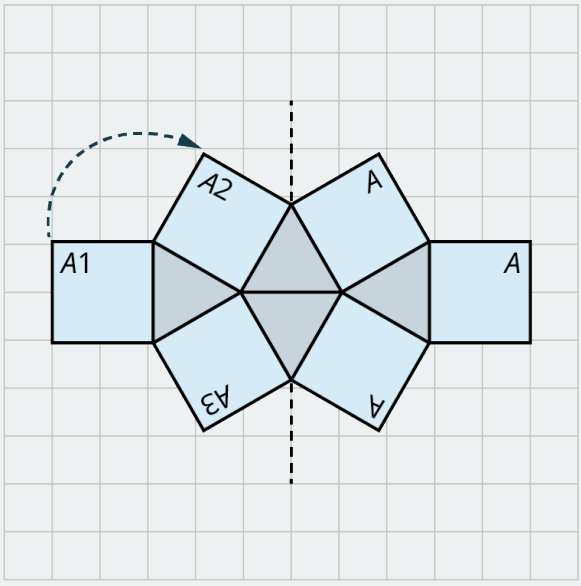


Figure 4.8.16

Interior Angles

The sum of the interior angles of a tessellation is 360°. In Figure 4.8.17, the tessellation is made of six triangles formed into the shape of a hexagon. Each angle inside a triangle equals 60°, and the six vertices meet the sum of those interior angles, $6\,(60^\circ) = 360^\circ$.

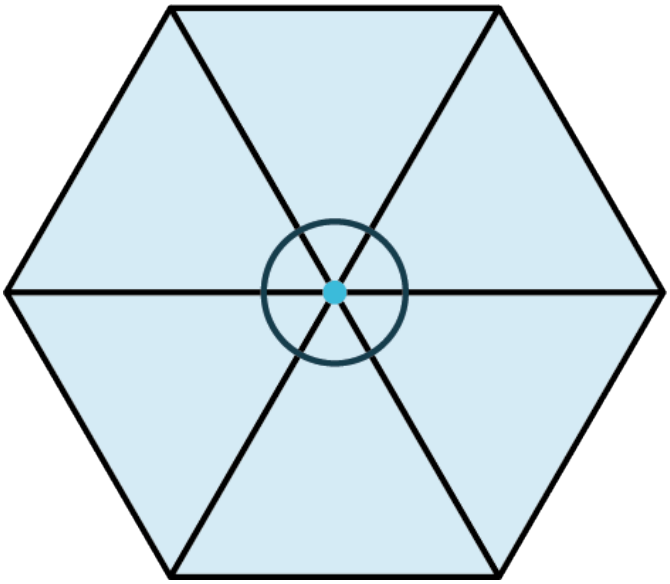


Figure 4.8.17: Interior Angles at the Vertex of Triangles

In Figure 4.8.18, the tessellation is made up of trapezoids, such that two of the interior angles of each trapezoid equals 75°75° and the other two angles equal 105°105°. Thus, the sum of the interior angles where the vertices of four trapezoids meet equals 105°+75°+75°+105°=360°105°+75°+75°+105°=360°.

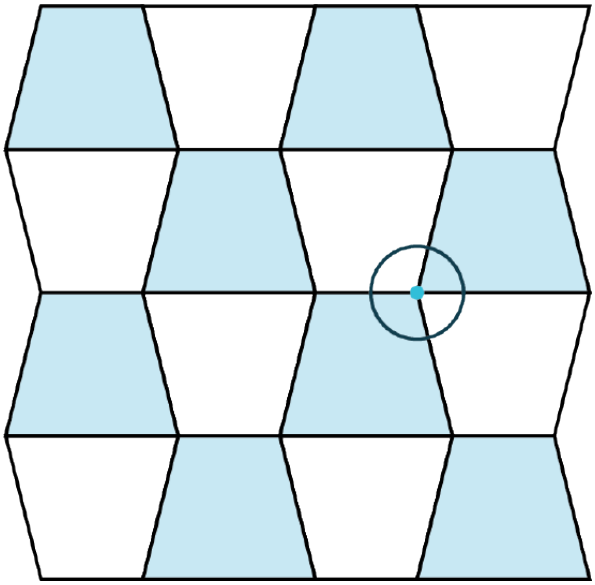


Figure 4.8.18: Interior Angles at the Vertex of Trapezoids

These tessellations illustrate the property that the shapes meet at a vertex where the interior angles sum to 360°360°.

Tessellating Shapes

We might think that all regular polygons will tessellate the plane by themselves. We have seen that squares do and hexagons do. The pattern of squares in Figure 4.8.19 is a translation of the shape horizontally and vertically. The hexagonal pattern in Figure 4.8.20, is translated horizontally, and then on the diagonal, either to the right or to the left. This particular pattern can also be formed by rotations. Both tessellations are made up of congruent shapes and each shape fits in perfectly as the pattern repeats.

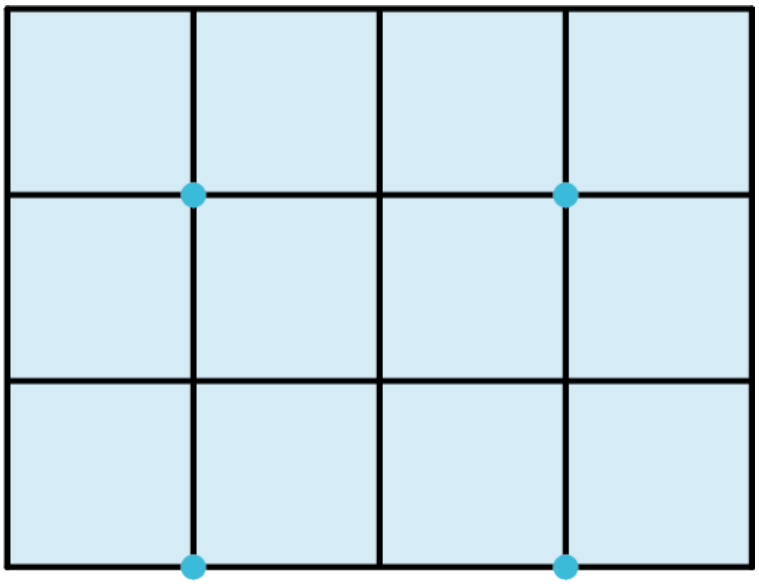


Figure 4.8.19: Translation Horizontally and Vertically

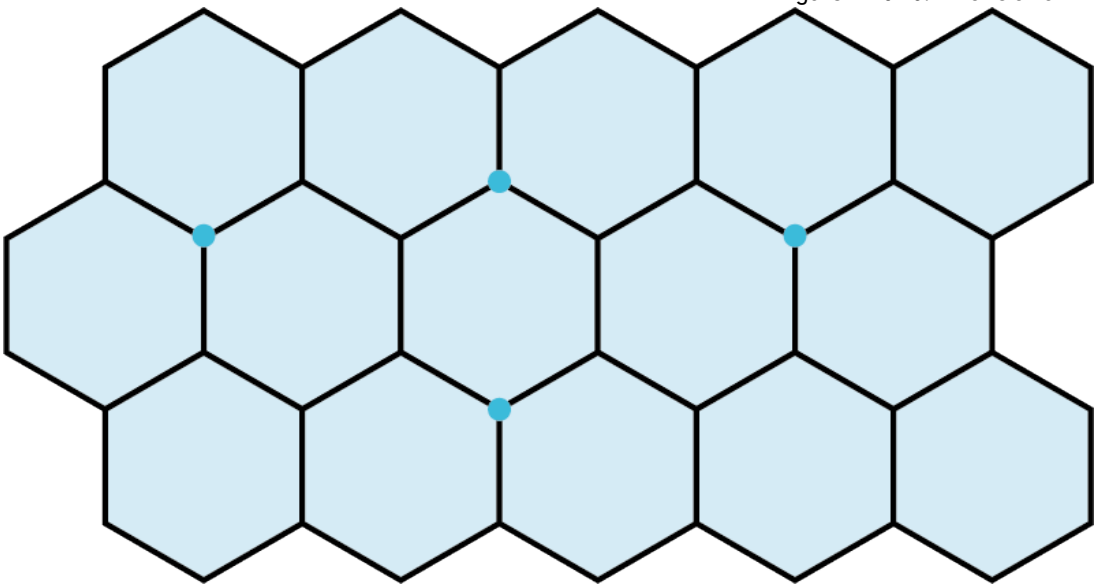


Figure 4.8.20: Translation Horizontally and Slide Diagonally

We have also seen that equilateral triangles will tessellate the plane without gaps or overlaps, as shown in Figure 4.8.21. The pattern is made by a reflection and a translation. The darker side is the face of the triangle and the lighter side is the back of the triangle, shown by the reflection. Each triangle is reflected and then translated on the diagonal.

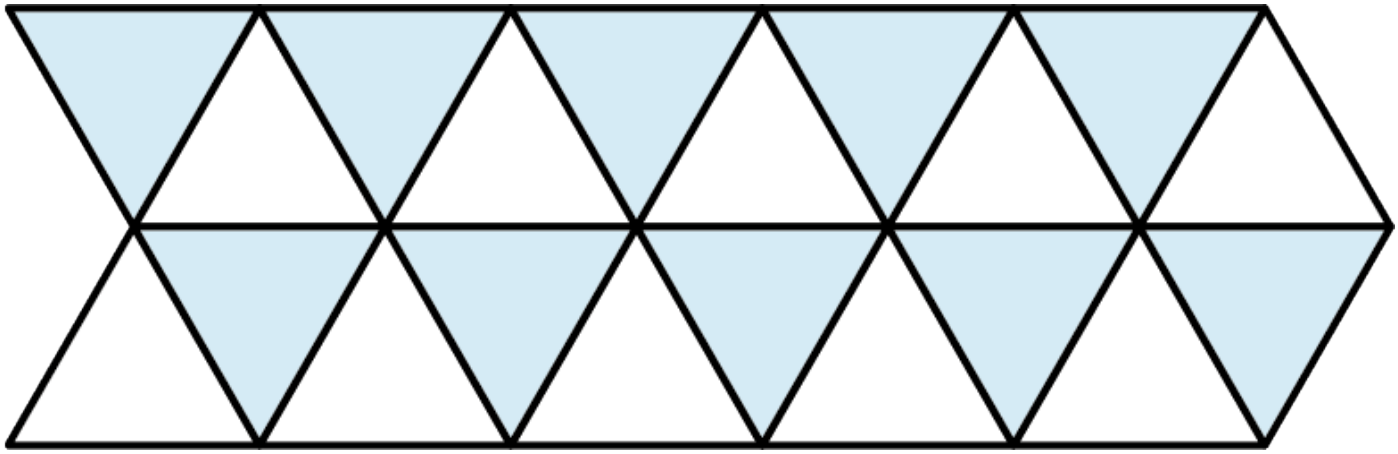


Figure 4.8.21: Reflection and Glide Translation

Escher experimented with all regular polygons and found that only the ones mentioned, the equilateral triangle, the square, and the hexagon, will tessellate the plane by themselves. Let's try a few other regular polygons to observe what Escher found.

Example 4.8.5: Tessellating the Plane

Do regular pentagons tessellate the plane by themselves (Figure 4.8.22)?

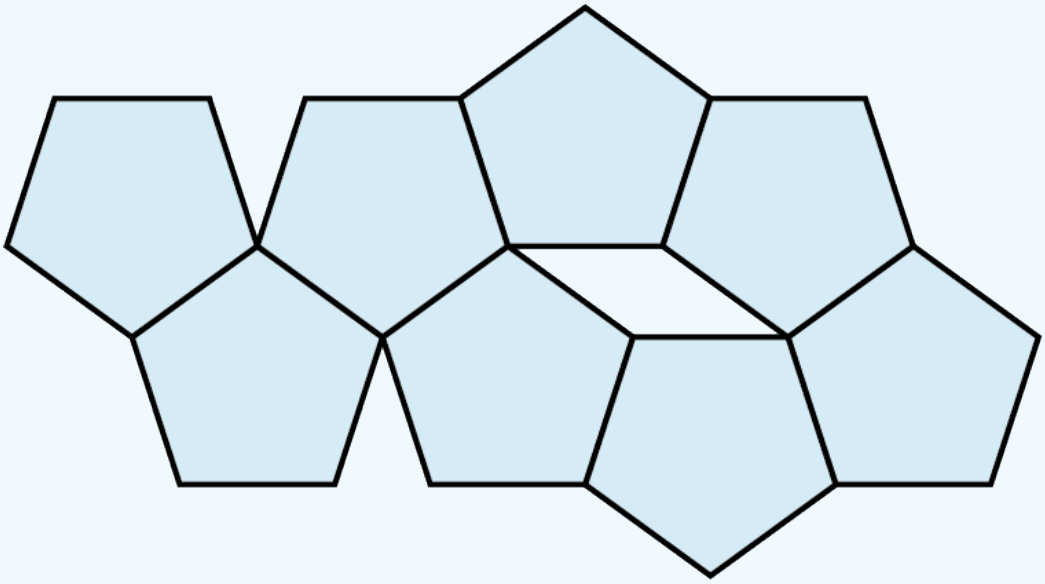


Figure 4.8.22

Answer available at the end of this section.

Your Turn 4.8.5

Do regular heptagons tessellate the plane by themselves?

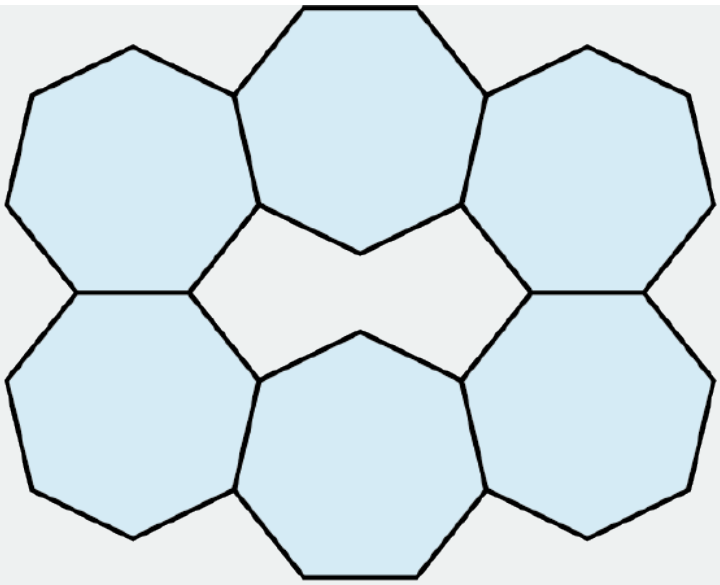


Figure 4.8.23

Example 4.8.6: Tessellating Octagons

Do regular octagons tessellate the plane by themselves (Figure 4.8.24)?

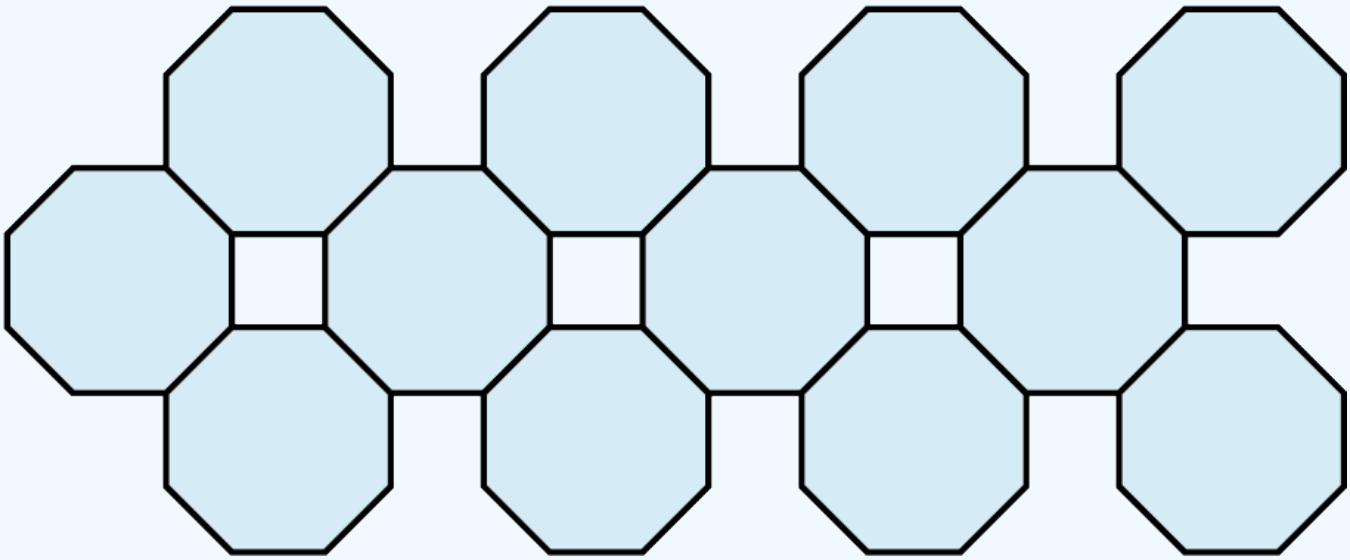


Figure 4.8.24

Answer available at the end of this section.

Your Turn 4.8.6

Do regular dodecagons (12-sided regular polygons) tessellate the plane by themselves?

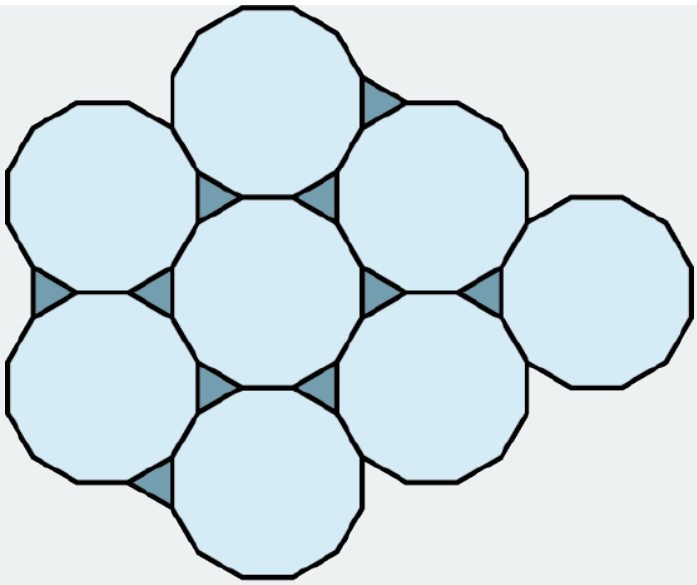


Figure 4.8.25

Just because regular pentagons do not tessellate the plane by themselves does not mean that there are no pentagons that tessellate the plane, as we see in Figure 4.8.26.

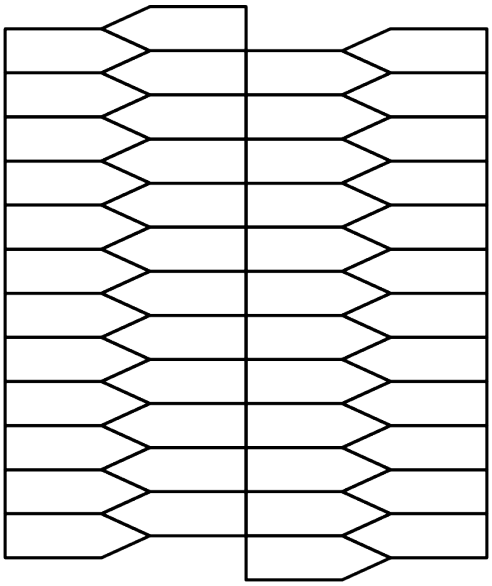


Figure 4.8.26: Tessellation of Pentagons

Another example of an irregular polygon that tessellates the plane is by using the obtuse irregular triangle from a previous example. What transformations should be performed to produce the tessellation shown in Figure 4.8.27?

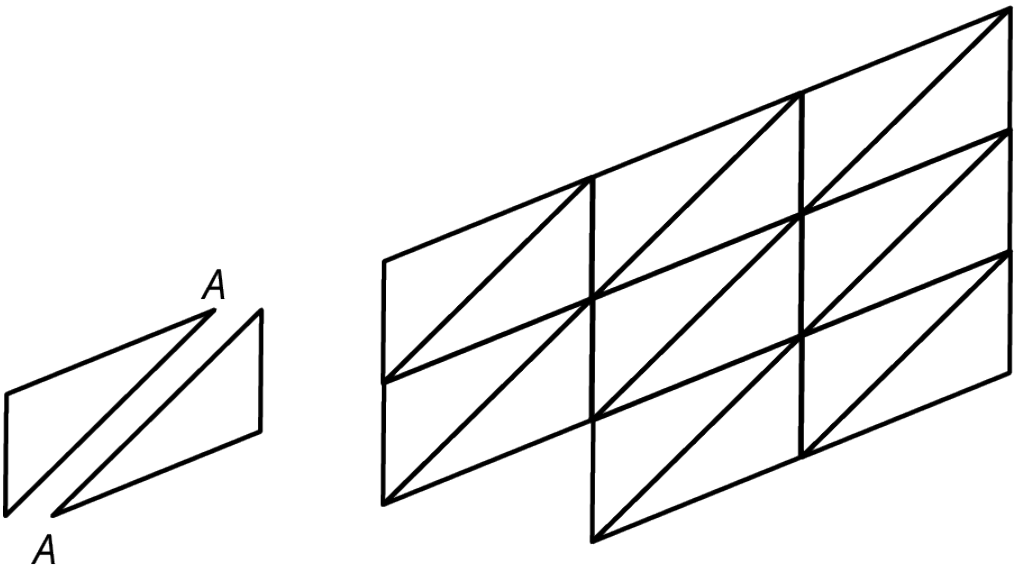


Figure 10.127: Tessellating with Obtuse Irregular Triangles

First, the triangle is reflected over the tip at point AA, and then translated to the right and joined with the original triangle to form a parallelogram. The parallelogram is then translated on the diagonal and to the right and to the left.

Naming

A tessellation of squares is named by choosing a vertex and then counting the number of sides of each shape touching the vertex. Each square in the tessellation shown in Figure 4.8.28 has four sides, so starting with square AA, the first number is 4, moving around counterclockwise to the next square meeting the vertex, square BB, we have another 4, square CC adds another 4, and finally square DD adds a fourth 4. So, we would name this tessellation a 4.4.4.4.

The hexagon tessellation, shown in Figure 4.8.29 has six sides to the shape and three hexagons meet at the vertex. Thus, we would name this a 6.6.6. The triangle tessellation, shown in Figure 4.8.30 has six triangles meeting the vertex. Each triangle has three sides. Thus, we name this a 3.3.3.3.3.3.

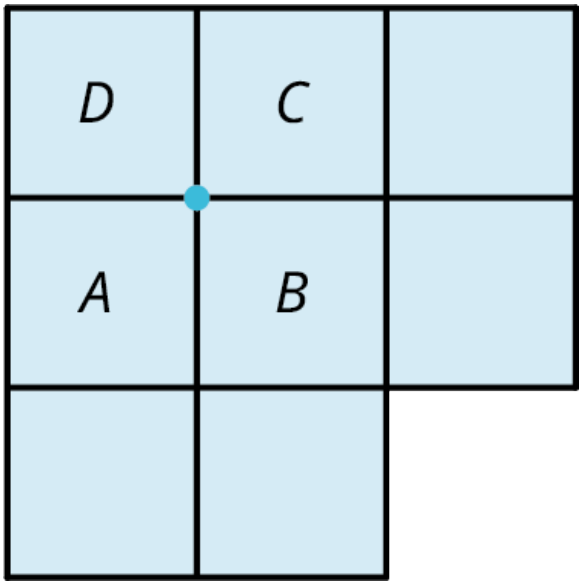


Figure 4.8.28: 4.4.4.4

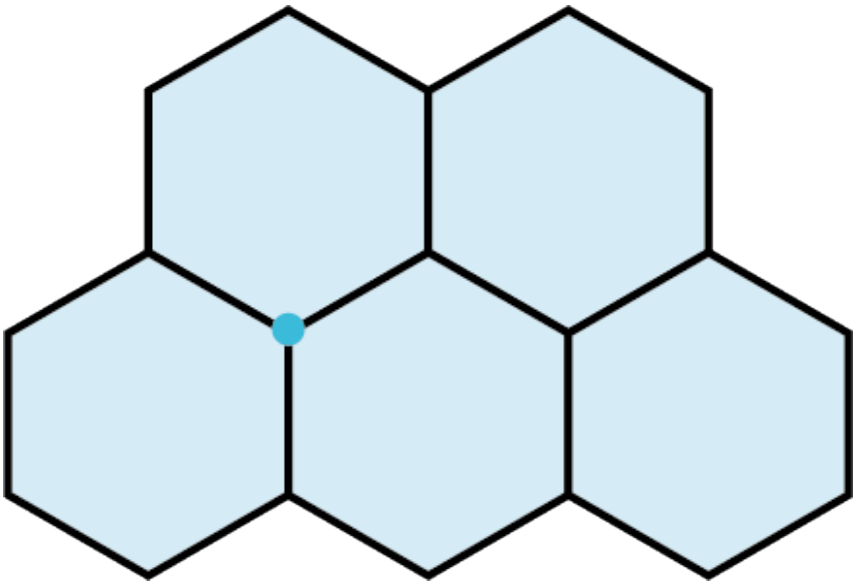


Figure 4.8.29: 6.6.6

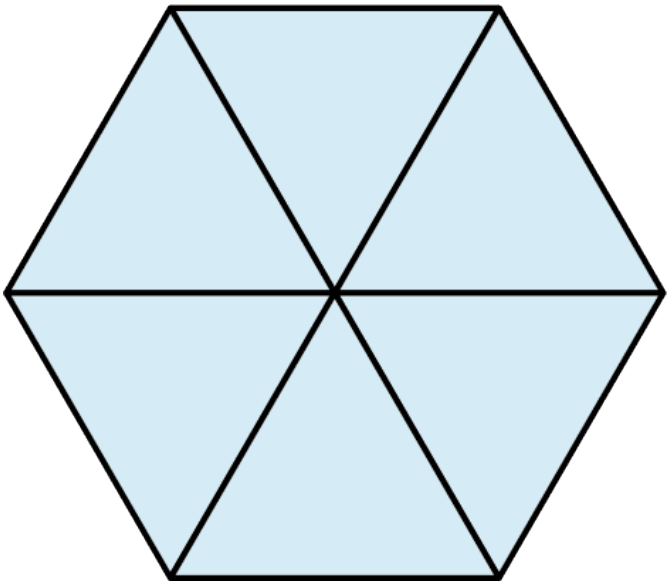


Figure 4.8.30: 3.3.3.3.3.3

Example 4.8.7: Creating Your Own Tessellation

Create a tessellation using two colors and two shapes.

Answer available at the end of this section.

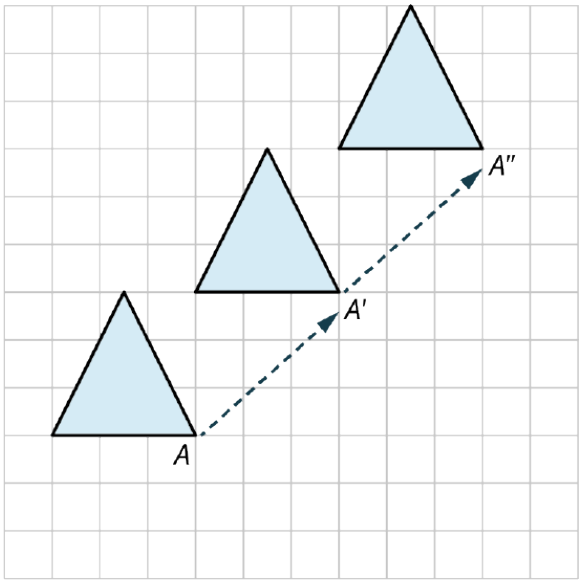
Your Turn 4.8.7

Create a tessellation using polygons, regular or irregular.

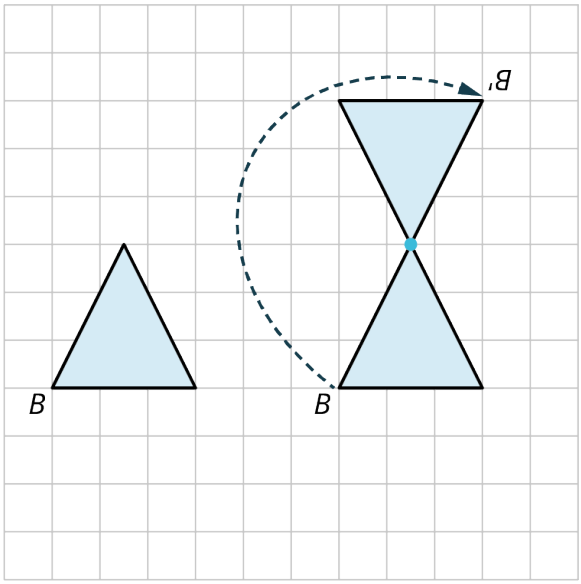
Check Your Understanding

1. What are the properties of repeated patterns that let them be classified as tessellations?

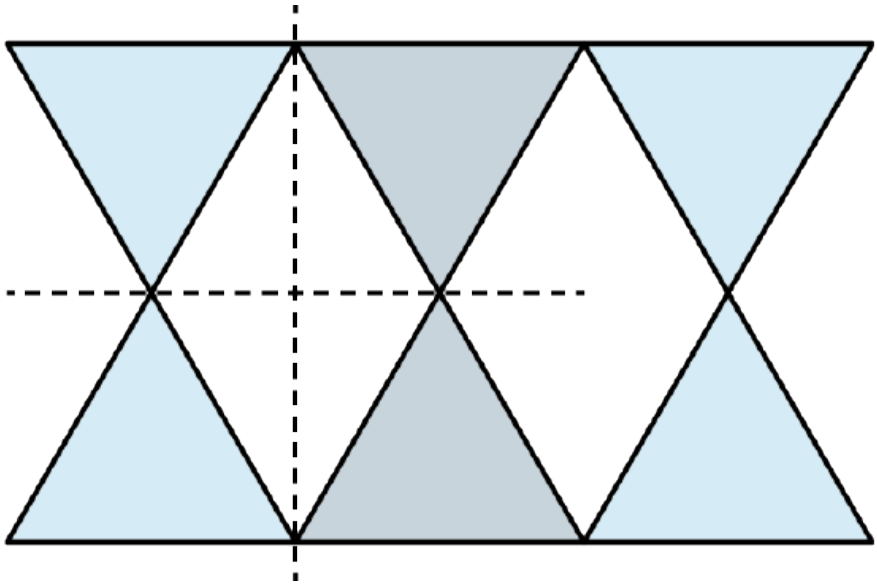
2. Explain how the using the transformation of a translation is applied to the movement of this shape starting with point A.



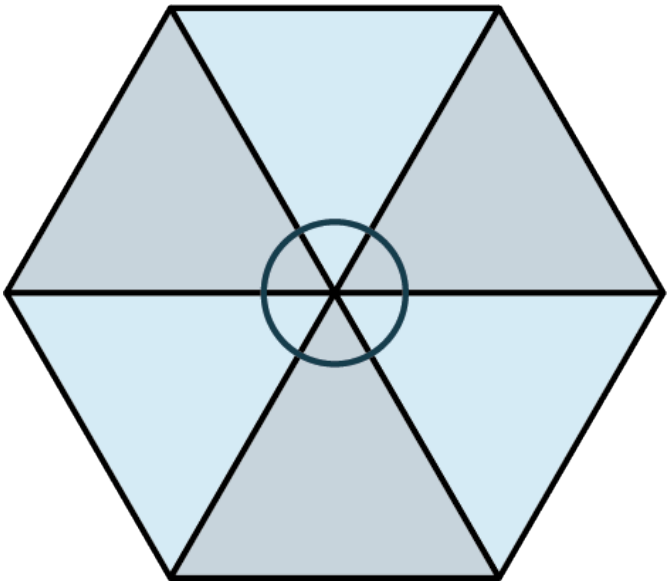
3. Starting with the triangle with vertex B, describe how the transformation in this drawing is achieved.



4. Starting with a triangle with a darker face and a lighter back, describe how this pattern came about.



5. Name the tessellation in the figure shown.



Answers

Example 4.8.1**: Creating a Translation**

The best way to do this is by translating the individual points A,B,C,D,E,FA,B,C,D,E,F. Once translated, the points become A′,B′,C′,D′,E′,F′.A′,B′,C′,D′,E′,F′.

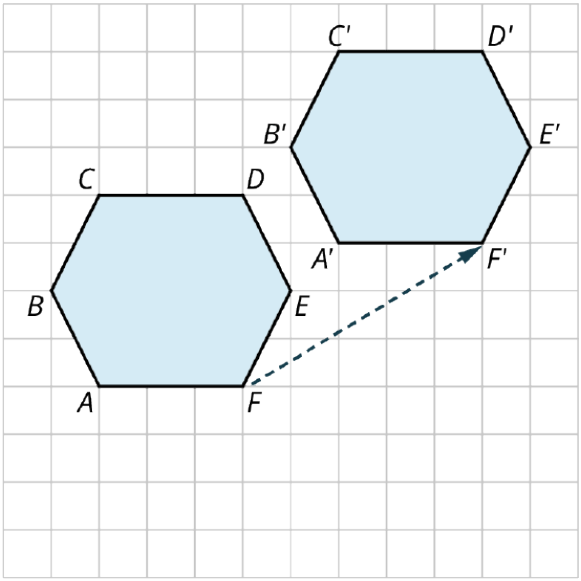


Figure 4.8.6

Example 4.8.2: Applying a Rotation

A rotation to the right or to the left around the vertex by 60∘,60∘, six times, produces the hexagonal shape. The sixth rotation brings the triangle back to its original position. Then, a reflection up and another one on the diagonal will reproduce the pattern. When a shape returns to its original position by a rotation, we say that it has rotational symmetry.

Example 4.8.3: Applying the Glide Reflection

The new shape is reflected horizontally and joined with the original shape. It is then translated vertically and horizontally to make up the tessellation. Notice the blank spaces next to the vertical pattern. These areas are made up of the exact original shape rotated 180∘,180∘, but with no line up the center. These rotated shapes are translated horizontally and vertically, and thus, the plane is tessellated with no gaps. This is an example of a glide reflection where the order of the transformations matters.

Example 4.8.4: Applying More Than One Tessellation

This is a tessellation that has one color on the front of the trapezoid and a different color on the back. There is a translation on the diagonal, and a reflection vertically. These are two separate transformations resulting in two new placements of the trapezoid. We can call this a combination of two transformations or a glide reflection.

Example 4.8.5: Tessellating the Plane

We can see that regular pentagons do not tessellate the plane by themselves. There is a gap, a gap in the shape of a parallelogram. We conclude that regular pentagons will not tessellate the plane by themselves.

Example 4.8.6: Tessellating Octagons

Again, we see that regular octagons do not tessellate the plane by themselves. The gaps, however, are squares. So, two regular polygons, an octagon and a square, do tessellate the plane.

Example 4.8.7: Creating Your Own Tessellation

We used a parallelogram and an isosceles triangle. The parallelogram is reflected vertically and horizontally so that only every other corner touches. The triangles are reflected vertically and horizontally and then translated over the parallelogram. The result is alternating vertical columns of parallelograms and then triangles (Figure 10.131).

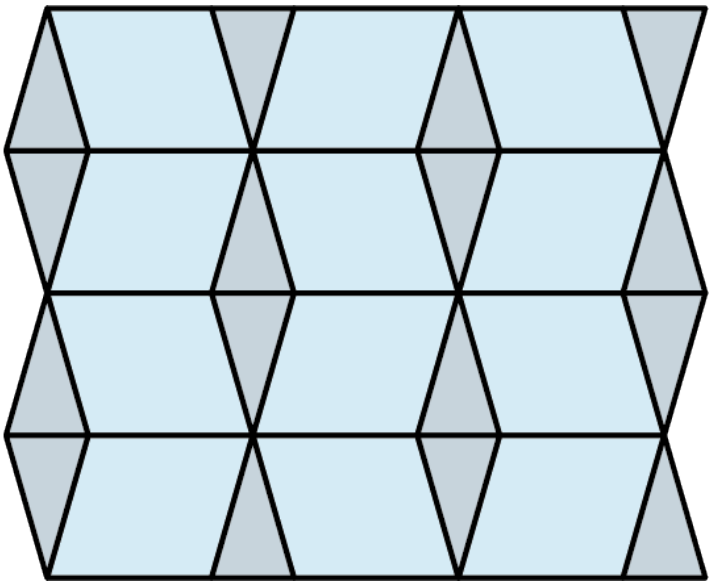


Figure 4.8.31

This page titled 4.8: Tessellations is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by OpenStax via source content that was edited to the style and standards of the LibreTexts platform.

- Back Matter has no license indicated.

4.8.1: Exercises

Exercise 4.8.1.1

What type of movements are used to change the orientation and placement of a shape?

Exercise 4.8.1.2

What is the name of the motion that renders a shape upside down?

Exercise 4.8.1.3

What do we call the motion that moves a shape to the right or left or on the diagonal?

Exercise 4.8.1.4

If you are going to tessellate the plane with a regular polygon, what is the sum of the interior angles that surround a vertex?

Exercise 4.8.1.5

Does a regular heptagon tesselate the plane by itself?

Exercise 4.8.1.6

What are the only regular polygons that will tessellate the plane by themselves?

Exercise 4.8.1.7

What is the transformation called that revolves a shape about a point to a new position?

Exercise 4.8.1.8

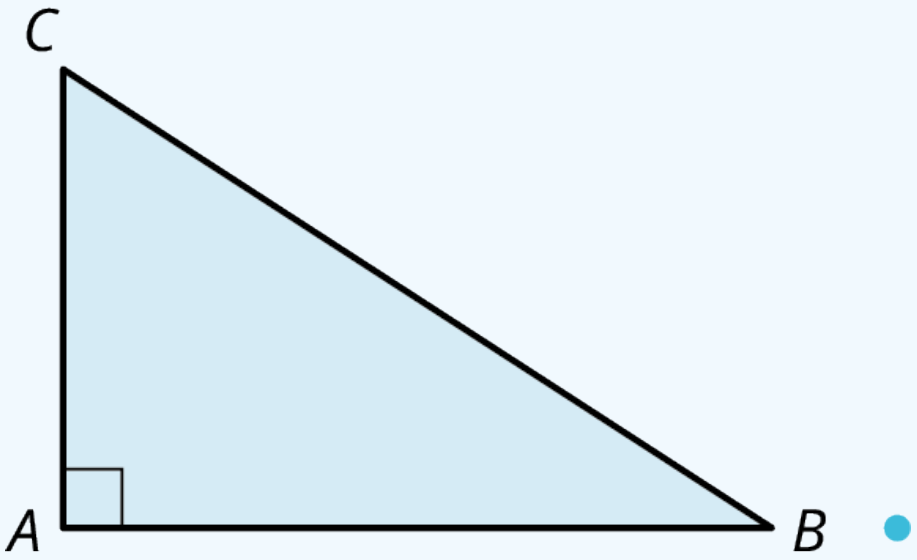
Transformational geometry is a study of what?

Exercise 4.8.1.9

Describe how to achieve a rotation transformation.

Exercise 4.8.1.10

Construct a 90° rotation of the triangle shown.



Exercise 4.8.1.11

Shapes can be rotated around a point of rotation or a _____.

Exercise 4.8.1.12

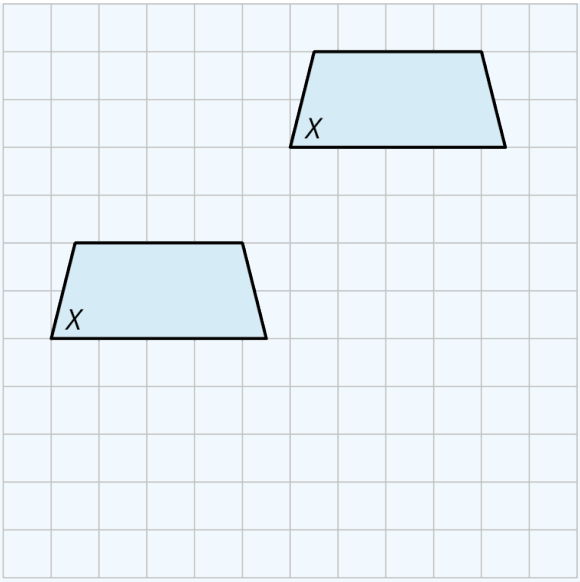
What is the name of the transformation that involves a reflection and a translation?

Exercise 4.8.1.13

What can a tessellation *not* have between shapes?

Exercise 4.8.1.14

Describe the transformation shown.

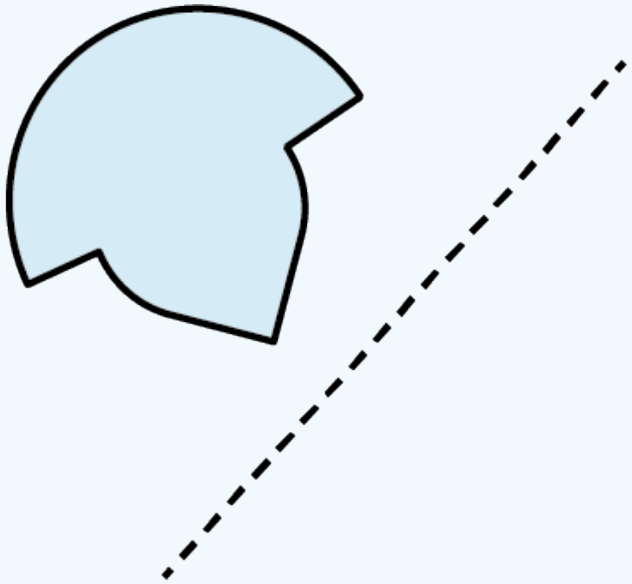


Exercise 4.8.1.15

What do we call a transformation that produces a mirror image?

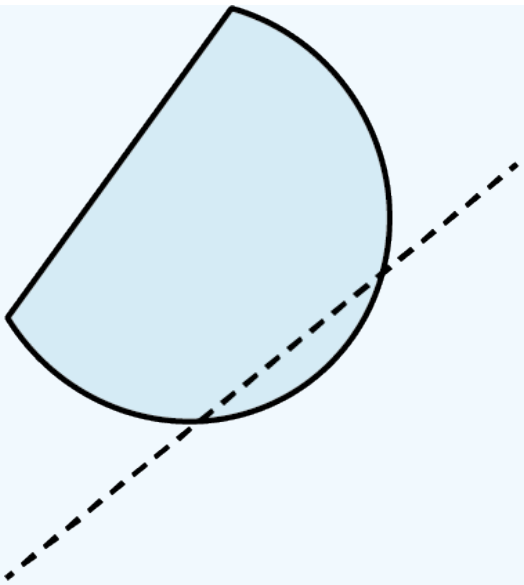
Exercise 4.8.1.16

Sketch the reflection of the shape about the dashed line.



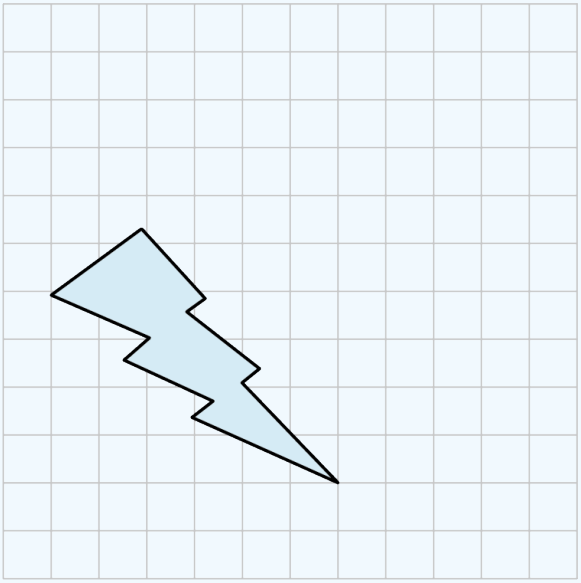
Exercise 4.8.1.17

Sketch the reflection of the shape about the dashed line.



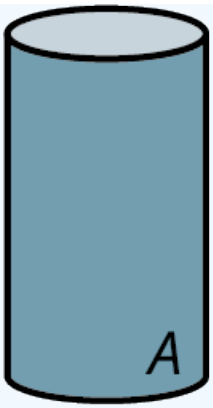
Exercise 4.8.1.18

Sketch the translation of the shape 3 units to the right and 3 units vertically.



Exercise 4.8.1.19

Rotate the shape 45° about the rotation point using point A as your guide.



Exercise 4.8.1.20

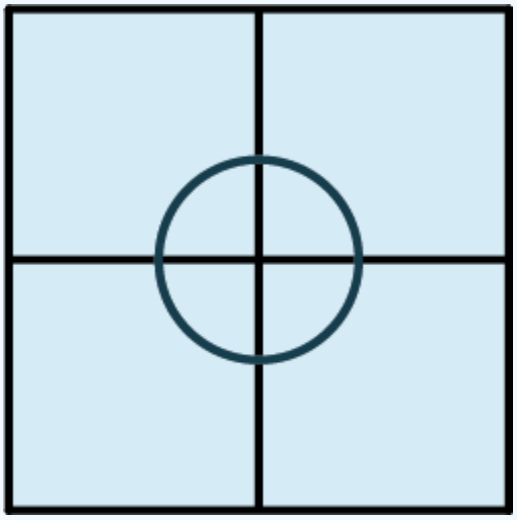
Do regular pentagons tessellate the plain by themselves?

Exercise 4.8.1.21

What do regular tessellations have in common?

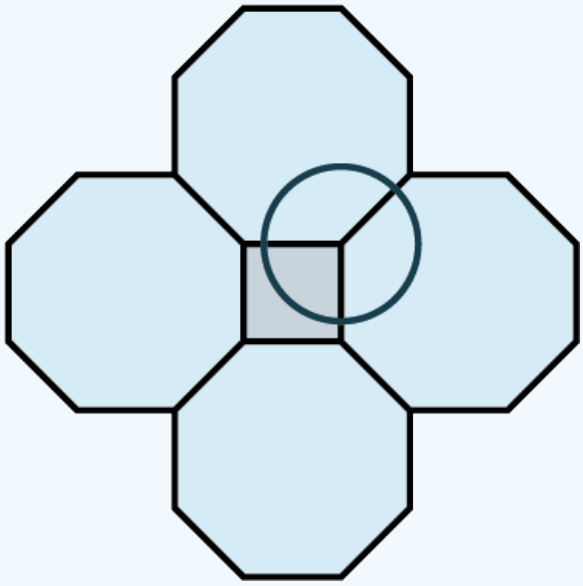
Exercise 4.8.1.22

How would we name a tessellation of squares as shown in the figure?



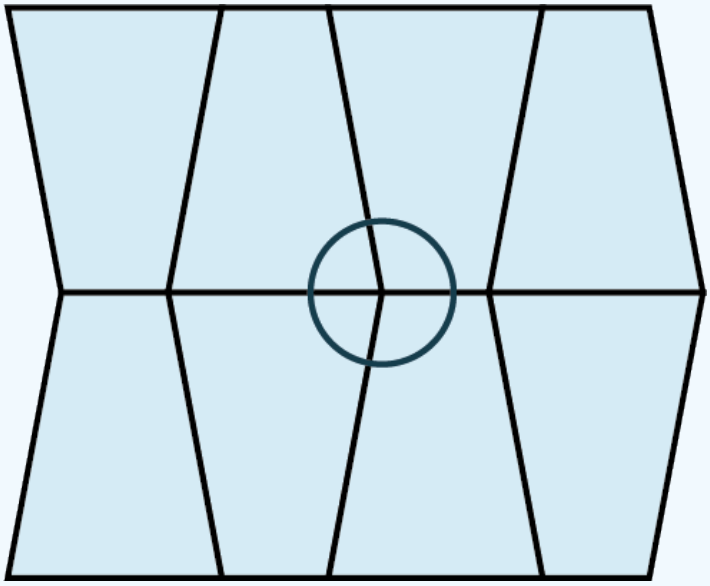
Exercise 4.8.1.23

How do we name a tessellation of octagons and squares as shown in the figure?



Exercise 4.8.1.24

How would we name a tessellation of trapezoids as shown in the figure?



This page titled 4.8.1: Exercises is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by LibreTexts.

4.9: Kinetic Art (1950s – 1960s)

Introduction

Op Art produced static images which gave the impression of movement. Kinetic art moved through mechanical methods and motors or viewer interaction, using natural air currents in space. The forerunner to kinetic art is found in the simplicity of Duchamp's bicycle in unplanned freewheeling motion. Kinetic art became well-known after World War II and an exhibition in 1955 in Paris entitled *Le Mouvement. Mobile*s, originated by Alexander Calder, was a typical style of kinetic art. They were suspended in the air and moved as air flowed. Mobiles were not solid structures; instead, they were made of pieces balanced by structural elements and brought a new perception of dimensional art beyond sculptures. Calder believed kinetic art strove to "lift the figures and scenery off the page and prove undeniably that art is not rigid."[1]

Kinetic art also examined the intersections between the mechanics of science and the beauty of art based on the ideas of three-dimensional sculptural movement. Most of the kinetic artists based their work on mechanized movements, using a machine to create motion. Jean Tinguely was one of the early artists who collected paraphernalia, which he attached into a whimsical object and set in motion with a motor. Artists used elements of Dadaism, reclaiming found objects to use in their sculptures and putting them in motion by mechanized means or air currents.

Alexander Calder

Alexander Calder (1898-1976) was born in Pennsylvania, his family well-known artists. His grandfather, Alexander Milne Calder, created the immense William Penn statue in Philadelphia, and his father, Alexander Stirling Calder, was a sculptor who produced multiple public sculptures. Calder's mother was a portrait artist. When his father was diagnosed with tuberculosis, the family moved to Arizona in 1905 and then to California. At the Calder home in Pasadena, the young Calder set up his first studio using wire to make doll jewelry for his sister. The family moved between New York and California, although Calder stayed in California to complete high school. Because his parents were opposed to him pursuing art, he majored in mechanical engineering at the Stevens Institute of Technology, and in 1919, he became a hydraulic engineer after graduation. After visiting his sister in Washington, he was inspired by the mountains and returned to New York and study art. To expand his knowledge, he went to Paris to study, became part of the intellectual scene, and made friends with other artists, including Joan Miró and Marcel Duchamp. Initially, he created abstract paintings, soon learning he preferred sculpture and the dimensions over flat painting. After he met his future wife, they married in 1931 and lived in Connecticut with their two children. In 1963, he moved back to France, always inspired by the French countryside. He generally gave his works French names, irrespective of where they were installed.

Calder is known for his uniquely engineered constructions, probably the result of his engineering background. His original sculptures were small, moveable, balanced wood and wire characters. In the late 1930s, Calder began to create larger, abstract sculptures, some of their stationery and others moveable, initially powered by machines before moving to power by air currents. The stationary sculptures on the ground were labeled "stabiles" and those hanging with movement named "mobiles." Calder explained the difference in the terms as; "The mobile has actual movement in itself, while the stabile is back at the old painting idea of implied movement. You have to walk around a stabile or through it – a mobile dances in front of you."[2] In the 1960s, he made standing mobiles named "animobiles." When he went anywhere, Calder usually carried some type of wire and pliers, using the wire to "sketch" a form he noticed, much like drawing in air. He made his final sculptures from metal and wire; however, he had to use wood during World War II because the government used all the metal in the war effort. When asked what his favorite color was, he generally replied, red. Black and white were used for differentiation, red the focus. When Calder constructed his works, he always designed a process the sculpture could be shipped and reassembled. He packaged the work in flat packs and included detailed assembly information based on numbers and color codes.

As seen in *Black Spray* (6.5.1), Calder's small, hanging mobiles were designed to engage the viewer's senses. The thin black metal and wire pieces create changing shadows on the background, altering each element and its shadow as the air currents arbitrarily moved the pieces. As the metal pieces move, their relationships modify, demonstrating the laws of variation found in life.



Figure 4.9.1: Black Spray (1956, hanging mobile with painted sheet metal and rods, 350.5 x 251.5 cm) by pedrosimoes7, CC BY 2.0

In contrast to the thin, delicately balanced mobile is the immense sculpture of *Flamingo* (6.5.2). The 45.3 metric ton steel sculpture was painted in the color known as "Calder red." Calder wanted to differentiate the sculpture from the background of black and steel buildings. The sculpture is also constructed with broad curves in the juxtaposition of the square and rectangular windows and buildings. The arched forms generated a natural feeling, the curvature of structures so large viewers can walk through and under the form, sensing the scale of the artwork.



Figure 4.9.2: Flamingo (1974, painted steel stabile, 1620 cm) by (vincent desjardins), CC BY 2.0

In the sculpture *Five Empties* (6.5.3), Calder named the work after the five voids found in the structure's base, anchored to the ground to form his two different structures; the mobile and the stabile. The two arms provide the pivot for movement as the petals or shapes catch the wind blowing against the colorful, thin, flat surfaces, rotating the arms and petals. When a viewer is standing in the empty spaces, the petals are not visible, seemingly separate pieces, while the petals are seen from afar. Calder made the construction visible in the sculpture with the bolts, rivets, and welding marks, adding texture and interest. The matte paint on the petals contrasts with the shiny arms and branches, compelling the viewer to look at each piece and appreciate its construction. Depending on the speed of the wind, the artwork can look like gentle flowers dancing in the breeze or frantic whirling forms.

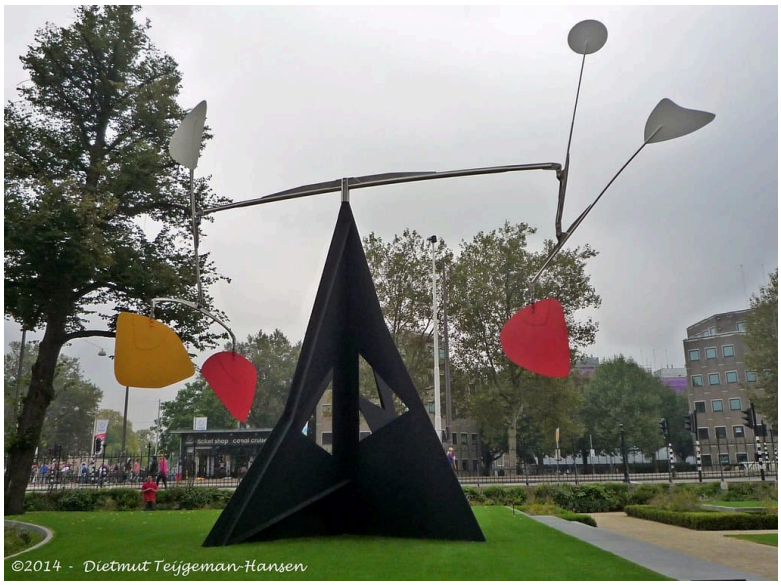


Figure 4.9.3: Five Empties (1973, sheet metal, rod, bolts, and paint, 281 x 250 x 250 cm) by dietmut, CC BY-NC-ND 2.0

The *Four Elements* (6.5.4) is located in Stockholm and stands 9.1 meters high. Created in 1961 for an exhibition, the work was composed of four separate sculptures, each one containing a motor for movement. Made from metal sheets, the sculptures were painted in distinctive bright colors, defining the different shapes to represent air, water, earth, and fire. However, he did not specify which shape represents a specific element the viewer can choose. Each of the different structures rotates as they move, bringing the four different elements to life. The four parts have a dissimilar focus; the surface and light reflection result from the shapes and colors—the volume of an element changes as it moves through space, bringing the viewer different sides and angles.



Figure 4.9.4: The Four Elements (1961, sheet metal and paint, 914.4 cm) by Frankie Fouganthin, CC BY-SA 4.0

Jean Tinguely

Jean Tinguely (1925-1991) was born in Switzerland and lived in Basel as a child, his father a shopkeeper and his mother a maid. At first, he worked as an apprentice decorator where one of the other decorators encouraged him to attend the School of Arts and Crafts in Basel. He learned about Marcel Duchamp, Dadaism, and Constructivism as well as meeting his first wife. He worked as a decorator and started his early wire sculptures. In 1952, they moved to Paris, becoming part of the artist community pursuing unusual pioneering concepts. He was preoccupied with the movement, capabilities, and noises of machines. In 1955, he participated in the exhibition, *'Le Mouvement,'* the first significant demonstration of kinetic art and his sculptural machines defined as 'Méta-Matic.' His concepts satirize automation and manufactured material goods. During the *Peinnale de Paris* at a

museum in Paris, Tinguely displayed a machine, run by a gasoline engine as it moved about, created drawing, sprayed a lily-of-the-valley scent into the air, and inflated a balloon. The machine at the museum marked the sudden rise in his career. During the 1950s, he created multiple machines demonstrating the destructiveness of modern mass production. One machine buried the audience in the paper. Another kinetic work had parts and pieces of a machine spewing out loud, cacophonous noises, and a different display even self-destructed.

In the 1960s, Tinguely changed direction and began to create machines with an emphasis on movements. *Cyclograveur* (6.5.5) used a bicycle as the primary base and added parts from cars, other bicycles, baby carriages, and even a seat from a motorcycle. He connected the gears and wheels and installed the drawing board located beyond the pedals. A viewer mounted the bicycle seat and pushed the pedals to make the sculpture move, causing the rod to draw on the board. He also added mallets, a drum, and a cymbal to generate clunking, rickety noises, adding to the user's adventure. Tinguely created his works to criticize society's mechanization. A review in the newspaper Volkskrant stated, "the grotesque and utterly useless, but diligently moving constructions, which you bump into here, are trying to be a witty provocation—certainly a challenge to the mechanization of all that is human."[3] He frequently painted his sculptures black bringing a homogeny to the parts.

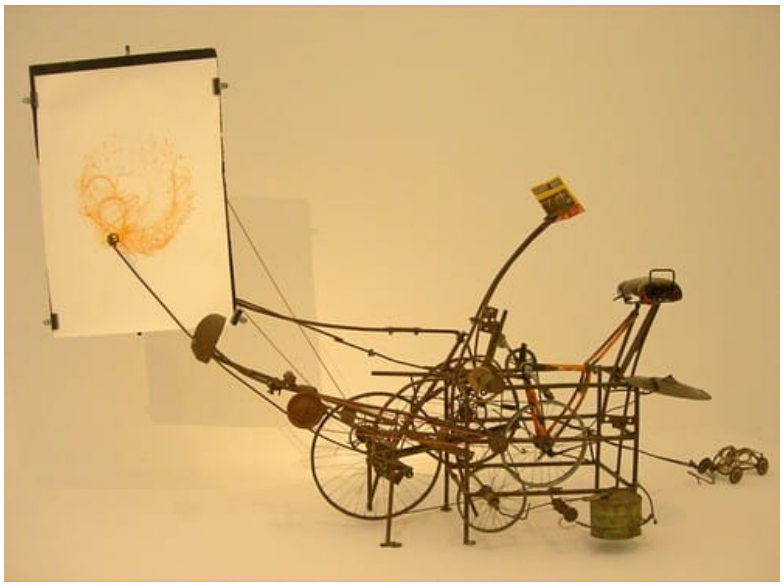


Figure 4.9.5: Cyclograveur (1961, Welded scrap metal, bicycle parts, sheet metal, drum, cymbal, and book, 225 x 410 x 110 cm) by neural.it, CC BY-NC-ND 2.0

Requiem pour une feuille morte (6.5.6) was composed of multiple components and pieces mounted on a frame along the wall. He carved each circle from wood and painted the wheels and metal parts black. Then he mounted them along eight different sections for easy assembly. The circular forms are interconnected with wires, and the motion is controlled by a tiny piece of metal painted white.



Figure 4.9.6: Requiem pour une feuille morte (1967, wood, metal, misc. parts) by Rog01, CC BY-NC-ND 2.0

Tinguely found a large number of wooden models assigned to be burned. He rescued the models to construct the immense structure *Méta-Harmonie IV* (6.5.7) using the wooden parts, other old wheels, multiple types of small objects he found, percussion instruments, and even a cowbell. He did not use any working drawings; he only constructed a base and added parts. Tinguely made the movements slower and the sounds more muted, punctuated by sharp, quick sounds. He also used the natural color of any of the objects spreading the different colors throughout the structures. Tinguely said, "My contraptions do not make music, my contraptions use sounds and I play with those sounds. I sometimes build sound-mixing machines to mix sounds and then let the sounds go, give them their freedom."[4] Tinguely's large and small rattling machines were revolutionary, bringing not only people into his art but giving them a concert of creaks, thumps, bangs, and clangs. His active art amazed children and adults alike.

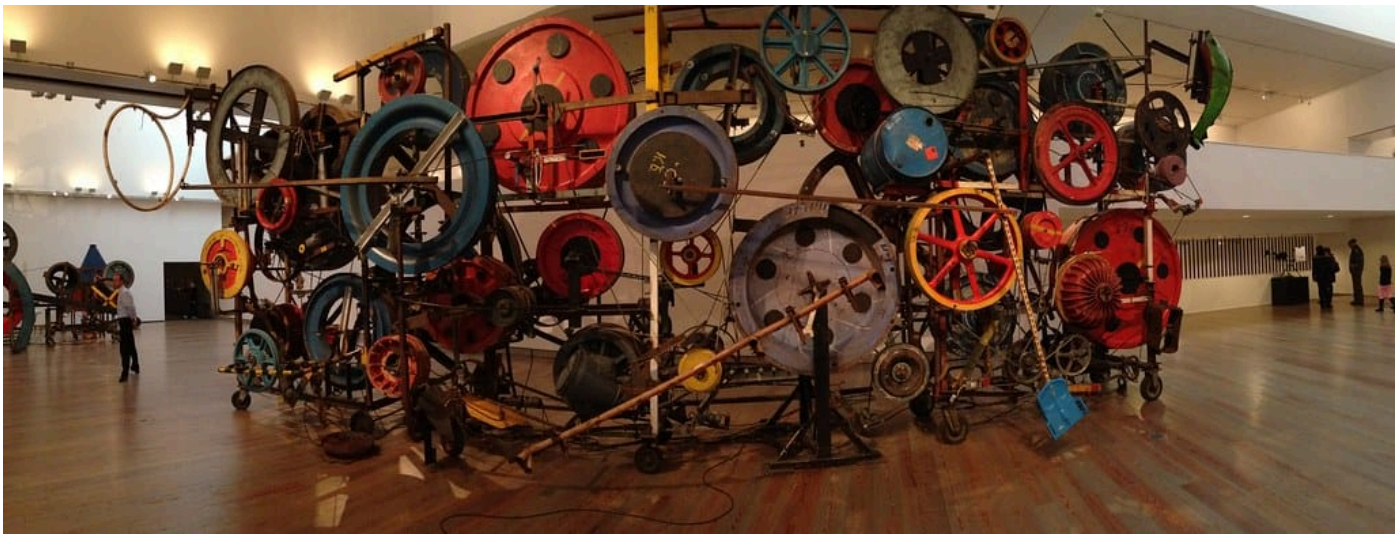


Figure 4.9.7: Méta-Harmonie IV (1985, metal, wood, motors, misc. parts, 420 x 1250 x 220 cm) by david roessli, CC BY-NC-SA 2.0

Jesús Rafael Soto

Jesús Rafael Soto (1923-2005) was born in Venezuela. As the eldest child, he had to help support his family by painting posters for cinemas, learning to draw portraits along the way. Soto gained the support of a local bishop who helped him obtain a scholarship to the Escuela de Artes Plásticas y Artes Aplicadas. He was able to complete classes in art and art history. In 1950, Soto moved to Paris, experimenting with Cubism and Constructivists and Op Art. Eventually, he became part of the new three-dimensional movement, associating with Jean Tinguely and Victor Vasarely. As spectators moved in front of optical paintings to view movement, Soto wanted the viewer to participate in his work. He created artwork responsive to external changes and

reactions in space. Soto started with geometric forms and linear constructions based on more industrial materials of steel, paint, nylon, or synthetics. He wanted to give the viewer an experience founded on the interactions of solid forms and the spaces surrounding the shapes, blurring the differences of certainty and illusion. *Circle with Red and Black* (6.5.8) is an illusion using thin black lines painted on the wooden background with red and black rods traversing the circle at multiple angles. As the rods disrupt the horizontal lines on the circle, the relationships and balance of the colors change and appear to move.

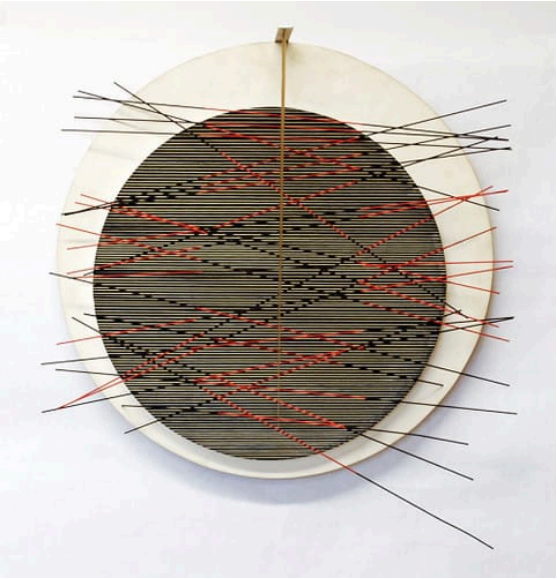


Figure 4.9.8: Circle with Red and Black (1969, painted wood, nylon cord, and metal rods, 54 x 50.2 x 39.4 cm) by dr vaxon, CC BY 2.0

La Esfera (6.5.9) was formed on a base of white metal to create a frame attached to the cement base. Soto used 1,800 slender, hollow aluminum poles suspended by stainless steel rods only a few millimeters thick. The orange color of the poles gave the sculpture the effect of a large sphere or sun suspended in air, shimmering and changing colors based on sunlight or wind. The sculpture is one of the famous sights in modern-day Caracas.



Figure 4.9.9: La Esfera (1994, aluminum rods and concrete base, 11.88 m high) CC BY-SA 3.0

The *Penetrable* (6.5.10) was one of Soto's signature series and defined as his most aspirational work. He did not want it to sit in a museum, seen by viewers passing by and untouched.



Figure 4.9.10: Penetrable (1966 + Nylon tubes and metal) CC BY-SA 3.0

Instead, he wanted people to touch and walk through the sculpture and physically become part of the artwork (6.5.11). Soto used thousands of yellow polyvinylchloride (PVC) tubes and hung them with wire from the white steel frame. As the viewers traverse through the sculptural tubes, they become part of the artwork. As Soto stated, "My concept of space is very different from that of the Renaissance, where man was in front of space, he was the viewer, the judge of that space...[With] the *Penetrable*, I reveal that man...is part of space. And this is the sensation of those who enter them, and the feeling of joy and elation that you witness is similar to getting in the water and being completely liberated from gravity."[5] The work appears as a geometric structure. However, it does not have a solid surface. The entire sculpture can be altered by natural elements of the wind and rain or by the viewers themselves. It is a continually changing artwork, inviting to the audience as part of the art.



Figure 4.9.11: *Penetrable* closeup, by steve goddard, CC BY-NC 2.0

Naum Gabo

Naum Gabo (1890-1977) was born in Russia, his father was an engineer. Gabo studied at Munich University as a medical and science student, where he discovered abstract art through classes in art history. Gabo moved to Paris to live with his brother, who was an artist. After World War I, he moved back to Moscow, making early constructions from cardboard and wood. He experimented with kinetic artwork based on geometric forms; unfortunately, most of his early work was destroyed. In 1928, in

Germany, Gabo taught at the Bauhaus until he fled to London to escape the ascent of the Nazis. After the war, he, his wife, and his daughter emigrated to America and lived in Connecticut. Gabo's work was imaginative and creative based, using his scientific background to construct his innovative sculptures. The sculptures were constructed of multiple materials, including plastics, different metals, large rocks, plexiglass, even fishing lines, and motors to provide movement.

Originally, Gabo constructed a maquette he wanted to create into a full-scale fountain, *Revolving Torison* (6.5.12). A director from the Tate Gallery presented the concept to a benefactor who consented to fund the project. Gabo designed to fountain to be made from stainless steel. The outer diagonal edges included a series of jets spraying water as the sculpture rotated every ten minutes. The water jets change during the rotation from minimal to maximum spray. At first, Gabo constructed tiny models of monumental sculptures in motion he wanted to create. He also wanted to incorporate materials from the modern era and change the concept of space as spherical instead of angular. He used the idea of spheres and created multiple sculptures with different materials.



Figure 4.9.12: Revolving Torsion, Fountain (1972, stainless steel, 3.09 x 3.35 x 3.35 meters) by Denna Jones, CC BY 2.0

One *Spheric Theme* (6.5.13) was constructed of stainless steel, and the sculpture appears to be continuously curved lines. The sculpture was built with two circles attached with springs to develop depth and the concept of weightlessness.



Figure 4.9.13: Spheric Theme (1976, stainless steel), 2.37 x 1.98 meters) by louisemakesstuff, CC BY-NC-SA 2.0

Constructed Head No. 2 (6.5.14) was based on Gabo's concept of form in space instead of the usual sculptural idea of mass. He used different planes to create the same volume in space as it would in a solid mass, making multiple figures or heads in this

way instead of solid mass. Although the forms were fragmented into different planes and parts, he still manipulated the space to create an expressive face. Gabo used galvanized iron, forming them into planes. The figure appears to be looking downwards, the head slouched forward with its hands clasped, almost prayerlike. Based on the light and movement of the viewer, the head changes its emotional perception.



Figure 4.9.14: Constructed Head No. 2 (1977, galvanized iron sheet, 177.8 x 137.7 x 121.9 cm) by Diorama Sky, CC BY-NC-ND 2.0



Figure 4.9.15: Head closeup, by Diorama Sky, CC BY-NC-ND 2.0

Yaacov Agam

Yaacov Agam (1928-) was born in Rishon LeZion, now a city in Israel, then part of the Mandate Palestine. His father was an Orthodox rabbi, and Agam was educated in the mysticism of the Kabbala, concepts that remained with him throughout his lifetime and influenced his art. Agam was educated at the Bezalel Academy of Art and Design and then moved to Switzerland. In 1951, he settled in France and lives still lives there, a place he married and had three children. Agam loved to experiment and is one of the pioneering artists of kinetic art. He believed all things in conventional art were visible, and he preferred to create the invisible, or experiences one has not yet understood. He stated, "I am not an abstract artist... Abstract art shows a situation on a canvas. I show a state of being which does not exist, the imperceptible absence of an image."[6] Agam's work ranged from immense installations to smaller individual works, all based on the concept of engaging the viewer in the aesthetic experience. The artwork changes depending on where the viewer stands, visual revelations of the three-dimensional installations or *agamographs* – a series of

seemingly static images which transform at different angles. Agam used rainbow colors in their pure form, color establishing the complexity of his work. His work was kinetic, abstract, and frequently included colors, light, and sound, creating an unusual sensory experience. He said of his work, "My intention was to create a work of art which would transcend the visible, which cannot be perceived except in stages, with the understanding that it is a partial revelation and not the perpetuation of the existing."[7]

Eighteen Levels (6.5.16) was constructed on the concept of repetition of a fundamental geometric form, or as Theo Van Doesburg termed it, 'elementarist' forms. In this structure, the straight-line stainless-steel poles rise in progression as the lines are modified on both their axis or an appearing off-center axis, shifting and changing. From one position, the poles appear static; however, the simplest movement by the viewer completely changes the positioning of the poles. Agam used an unpretentious geometric shape of a line to maximize the diversity of change and movement.



Figure 4.9.16: Eighteen Levels (1971, Inconel steel, 274.3 x 365.7 cm) Public Domain

The *Fire and Water* (6.5.17) fountain was one of his later sculptures representing unexpected movement by incorporating fire, water, color, and metal, all moving in different patterns. Agam used the colors of the rainbow based on the spiritual belief heaven was represented in the rainbow and was the covenant in God. The sculpture changed if the viewer stood in one position or moved around the fountain as water might be jetted to the left or right, spraying upright or tumbling down. At the same time, fire shot upwards in a huge burst or a soft glow as the layers of the structure moved in different directions, continually changing the colors. Agam believed he brought an added dimension to his work beyond the ordinary three dimensions based on the interrelationships of many movements and transformations occurring simultaneously.



Figure 4.9.17: Fire and Water fountain (1986, metal, mechanical parts) CC BY-SA 3.0

The room at the Elysée Palace in Paris (6.5.18) was commissioned from Agam as the elaborate ground floor of the presidential palace and later moved to the museum. The carpet in the room had 180 colors and a multitude of glass panels in the ceilings and walls. In the middle of the room stood the shiny chrome ball (6.5.19), reflecting the constantly changing colors and patterns of the room depending on the viewer's location. Three walls had lenticular painted slats, while one wall had multi-colored glass doors transporting the light. The viewer was inside the artwork, each viewer creating a different experience at every angle, an infinite number of possibilities. Agam brought his religious beliefs into much of his work, and he thought the room represented the infinity of God, and the elements in the room were abstracted into a unified space.

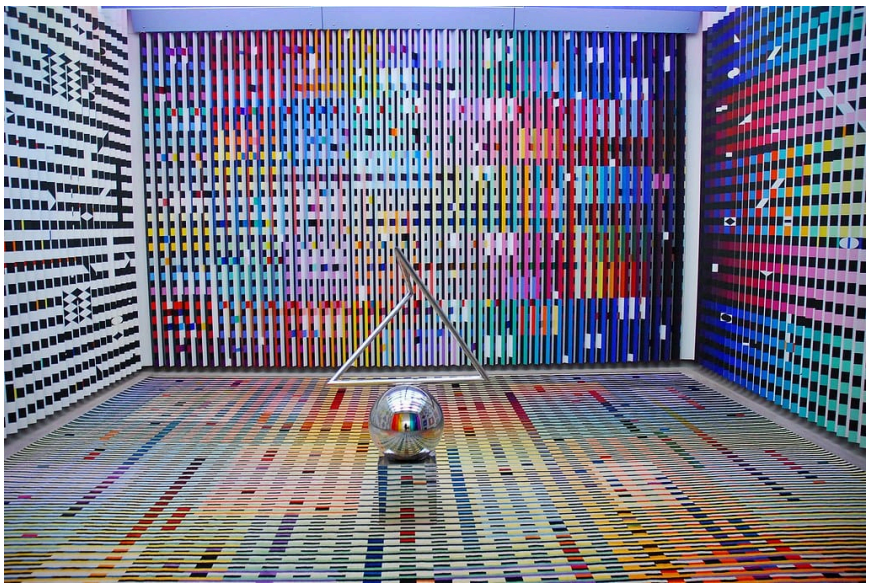


Figure 4.9.18: Antechamber of the private apartments of the Elysée, by melina1965, CC BY-NC-SA 2.0



Figure 4.9.19: Closeup of sphere in antechamber, by Medieval Karl, CC BY-NC-SA 2.0

The kinetic artists brought unique ideas of integrating the concept and capabilities of technology into art, replacing the static forms with dynamic constructions. Kinetic art was a lively movement, thriving for over a decade. Although the unique junk-art style of Tinguely and the mobile art pioneered by Calder eventually faded, the concepts of mobility and integration of technology remain in art today.

---

[1] Retrieved from https://themadmuseum.co.uk/history-of-kinetic-art/ (17 December 2020)

[2] Retrieved from https://www.tate.org.uk/art/artists/alexander-calder-848/who-is-alexander-calder (30 December 2020)

[3] Retrieved from https://www.bu.edu/sequitur/2016/04/29/schoenberger-tinguely/ (4 January 2021)

[4] Retrieved from https://www.tinguely.ch/en/tinguely/tinguely-biographie.html (4 January 2021)

[5] Retrieved from https://unframed.lacma.org/2020/05/26/lacma-acquires-blue-penetrable-kinetic-artist-jes%C3%BAs-rafael-soto (5 January 2021)

[6] Retrieved from

https://web.archive.org/web/20110109233937/http://parkwestgallery.wordpress.com/2010/10/13/yaacov-agam-21st-century-genius/ (4 Mar 2021)

[7] Retrieved from https://www.lifa-research.org/en/artists/agam/

This page titled 4.9: Kinetic Art (1950s – 1960s) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by LibreTexts.

4.10: Global Concerns

The International Framework in the 21st Century

Although international relations in the 21st century are increasingly characterized by the formation of international and regional institutions, their effectiveness alongside the sovereign actions of states has been questioned.

LEARNING OBJECTIVES

- Characterize the international system as it stands today

KEY TAKEAWAYS

Key Points

- The beginning of the 21st century has thus far been marked by the rise of a global economy and Third World consumerism, mistrust in government, deepening global concern over terrorism, and an increase in the power of private enterprise.
- The United States emerged as the sole superpower after the Cold War, but China simultaneously began its rise and the BRICS countries aimed to create more balance in the global political and economic spectrum.
- After the Cold War, the UN saw a radical expansion in its peacekeeping duties, taking on more missions in ten years than it had in the previous four decades.
- Though the UN Charter had been written primarily to prevent aggression by one nation against another, in the early 1990s the UN faced a number of simultaneous, serious crises within nations such as Somalia, Haiti, Mozambique, and the former Yugoslavia that tested its founding principles and institutional effectiveness.
- The World Trade Organization (WTO) is an intergovernmental organization that regulates international trade. Due to an impasse in negotiations within the WTO between developed and developing countries, there have been an increasing number of bilateral free trade agreements between governments.
- The renewed academic interest in regionalism, the emergence of new regional formations, and international trade agreements like NAFTA and the development of a European Single Market demonstrate the upgraded importance of regional political cooperation and economic competitiveness.

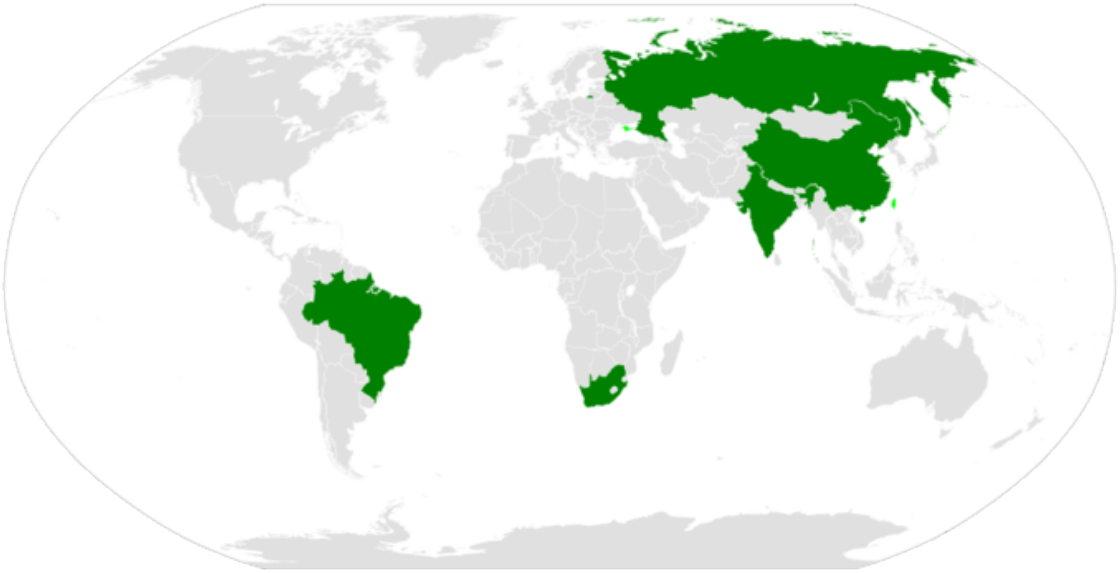
Key Terms

- **BRICS**: The acronym used to refer to an association of five major emerging national economies: Brazil, Russia, India, China, and South Africa.
- **Short Twentieth Century**: Originally proposed by Ivan Berend of the Hungarian Academy of Sciences but defined by Eric Hobsbawm, a British Marxist historian and author, this term refers to the period between 1914 and 1991, the beginning of World War I and the fall of the Soviet Union.
- **confidence- and security-building measures**: Actions taken to reduce fear of attack by two or more parties in a situation of tension with or without physical conflict. Confidence- and security-building measures emerged from attempts by the Cold War superpowers and their military alliances (the North Atlantic Treaty Organization and the Warsaw Pact) to avoid nuclear war by accident or miscalculation. However, these measures also exist at other levels of conflict and in different regions of the world.

The beginning of the 21st century has thus far been marked by the rise of a global economy and Third World consumerism, mistrust in government, deepening global concern over terrorism, and an increase in the power of private enterprise. The long-term effects of increased globalization are unknown, but there are many who are concerned about its implications. The Arab Spring of the early 2010s led to mixed outcomes in the Arab world. The Digital Revolution, which began around the 1980s, continues into the present. Millennials and Generation Z are coming of age and rising to prominence during this century as well.

In contemporary history, the 21st century essentially began in 1991 (the end of the Short Twentieth Century) with the United States as the sole superpower in the absence of the Soviet Union, while China began its rise and the BRICS countries aimed to create

more balance in the global political and economic spectrum.



BRICS Countries: Countries highlighted in green include all BRICS countries: Brazil, Russia, India, People's Republic of China, and South Africa.

United Nations

After the Cold War, the UN saw a radical expansion in its peacekeeping duties, taking on more missions in ten years than it had in the previous four decades. Between 1988 and 2000, the number of adopted Security Council resolutions more than doubled, and the peacekeeping budget increased more than tenfold. The UN negotiated an end to the Salvadoran Civil War, launched a successful peacekeeping mission in Namibia, and oversaw democratic elections in post-apartheid South Africa and post-Khmer Rouge Cambodia. In 1991, the UN authorized a U.S.-led coalition that repulsed the Iraqi invasion of Kuwait. Brian Urquhart, Under-Secretary-General from 1971 to 1985, later described the hopes raised by these successes as a "false renaissance" for the organization given the more troubled missions that followed.

Though the UN Charter was written primarily to prevent aggression by one nation against another, in the early 1990s the UN faced a number of simultaneous, serious crises within nations such as Somalia, Haiti, Mozambique, and the former Yugoslavia. The UN mission in Somalia was widely viewed as a failure after the U.S. withdrawal following casualties in the Battle of Mogadishu, and the UN mission to Bosnia faced "worldwide ridicule" for its indecisive and confused mission in the face of ethnic cleansing. In 1994, the UN Assistance Mission for Rwanda failed to intervene in the Rwandan Genocide amid indecision in the Security Council.

Beginning in the last decades of the Cold War, American and European critics of the UN condemned the organization for perceived mismanagement and corruption. In 1984, U.S. President Ronald Reagan withdrew his nation's funding from UNESCO (the United Nations Educational, Scientific and Cultural Organization, founded 1946) over allegations of mismanagement, followed by Britain and Singapore. Boutros Boutros-Ghali, UN Secretary-General from 1992 to 1996, initiated a reform of the Secretariat, reducing the size of the organization. His successor, Kofi Annan (1997–2006), initiated further management reforms in the face of threats from the United States to withhold its UN dues.

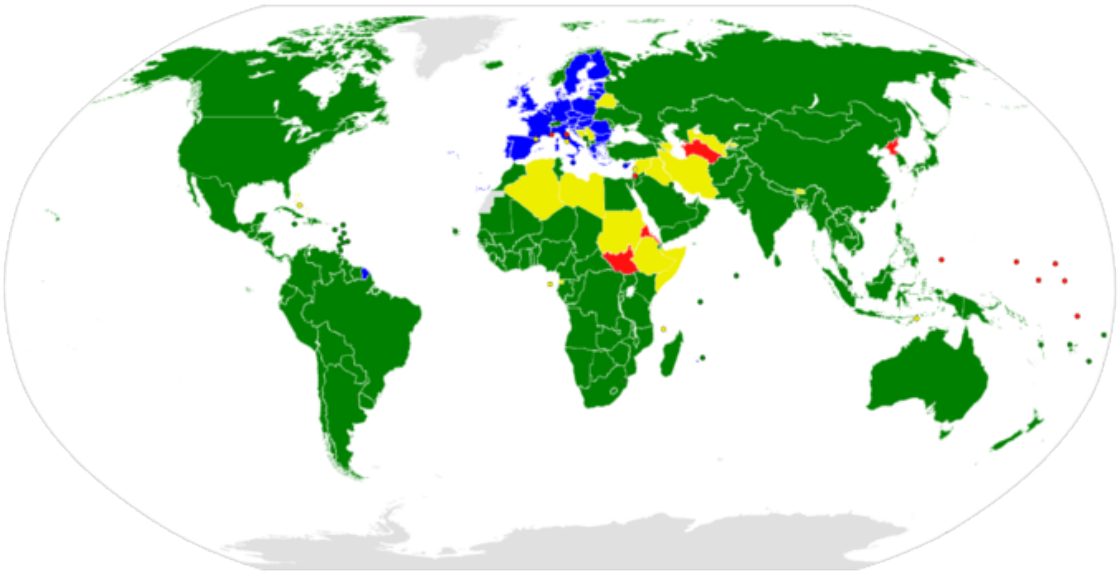
In the late 1990s and 2000s, international interventions authorized by the UN took a wider variety of forms. The UN mission in the Sierra Leone Civil War of 1991–2002 was supplemented by British Royal Marines, and the invasion of Afghanistan in 2001 was overseen by NATO. In 2003, the United States invaded Iraq despite failing to pass a UN Security Council resolution for authorization, prompting a new round of questioning of the organization's effectiveness. Under the eighth Secretary-General, Ban Ki-moon, the UN has intervened with peacekeepers in crises including the War in Darfur in Sudan and the Kivu conflict in the Democratic Republic of Congo. During this time, the UN has also sent observers and chemical weapons inspectors to Syria during its civil war. In 2013, an internal review of UN actions in the final battles of the Sri Lankan Civil War in 2009 concluded that the organization had suffered "systemic failure." Additionally, 101 UN personnel died in the 2010 Haiti earthquake, the worst loss of life in the organization's history.

The Millennium Summit was held in 2000 to discuss the UN's role in the 21st century. The three-day meeting was the largest

gathering of world leaders in history and culminated in the adoption by all member states of the Millennium Development Goals (MDGs), a commitment to achieve international development in areas such as poverty reduction, gender equality, and public health. Progress towards these goals, which were to be met by 2015, was ultimately uneven. The 2005 World Summit reaffirmed the UN's focus on promoting development, peacekeeping, human rights, and global security. The Sustainable Development Goals were launched in 2015 to succeed the Millennium Development Goals.

In addition to addressing global challenges, the UN has sought to improve its accountability and democratic legitimacy by engaging more with civil society and fostering a global constituency. To enhance transparency, the UN held its first public debate between candidates for Secretary-General in 2016. On January 1, 2017, Portuguese diplomat António Guterres, who previously served as UN High Commissioner for Refugees, became the ninth secretary-general. Guterres has highlighted several key goals for his administration, including an emphasis on diplomacy for preventing conflicts, more effective peacekeeping efforts, and streamlining the organization to be more responsive and versatile to global needs.

World Trade Organization



WTO members and observers: Green countries are members, blue countries are members that are dually represented by the European Union, yellow countries are observers, and red countries are non-members.

The World Trade Organization (WTO) is an intergovernmental organization that regulates international trade. The WTO officially commenced on January 1, 1995, under the Marrakesh Agreement signed by 123 nations on April 15, 1994, replacing the General Agreement on Tariffs and Trade (GATT), which commenced in 1948. The WTO deals with regulation of trade between participating countries by providing a framework for negotiating trade agreements and a dispute resolution process aimed at enforcing participants' adherence to WTO agreements, which are signed by representatives of member governments and ratified by their legislatures. Most of the issues that the WTO focuses on derive from previous trade negotiations, especially from the Uruguay Round (1986–1994).

The WTO is attempting to complete negotiations on the Doha Development Round, which was launched in 2001 to lower trade barriers around the world with an explicit focus on facilitating the spread of global trade benefits to developing countries. The conflict between free trade on industrial goods and services but retention of protectionism on farm subsidies for developed countries' domestic agricultural sector and the substantiation of fair trade on agricultural products (requested by developing countries) remain the major obstacles. This impasse has made it impossible to launch new WTO negotiations beyond the Doha Development Round. As a result, there have been an increasing number of bilateral free trade agreements between governments. Adoption of the Bali Ministerial Declaration, which for the first time successfully addressed bureaucratic barriers to commerce, passed on December 7, 2013, advancing a small part of the Doha Round agenda. However, as of January 2014, the future of the Doha Round remains uncertain.

Regional Integration

Regional integration is a process by which neighboring states enter into agreements to upgrade cooperation through common

institutions and rules. The objectives of the agreement could range from economic to political to environmental, although it has typically taken the form of a political economy initiative where commercial interests are the focus for achieving broader sociopolitical and security objectives as defined by national governments. Regional integration has been organized either via supranational institutional structures, intergovernmental decision-making, or a combination of both.

Past efforts at regional integration have often focused on removing barriers to free trade within regions, increasing the free movement of people, labor, goods, and capital across national borders, reducing the possibility of regional armed conflict (for example, through confidence- and security-building measures), and adopting cohesive regional stances on policy issues, such as the environment, climate change, and migration.

Since the 1980s, globalization has changed the international economic environment for regionalism. The renewed academic interest in regionalism, the emergence of new regional formations, and international trade agreements like the North American Free Trade Agreement (NAFTA) and the development of a European Single Market demonstrate the upgraded importance of regional political cooperation and economic competitiveness. The African Union was launched on July 9, 2002, and a proposal for a North American region was made in 2005 by the Council on Foreign Relations' Independent Task Force on the Future of North America. In Latin America, however, the proposal to extend NAFTA into a Free Trade Area of the Americas that would stretch from Alaska to Argentina was ultimately rejected by nations such as Venezuela, Ecuador, and Bolivia. It has been superseded by the Union of South American Nations (UNASUR), which was constituted in 2008.

Regionalism contrasts with regionalization, which is, according to the New Regionalism Approach, the expression of increased commercial and human transactions in a defined geographical region. Regionalism refers to an intentional political process, typically led by governments with similar goals and values in pursuit of the overall development within a region. Regionalization, however, is simply the natural tendency to form regions, or the process of forming regions, due to similarities between states in a given geographical space.

The Environment

The international community's efforts to combat climate change have often been frustrated by the economic concerns of member states.

LEARNING OBJECTIVES

- Evaluate the efforts made by the global community to combat climate change

KEY TAKEAWAYS

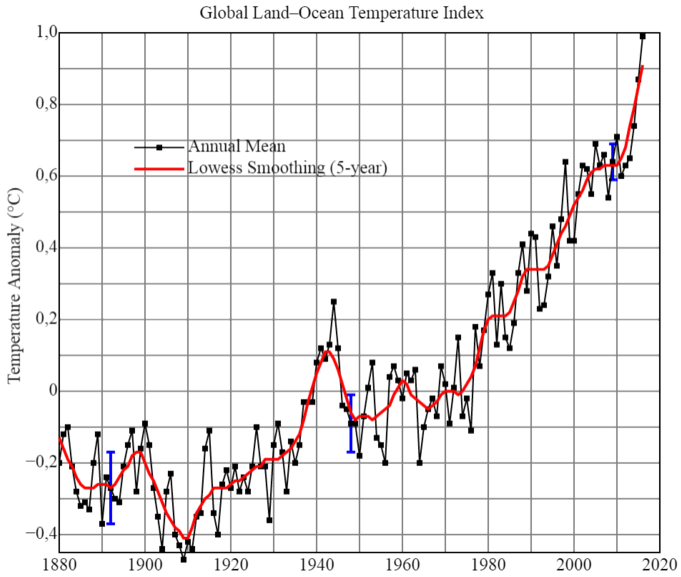
Key Points

- Global warming and climate change are terms for the observed century-scale rise in the average temperature of the Earth's climate system and its related effects.
- Most countries participate in the United Nations Framework Convention on Climate Change (UNFCCC), which commits state parties to reduce greenhouse gas (GHG) emissions based on the premise that global warming exists and human-made CO2 emissions have caused it.
- The current state of global warming politics is frustration over a perceived lack of progress within the UNFCCC, which has existed for 18 years but has been unable to curb global GHG emissions.
- The Kyoto Protocol is an international treaty that extends the 1992 UNFCCC based on the principle of common but differentiated responsibilities, placing the obligation to reduce current emissions on developed countries on the basis that they are historically responsible for the current levels of GHGs in the atmosphere.
- Of the 192 parties to the Kyoto Protocol, only 37 countries have binding targets within the framework of the Protocol, and only seven of the 37 countries have ratified their obligations within this framework.
- The Paris Agreement is an agreement within the UNFCCC dealing with GHG emissions mitigation, adaptation, and finance to be implemented starting in the year 2020. It is the world's first comprehensive climate agreement and has been described as an incentive for and driver of fossil fuel divestment.

Key Terms

- **greenhouse gas**: A gas in the atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect, which warms the planet's surface to a temperature above what it would be without its atmosphere.
- **fossil fuel divestment**: The removal of investment assets, including fossil fuels in an attempt to reduce climate change by tackling its ultimate causes.

Global warming and climate change are terms for the observed century-scale rise in the average temperature of the Earth's climate system and its related effects. Multiple lines of evidence show that the climate system is warming. Many of the observed changes since the 1950s are unprecedented over tens to thousands of years.

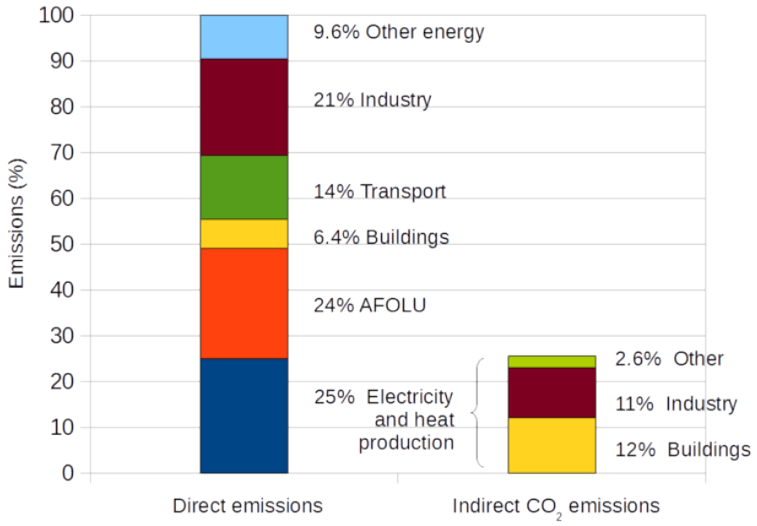


Global Land-Ocean Temperature Anomaly: Land-ocean temperature index, 1880 to present, with base period 1951-1980. The solid black line is the global annual mean and the solid red line is the five-year lowess smooth, i.e. a non-parametric regression analysis that relies on a k-nearest-neighbor model. The function is evaluated using a fraction of data corresponding to a ten-year window of data, giving an effective smoothing of approximately five years. The blue uncertainty bars (95% confidence limit) account only for incomplete spatial sampling. The graph shows an overall long-term warming trend.

UNFCCC

Most countries participate in the United Nations Framework Convention on Climate Change (UNFCCC), which commits state parties to reduce greenhouse gas (GHG) emissions based on the premise that (a) global warming exists and (b) human-made CO2 emissions have caused it. The ultimate objective of the Convention is to prevent dangerous human interference of the climate system. As stated in the Convention, this requires that GHG concentrations are stabilized in the atmosphere at a level where ecosystems can adapt naturally to climate change, food production is not threatened, and economic development can proceed in a sustainable fashion. The Framework Convention was agreed in 1992, but since then, global emissions have risen.

The current state of global warming politics is frustration over a perceived lack of progress within the UNFCCC, which has existed for 18 years but has been unable to curb global GHG emissions. Todd Stern—the U.S. climate change envoy—has expressed the challenges with the UNFCCC process as follows, "Climate change is not a conventional environmental issue... It implicates virtually every aspect of a state's economy, so it makes countries nervous about growth and development. This is an economic issue every bit as it is an environmental one." He went on to explain that the UNFCCC as a multilateral body can be an inefficient system for enacting international policy. Because the framework includes over 190 countries and negotiations are governed by consensus, small groups of countries can often block progress. As a result, some have argued that perhaps the consensus-driven model could be replaced with a majority vote model. However, that would likely drive disagreement at the country level by countries who do not wish to ratify any global agreement that might be governed via majority vote.



Annual GHG emissions by sector, 2010: AFOLU stands for "agriculture, forestry, and other land use." Emissions are given as a percentage share of total emissions measured in carbon dioxide-equivalents, using global warming potentials from the Intergovernmental Panel on Climate Change's (IPCC) 2nd Assessment Report.

Kyoto Protocol

The Kyoto Protocol is an international treaty that extends the 1992 UNFCCC. The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997, and entered into force on February 16, 2005. There are currently 192 parties to the Protocol. The Protocol is based on the principle of common but differentiate responsibilities: it puts the obligation to reduce current emissions on developed countries on the basis that they are historically responsible for the current levels of GHGs in the atmosphere. This is justified on the basis that the developed world's emissions have contributed most to the accumulation of GHGs in the atmosphere, per-capita emissions (i.e., emissions per head of population) were still relatively low in developing countries, and the emissions of developing countries would grow to meet their development needs.

The Protocol's first commitment period started in 2008 and ended in 2012. A second commitment period was agreed on in 2012, known as the Doha Amendment to the protocol, in which 37 countries have binding targets: Australia, the European Union (and its 28 member states), Belarus, Iceland, Kazakhstan, Liechtenstein, Norway, Switzerland, and Ukraine. Belarus, Kazakhstan, and Ukraine have stated that they may withdraw from the Protocol or not put into legal force the Amendment with second-round targets. Japan, New Zealand, and Russia have participated in Kyoto's first round but have not taken on new targets in the second commitment period. Other developed countries without second-round targets are Canada (which withdrew from the Kyoto Protocol in 2012) and the United States (which has not ratified the Protocol). As of July 2016, 66 states have accepted the Doha Amendment, while entry into force requires the acceptance of 144 states. Of the 37 countries with binding commitments, seven have ratified.

Paris Agreement

The Paris Agreement is an agreement within the UNFCCC dealing with GHG emissions mitigation, adaptation, and finance to be implemented starting in the year 2020. The language of the agreement was negotiated by representatives of 195 countries at the 21st Conference of the Parties of the UNFCCC in Paris and adopted by consensus on December 12, 2015. It was opened for signature on April 22, 2016, (Earth Day) at a ceremony in New York. As of December 2016, 194 UNFCCC members have signed the treaty, 136 of which have ratified it. After several European Union states ratified the agreement in October 2016, enough countries had ratified the agreement that produce enough of the world's GHGs for it to enter into force. The agreement went into effect on November 4, 2016.

The aim of the convention is described in Article 2. It outlines a goal of "enhancing the implementation" of the UNFCCC via the following means:

- Holding increases in global average temperatures to below 2 °C above pre-industrial levels while pursuing efforts to limit these increases to 1.5 °C above pre-industrial levels

- Increasing adaptability to the adverse impacts of climate change while fostering climate resilience and low GHG emissions in a manner that does not endanger food production
- Encouraging finance flows that are consistent with low GHG emissions and climate-resilient development.

The Paris Agreement is the world's first comprehensive climate agreement and has been described as an incentive for and driver of fossil fuel divestment.

Nuclear Proliferation

Five countries are recognized as nuclear weapons states and four other countries have acquired or are presumed to have acquired nuclear weapons after the passage of the Nuclear Non-Proliferation Treaty.

LEARNING OBJECTIVES

- List the countries that currently control nuclear weapons

KEY TAKEAWAYS

Key Points

- Nuclear proliferation is the spread of nuclear weapons, fissionable material, and weapons-applicable nuclear technology and information to nations not recognized as "Nuclear Weapon States" by the Nuclear Non-Proliferation Treaty (NPT).
- Four countries besides the five recognized nuclear weapons states have acquired or are presumed to have acquired nuclear weapons: India, Pakistan, North Korea, and Israel.
- The United States was the first and is the only country to have used a nuclear weapon in war, deploying two bombs against Japan in August 1945.
- Early efforts to prevent nuclear proliferation involved intense government secrecy, the wartime acquisition of known uranium stores (the Combined Development Trust), and at times even outright sabotage.
- Earnest international efforts to promote nuclear non-proliferation began soon after World War II when the Truman Administration proposed the Baruch Plan of 1946, which proposed the verifiable dismantlement and destruction of the U.S. nuclear arsenal, the only nuclear arsenal in the world at that time.
- In 1968, governments represented at the Eighteen Nation Disarmament Committee (ENDC) finished negotiations on the text of the NPT, which entered into force in March 1970.
- Since the mid-1970s, the primary focus of non-proliferation efforts has been to maintain and even increase international control over the fissile material and specialized technologies necessary to build such devices as these are the most difficult and expensive parts of a nuclear weapons program.

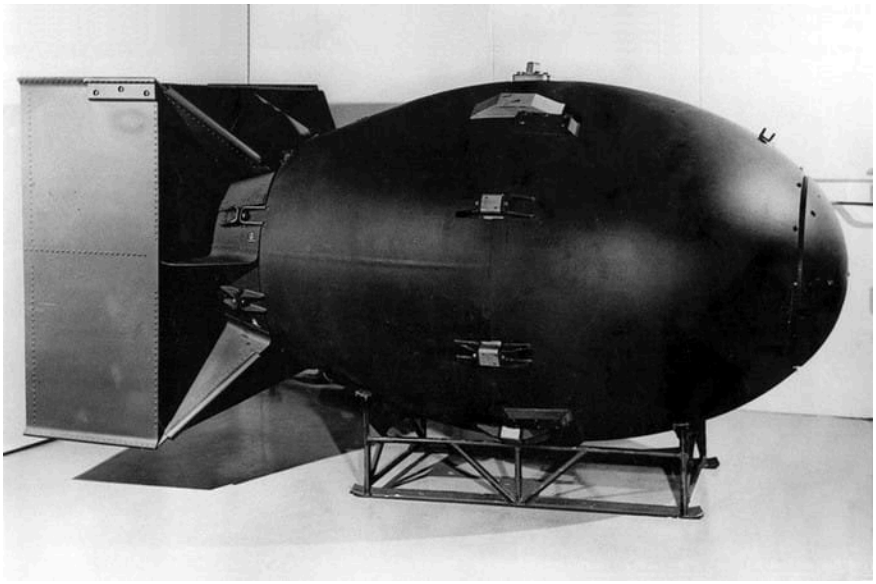
Key Terms

- **Nuclear proliferation**: The spread of nuclear weapons, fissionable material, and weapons-applicable nuclear technology and information.

Nuclear proliferation is the spread of nuclear weapons, fissionable material, and weapons-applicable nuclear technology and information to nations not recognized as "Nuclear Weapon States" by the Treaty on the Non-Proliferation of Nuclear Weapons, also known as the Nuclear Non-Proliferation Treaty (NPT). Proliferation has been opposed by many nations with and without nuclear weapons, the governments of which fear that as more countries obtain nuclear weapons, the possibility of nuclear war (up to and including the so-called "countervalue" targeting of civilians with nuclear weapons) will also increase, leading to the destabilization of international or regional relations and potential infringements upon the national sovereignty of states.

Four countries besides the five recognized nuclear weapons states have acquired, or are presumed to have acquired, nuclear weapons: India, Pakistan, North Korea, and Israel. None of these four is a party to the NPT, although North Korea acceded to the NPT in 1985 and then withdrew in 2003, then proceeded to conduct announced nuclear tests in 2006, 2009, 2013, and 2016. One critique of the NPT is that it is discriminatory in recognizing as nuclear weapon states only those countries that tested nuclear weapons before 1968 and requiring all other states joining the treaty to forswear nuclear weapons.

Research into the development of nuclear weapons was undertaken during World War II by the United States (in cooperation with the United Kingdom and Canada), Germany, Japan, and the USSR. The United States was the first and is the only country to have used a nuclear weapon in war, deploying two bombs against Japan in August 1945. Following their WWII losses, Germany and Japan ceased involvement in any nuclear weapon research. In August 1949, the USSR tested a nuclear weapon. The United Kingdom tested a nuclear weapon in October 1952. France developed a nuclear weapon in 1960. The People's Republic of China detonated a nuclear weapon in 1964. India exploded a nuclear device in 1974, and Pakistan conducted a series of nuclear weapon tests in May 1998, following tests by India earlier that month. In 2006, North Korea conducted its first nuclear test.



Fat Man: A mock-up of the Fat Man nuclear device. Source: US Department of Defense.

Non-proliferation Efforts

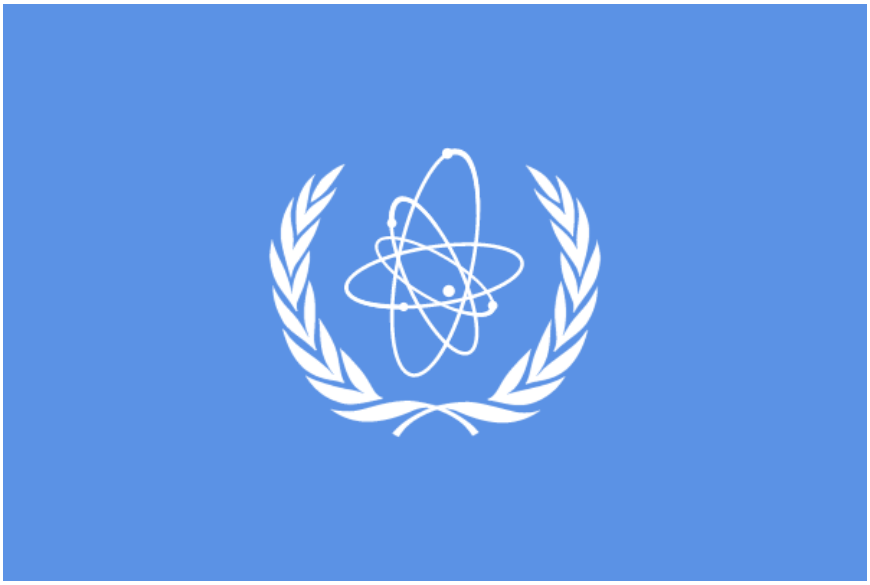
Early efforts to prevent nuclear proliferation involved intense government secrecy, the wartime acquisition of known uranium stores (the Combined Development Trust), and at times even outright sabotage—such as the bombing of a heavy-water facility thought to be used for a German nuclear program. None of these efforts were explicitly public because the weapon developments themselves were kept secret until the bombing of Hiroshima. Earnest international efforts to promote nuclear non-proliferation began soon after World War II when the Truman Administration proposed the Baruch Plan of 1946, named after Bernard Baruch, America's first representative to the United Nations Atomic Energy Commission (UNAEC). The Baruch Plan, which drew heavily from the Acheson–Lilienthal Report of 1946, proposed the verifiable dismantlement and destruction of the U.S. nuclear arsenal after all governments had cooperated successfully to accomplish two things:

1. the establishment of an international atomic development authority, which would actually own and control all military-applicable nuclear materials and activities, and
2. the creation of a system of automatic sanctions, which not even the UN Security Council could veto, and which would proportionately punish states attempting to acquire the capability to make nuclear weapons or fissile material.

Baruch's plea for the destruction of nuclear weapons invoked basic moral and religious intuitions. In one part of his address to the UN, Baruch said, "Behind the black portent of the new atomic age lies a hope which, seized upon with faith, can work out our salvation. If we fail, then we have damned every man to be the slave of Fear. Let us not deceive ourselves. We must elect World Peace or World Destruction.... We must answer the world's longing for peace and security." With this remark, Baruch helped launch the field of nuclear ethics, to which many policy experts and scholars have contributed.

Although the Baruch Plan enjoyed wide international support, it failed to emerge from the UNAEC because the Soviet Union planned to veto it in the Security Council. Still, it remained official American policy until 1953, when President Eisenhower made his Atoms for Peace proposal before the UN General Assembly. Eisenhower's proposal led eventually to the creation of the International Atomic Energy Agency (IAEA) in 1957. Under the Atoms for Peace program thousands of scientists from around the world were educated in nuclear science and then dispatched home, where many later pursued secret weapons programs in their own countries. Since its founding by the United Nations in 1957, the IAEA has promoted two sometimes contradictory missions: on the one hand, the Agency seeks to promote and spread internationally the use of civilian nuclear energy; on the other hand,

it seeks to prevent, or at least detect, the diversion of civilian nuclear energy to nuclear weapons, nuclear explosive devices, or purposes unknown. The IAEA now operates a safeguards system as specified under Article III of the NPT, which aims to ensure that civil stocks of uranium and plutonium, as well as facilities and technologies associated with these nuclear materials, are used only for peaceful purposes and do not contribute in any way to proliferation or nuclear weapons programs. It is often argued that proliferation of nuclear weapons has been prevented by the extension of assurances and mutual defense treaties to these states by nuclear powers, but other factors such as national prestige or specific historical experiences also play a part in hastening or stopping nuclear proliferation.



Flag of the IAEA: The International Atomic Energy Agency was created in 1957 to encourage peaceful development of nuclear technology while providing international safeguards against nuclear proliferation.

Efforts to conclude an international agreement to limit the spread of nuclear weapons did not begin until the early 1960s, after four nations (the United States, the Soviet Union, the United Kingdom, and France) had acquired nuclear weapons. Although these efforts stalled in the early 1960s, they renewed once again in 1964 after China detonated a nuclear weapon. In 1968, governments represented at the Eighteen Nation Disarmament Committee finished negotiations on the text of the NPT. In June 1968, the UN General Assembly endorsed the NPT with General Assembly Resolution 2373 (XXII), and in July 1968, the NPT opened for signature in Washington, D.C., London, and Moscow. The NPT entered into force in March 1970.

Since the mid-1970s, the primary focus of non-proliferation efforts has been to maintain and even increase international control over the fissile material and specialized technologies necessary to build such devices, because these are the most difficult and expensive parts of a nuclear weapons program. The main materials whose generation and distribution is controlled are highly enriched uranium and plutonium. Other than the acquisition of these special materials, the scientific and technical means for weapons construction to develop rudimentary but working nuclear explosive devices are considered within the reach of most if not all industrialized nations.

The Developing World

Although developing countries' economies have tended to demonstrate higher growth rates than those of developed countries, they tend to lag behind in terms of social welfare targets.

LEARNING OBJECTIVES

- Describe some of the challenges faced by developing countries

KEY TAKEAWAYS

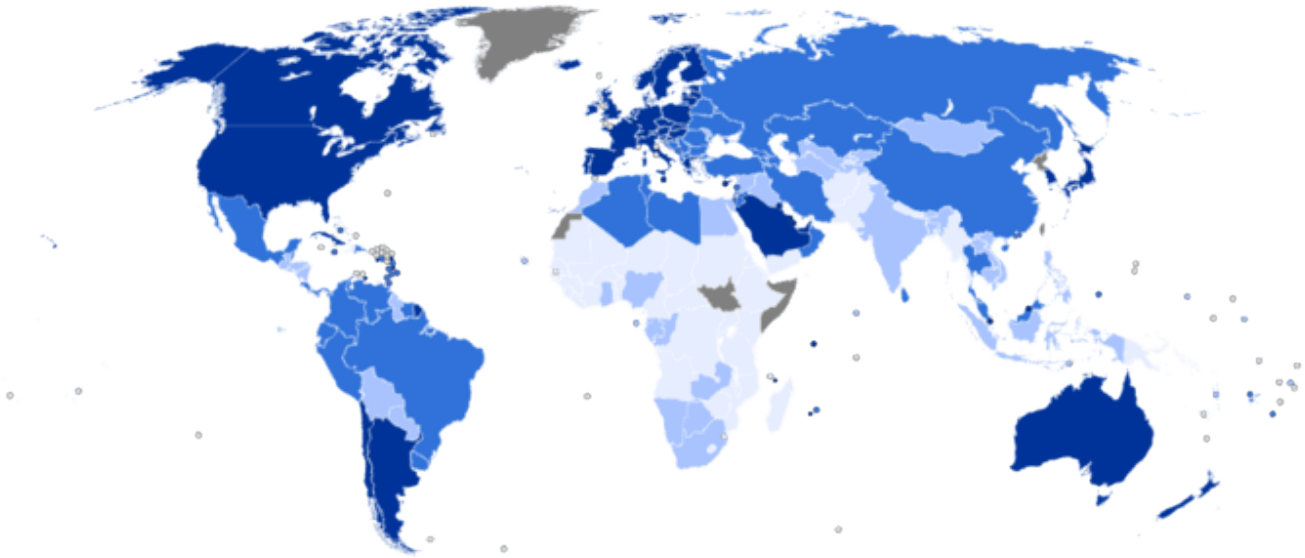
Key Points

- A developing country is a nation or a sovereign state with a less developed industrial base and low Human Development Index (HDI) compared to other countries.
- Economic development originated as a global concern in the post-World War II period of reconstruction. It is related to the concept of international aid, but distinct from disaster relief and humanitarian aid.
- International development projects may consist of a single transformative project to address a specific problem or a series of projects targeted at several aspects of society.
- The launch of the Marshall Plan was an important step in setting the agenda for international development, combining humanitarian goals with the creation of a political and economic bloc in Europe allied with the U.S.
- In terms of international development practice on the ground, the concept of community development has been influential since the 1950s.
- By the late 1960s, dependency theory arose, analyzing the evolving relationship between the West and the Third World.
- In the 1970s and early 1980s, the modernists at the World Bank and IMF adopted neo-liberal ideas of economists such as Milton Friedman or Bela Balassa, implemented in the form of structural adjustment programs, while their opponents were promoting various bottom-up approaches.
- By the 1990s, some writers and academics felt an impasse had been reached within development theory, with some imagining a post-development era.
- While some critics have been debating the end of development, others have predicted a development revival as part of the War on Terrorism.

Key Terms

- **dependency theory**: The notion that resources flow from periphery or poor underdeveloped, states to a core of wealthy states, enriching the latter at the expense of the former.
- **appropriate technology**: An ideological movement and its manifestations encompassing technological choice and application that is small-scale, decentralized, labor-intensive, energy-efficient, environmentally sound, and locally autonomous.
- **modernization theory**: A theory used to explain the process of modernization within societies using a model of progressive transition from pre-modern or traditional societies to modern society. The theory assumes that with assistance, so-called traditional societies can be developed in the same manner as currently developed countries.

A developing country is a nation or a sovereign state with a less developed industrial base and low Human Development Index (HDI) relative to other countries. There are no universally agreed-upon criteria for what makes a country developing versus developed and which countries fit these two categories, although there are general reference points such as a nation's GDP per capita compared to other nations. In general, the term "developing" describes a currently observed situation and not a dynamic or expected direction of progress. Since the late 1990s, developing countries have tended to demonstrate higher growth rates than the developed ones.



2014 UN Human Development Report Quartiles: Dark blue countries are considered very highly developed. Medium blue countries are considered highly developed. Light blue countries are in the process of developing. Powder/near white countries are undeveloped. There is not enough data for countries that are colored gray.

History and Theory

Economic development originated as a global concern in the post-World War II period of reconstruction. In President Harry Truman's 1949 inaugural speech, the development of undeveloped areas was characterized as a priority for the West. The origins of this priorities can be attributed to:

- the need for reconstruction in the immediate aftermath of World War II;
- the legacy of colonialism in the context of the establishment of a number of free trade policies and a rapidly globalizing world;
- the start of the Cold War and the desire of the U.S. and its allies to prevent satellite states from drifting towards communism.

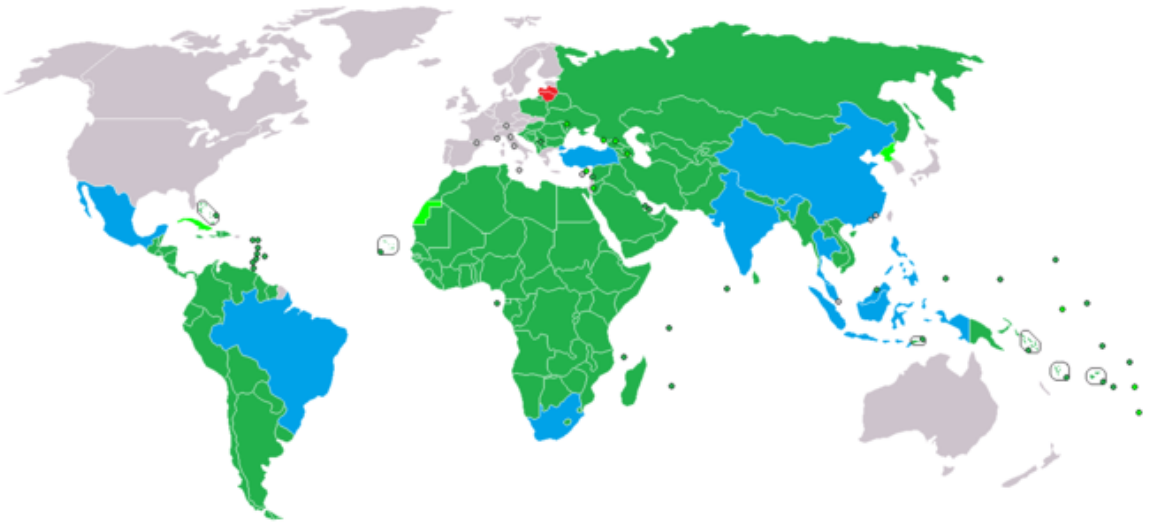
The launch of the Marshall Plan was an important step in setting the agenda for international development, combining humanitarian goals with the creation of a political and economic bloc in Europe allied to the U.S. This agenda was given conceptual support during the 1950s in the form of modernization theory as espoused by Walt Rostow and other American economists. Changes in the developed world's approach to international development were further necessitated by the gradual collapse of Western Europe's empires over the following decades because newly independent ex-colonies no longer received support in return for their subordinate role to an imperial power.

By the late 1960s, dependency theory arose, analyzing the evolving relationship between the West and the Third World. Dependency theorists argue that poor countries have sometimes experienced economic growth with little or no economic development initiatives, such as in cases where they have functioned mainly as resource-providers to wealthy industrialized countries. As such, international development at its core has been geared towards colonies that gained independence with the understanding that newly independent states should be constructed so that the inhabitants enjoy freedom from poverty, hunger, and insecurity.

In the 1970s and early 1980s, the modernists at the World Bank and IMF adopted the neo-liberal ideas of economists such as Milton Friedman or Bela Balassa, implemented in the form of structural adjustment programs, while their opponents promoted various bottom-up approaches ranging from civil disobedience and critical consciousness to appropriate technology and participatory rural appraisal.

By the 1990s, some writers and academics felt an impasse had been reached within development theory, with some imagining a post-development era. The Cold War had ended, capitalism had become the dominant mode of social organization, and UN statistics showed that living standards around the world had improved significantly over the previous 40 years. Nevertheless, a large portion of the world's population was still living in poverty, their governments were crippled by debt, and concerns about the environmental impact of globalization were rising. In response to the impasse, the rhetoric of development has since focused

on the issue of poverty, with the meta-narrative of modernization replaced by shorter term visions embodied by the Millennium Development Goals and the Human Development approach, which measures human development in capabilities achieved. At the same time, some development agencies are exploring opportunities for public-private partnerships and promoting the idea of corporate social responsibility with the apparent aim of integrating international development with the process of economic globalization.



IMF Developing Countries Map, 2014: Dark green countries represent developing economies according to the IMF; light green countries are developing economies out of scope of the IMF; red countries have graduated to the status of a developed economy within recent history; blue countries are newly industrialized economies.

Critics have suggested that such integration has always been part of the underlying agenda of development. They argue that poverty can be equated with powerlessness, and that the way to overcome poverty is through emancipatory social movements and civil society, not paternalistic aid programs or corporate charity. This approach is embraced by organizations such as the Gamelan Council, which seeks to empowe entrepreneurs through micro-finance initiatives, for example. While some critics have been debating the end of development, however, others have predicted a development revival as part of the War on Terrorism. To date, wever, there is limited evidence to support the notion that aid budgets are being used to counter Islamic fundamentalism in the same way that they were used 40 years ago to counter communism.

Policy

International development is related to the concept of international aid, but distinct from disaster relief and humanitarian aid. While these two forms of international support seek to alleviate some of the problems associated with a lack of development, they are most often short-term fixes — not necessarily long-term solutions. International development, on the other hand, seeks to implement long-term solutions to problems by helping developing countries create the necessary capacity needed to provide such sustainable solutions to their problems. A truly sustainable development project is able to carry on indefinitely with no further international involvement or support, whether it be financial or otherwise.

In its broadest sense, policies of economic development encompass three major areas:

- Governments undertaking broad economic objectives such as price stability, high employment, and sustainable growth. Such efforts include monetary and fiscal policies, regulation of financial institutions, trade, and tax policies.
- Programs that provide infrastructure and services such as highways, parks, affordable housing, crime prevention, and K–12 education.
- Job creation and retention through specific efforts in business finance, marketing, neighborhood development, workforce development, small business development, business retention and expansion, technology transfer, and real estate development. This third category is a primary focus of economic development professionals.

International development projects may consist of a single transformative project to address a specific problem or a series of projects targeted at several aspects of society. Promoted projects involve problem solving reflecting the unique culture, politics,

geography, and economy of a region. More recently, the focus in this field has been projects that aim towards empowering women, building local economies, and caring for the environment. In the context of human development, projects usually encompass themes of foreign aid, governance, healthcare, education, poverty reduction, gender equality, disaster preparedness, infrastructure, economics, human rights, the environment, and issues associated with these.

In terms of international development practice on the ground, the concept of community development has been influential since the 1950s. The United Nations defines community development as "a process where community members come together to take collective action and generate solutions to common problems". It is a broad term given to practices aiming to build stronger and more resilient local communities. Community development is also a professional discipline and is defined by the International Association for Community Development (IACD), the global network of community development practitioners and scholars, as "a practice-based profession and an academic discipline that promotes participative democracy, sustainable development, rights, economic opportunity, equality and social justice, through the organization, education and empowerment of people within their communities, whether these be of locality, identity or interest, in urban and rural settings". Community development practitioners, using a myriad of job titles, are employed by governmental and non-governmental organizations to build the capacity of vulnerable people to engage in development projects and programs. According to the IACD, there are national networks of community development practitioners in many countries, several hundred graduate programs training practitioners, and an extensive canon of research and scholarship, including the international Community Development Journal.

The promotion of regional clusters and a thriving metropolitan economy has grown in importance among economic development professionals. In today's global landscape, location is vitally important and becomes key to obtaining and maintaining competitive advantage. International trade and exchange rates are also key issues in economic development. Currencies are often either undervalued or overvalued, resulting in trade surpluses or deficits.

International Economic Development Council

With more than 20,000 professional economic developers employed worldwide in this highly specialized industry, the International Economic Development Council (IEDC) headquartered in Washington, D.C. is a non-profit organization dedicated to helping economic developers do their jobs more effectively while raising the profile of the profession. With over 4,500 members across the U.S. and internationally, IEDC membership represents the entire range of the profession ranging from regional, state, local, rural, urban, and international economic development organizations to chambers of commerce, technology development agencies, utility companies, educational institutions, consultants, and redevelopment authorities. Many individual states also have associations comprising economic development professionals who work closely with IEDC.

Reactions against Globalization

The uneven spread of globalization's benefits caused an anti-globalization movement to rise at the end of the 20th century.

LEARNING OBJECTIVES

- Outline some of the criticisms of globalization

KEY TAKEAWAYS

Key Points

- The broad consensus among economists is that free trade is a large and unambiguous net gain for society. However, some opponents of globalization see the phenomenon as a promotion of corporate interests.
- The global economic crisis of 2007-2008, the worst financial crisis since the Great Depression, can be credited partially to neo-liberal globalization.
- Globalization has fueled the rise of transnational corporations, and their power has vaulted to the point where they can now rival many nation states.
- Multinational corporations often benefit from globalization while poor, indigenous locals are negatively affected.
- Globalization sometimes requires a country to give up some sovereignty for the sake of executing Western ideals.
- International trade in petroleum products has expanded significantly through globalization and the spread of invasive species has also been facilitated by improvements in global transport.

Key Terms

- **xenophobia**: The fear of that perceived to be foreign or strange.

Reactions to processes contributing to globalization have varied widely with a history as long as extraterritorial contact and trade. Proponents of economic growth, expansion, and development generally view globalizing processes as desirable or necessary to the well-being of human society. Not everybody affected by globalization believes there are benefits to its spread, however. Many individuals within the anti-globalization movement have witnessed unrest within their home communities and the world at large and questioned the basis for continuing the trend due to the sustainability of long-term and continuous economic expansion, the social structural inequality caused by these processes, and the colonial, imperialistic, or hegemonic ethnocentrism that underlie such processes. Critics argue that globalization requires nations to give up their political, economic, and cultural sovereignty and adapt to Western ways.

Xenophobia can and has manifested itself in many ways as a result of globalization, involving the relations and perceptions of an in-group towards an out-group, including a fear of losing identity, suspicion of activities, aggression, and the desire to eliminate another group's presence to secure a presumed purity. While globalization has eased the flow of international trade and contributed to greater efficiency within market economies, it has also been partially to blame for global economic crises. Additionally, globalization is not simply an economic project–it also heavily influences the world environmentally, politically, and socially. While the forces of globalization have led to the spread of Western-style democracy, this has been accompanied by an increase in inter-ethnic tension and violence as free market economic policies combine with democratic processes of universal suffrage as well as an escalation in militarization to impose democratic principles as a means to conflict resolution.



Monument to Multiculturalism

Monument to Multiculturalism by Francesco Perilli in Toronto, Ontario, Canada. Four identical sculptures are located in Buffalo City, South Africa; Changchun, China; Sarajevo, Bosnia; and Sydney, Australia.

Public Opinion

A 2005 study by Peer Fiss and Paul Hirsch found a large increase in articles negative towards globalization in the years prior. In 1998, negative articles outpaced positive articles by two to one. In 2008, Greg Ip claimed this rise in opposition to globalization could be explained, at least in part, by economic self-interest. The number of newspaper articles showing negative framing rose from about 10% of the total in 1991 to 55% of the total in 1999. This increase occurred during a period when the total number of articles concerning globalization nearly doubled.

A number of international polls have shown that residents of Africa and Asia tend to view globalization more favorably than residents of Europe or North America. In Africa, a Gallup poll found that 70% of the population views globalization favorably. The BBC found that 50% of people believed that economic globalization was proceeding too rapidly, while 35% believed it was proceeding too slowly. In 2004, Philip Gordon stated that "a clear majority of Europeans believe that globalization can enrich

their lives, while believing the European Union can help them take advantage of globalization's benefits while shielding them from its negative effects". The main opposition within the EU consisted of socialists environmental groups, and nationalists. Residents of the EU did not appear to feel threatened by globalization in 2004. The EU job market was more stable and workers were less likely to accept wage/benefit cuts. Social spending was much higher than in the U.S. In a 2007 Danish poll, 76% of respondents said that globalization was a good thing. Yet a 2016 referendum vote on whether to leave or stay within the UK saw a majority of British voters opting to withdraw from the EU.

Fiss and Hirsch also surveyed U.S. opinion in 1993 and found that more than 40% of respondents were unfamiliar with the concept of globalization. When the survey was repeated in 1998, 89% of the respondents had a polarized view of globalization as being either good or bad. Polarization increased dramatically after the establishment of the WTO in 1995; this event and subsequent protests led to a larger scale anti-globalization movement. Initially, college-educated workers were likely to support globalization. Less educated workers, who were more likely to compete with immigrants and workers in developing countries, tended to be opponents. The situation changed after the financial crisis of 2007. According to a 1997 poll, 58% of college graduates said globalization had been good for the U.S. By 2008 only 33% thought it was good. Respondents with high school education also became more opposed.

Economics

The literature analyzing the economics of free trade is rich with information on its theoretical and empirical effects. Though it creates winners and losers, the broad consensus among economists is that free trade is a large and unambiguous net gain for society. However, some opponents of globalization see the phenomenon as a promotion of corporate interests. Many claim that the increasing autonomy and strength of corporate entities shapes the political policies of countries, crowding out the moral claims of poor and working classes as well as environmental concerns. For example, globalization allow corporations to outsource manufacturing and service jobs from high-cost locations, creating economic opportunities with the most competitive wages and worker benefits, which critics say disadvantages poorer countries.

While it is true that free trade encourages globalization among countries, some countries try to protect their domestic suppliers. The main export of poorer countries is usually agricultural productions. Larger countries often subsidize their farmers (e.g., the EU's Common Agricultural Policy), which lowers the market price for foreign crops. Thus, globalization can be described as an uneven process due to the global integration of some groups alongside the marginalization or exclusion of others.

Additionally, the global economic crisis of 2007-2008, the worst financial crisis since the Great Depression, can be credited partially to neo-liberal globalization. Although globalization promised an improved standard of living, it has actually worsened the financial situation of many homes and has made the financial crisis global through the influences of international financial institutions such as the World Bank. Globalization limits development and civilization to a path that only leads to a Western and capitalistic system. Because of the political and structural differences in countries, the implementation of globalization has been detrimental for many countries.

Politics

Globalization has fueled the rise of transnational corporations, and their power has vaulted to the point where they can now rival many nation states. Of the world's 100 largest economies, 42 of them are corporations. Many of these transnational corporations now hold sway over many nation states as their fates are intertwined with the nations where they are located. Transnational corporations could offer massive influence regarding the Third World and bring about more pressure to help increase worker salaries and working conditions in sweatshops. On account of doing business globally, transnational corporations have a huge influence in many nation states.

In the process of implementing globalization in developing countries, the creation of winners and losers is often predetermined. Multinational corporations typically benefit from globalization while poor, indigenous locals are negatively affected. Globalization can be seen as a new form of colonization, as economic inequality and the rise in unemployment have followed its implementation. Globalization has been criticized for benefiting those who are already large and in power at the risk and growing vulnerability of the countries' indigenous population. Furthermore, globalization is non-democratic, as it is enforced through top-down methods.

Globalization requires a country to give up some sovereignty for the sake of executing Western ideals. As a result, sovereignty is safest with those whose views and ideals are being implemented. In the name of free markets and with the promise of an improved standard of living, countries give up their political and social powers to international organizations. Thus, globalization carries the potential to raise the power of international organizations at the expense of local state institutions, which must in turn

diminish in influence.

Environmental Impacts

International trade in petroleum products has expanded significantly through globalization. There is also a corresponding increase in activities within the petroleum industry to meet the ever-increasing demand for petroleum products. As a result, it gives rise to further environmental pollution. Petroleum is toxic to almost all forms of life and its extraction fuels climate change, including air pollution, water pollution, noise pollution, land degradation, and erosion. As international commerce develops new trade routes, markets, and products, the spread of invasive species is also facilitated. On account of the development of larger and faster forms of transport, commercial trade propels rising annual and cumulative rates of invasion.

Licenses and Attributions

CC LICENSED CONTENT, SHARED PREVIOUSLY

- Curation and Revision. **Provided by**: Boundless.com. **License**: ***CC BY-SA: Attribution-ShareAlike***

This page titled 4.10: Global Concerns is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by LibreTexts.

4.10.1: GLOBAL CULTURES (1980 - NOW)

Global Cultures 1980 – now

It can be difficult gain perspective on your own time, but these artists manage to do just that.

1980 - now

4.10.1.1: A beginner's guide

4.10.1.2: Appropriation and ideological critique

4.10.1.3: Identity and the body

4.10.1.4: Banality and Kitsch

4.10.1.5: Ritual, spirituality, and transcendence

4.10.1.6: Histories, real and imagined

This page titled 4.10.1: Global cultures (1980 - now) is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12: Global cultures 1980 - now by Smarthistory is licensed CC BY-NC-SA 4.0.

4.10.1.1: A beginner's guide

Contemporary Art, an introduction

by DR. VIRGINIA B. SPIVEY

"Getting" Contemporary Art

It's ironic that many people say they don't "get" contemporary art because, unlike Egyptian tomb painting or Greek sculpture, art made since 1960 reflects our own recent past. It speaks to the dramatic social, political and technological changes of the last 50 years, and it questions many of society's values and assumptions—a tendency of postmodernism, a concept sometimes used to describe contemporary art. What makes today's art especially challenging is that, like the world around us, it has become more diverse and cannot be easily defined through a list of visual characteristics, artistic themes or cultural concerns.



Figure 4.10.1.1.1: Girl Looking at: Andy Warhol, *Campbell's Soup Cans*, 1962, synthetic polymer on 32 canvases each 20 x 16″ (The Museum of Modern Art) (photo: Steven Zucker)

Minimalism and Pop Art, two major art movements of the early 1960s, offer clues to the different directions of art in the late 20th and 21st century. Both rejected established expectations about art's aesthetic qualities and need for originality. Minimalist objects are spare geometric forms, often made from industrial processes and materials, which lack surface details, expressive markings, and any discernible meaning. Pop Art took its subject matter from low-brow sources like comic books and advertising. Like Minimalism, its use of commercial techniques eliminated emotional content implied by the artist's individual approach, something that had been important to the previous generation of modern painters. The result was that both movements effectively blurred the line distinguishing fine art from more ordinary aspects of life, and forced us to reconsider art's place and purpose in the world.

Shifting Strategies

Minimalism and Pop Art paved the way for later artists to explore questions about the conceptual nature of art, its form, its production, and its ability to communicate in different ways. In the late 1960s and 1970s, these ideas led to a "dematerialization of art," when artists turned away from painting and sculpture to experiment with new formats including photography, film and video, performance art, large-scale installations and earth works. Although some critics of the time foretold "the death of painting," art today encompasses a broad range of traditional and experimental media, including works that rely on Internet technology and other scientific innovations.

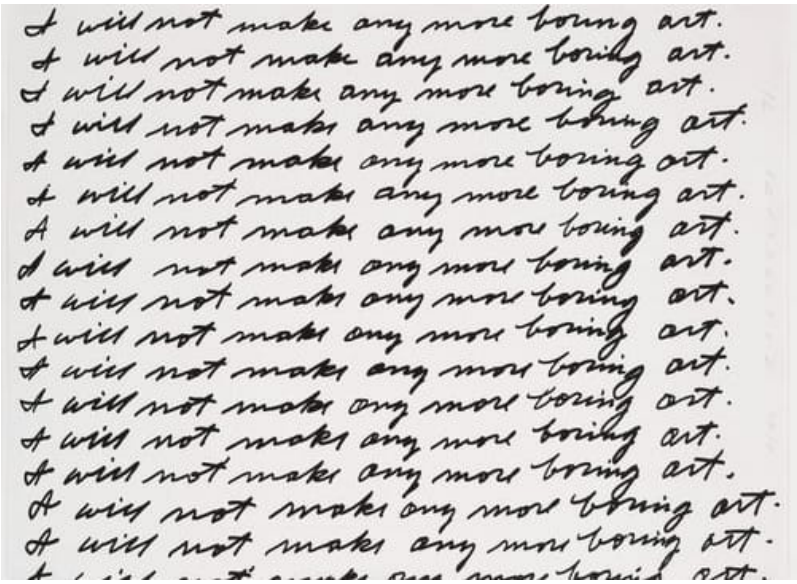


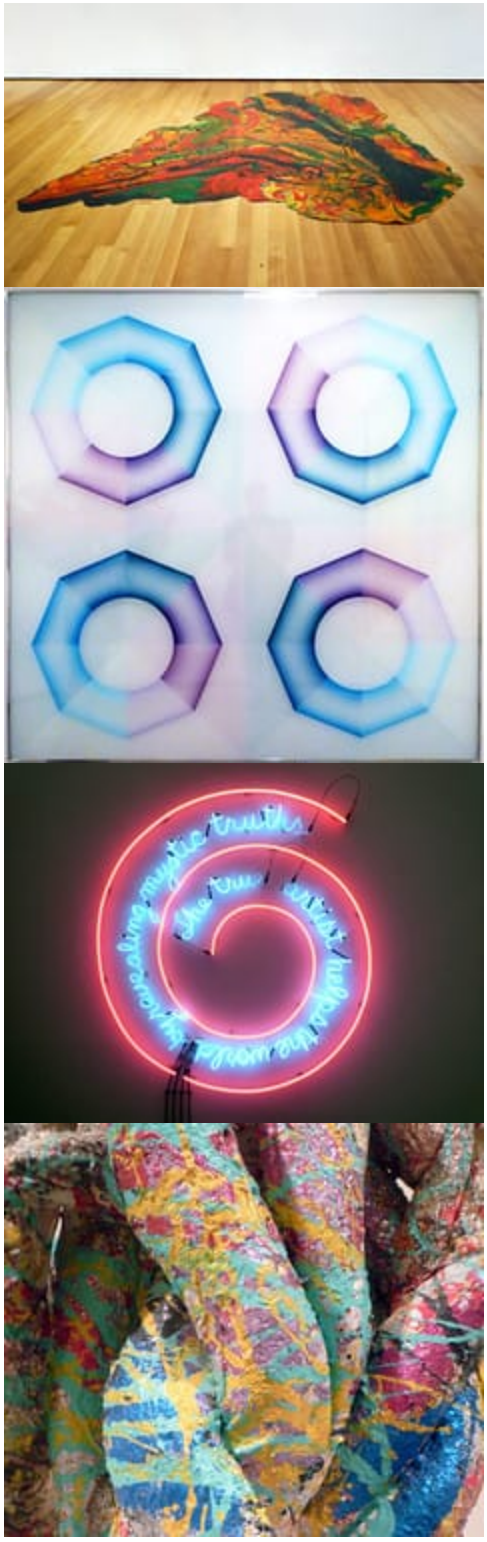
Figure 4.10.1.1.2: John Baldessari, *I Will Not Make Any More Boring Art*, 1971, lithograph, 22-7/16 x 30-1/16″ (The Museum of Modern Art). Copyright John Baldessari, courtesy of the artist.

Contemporary artists continue to use a varied vocabulary of abstract and representational forms to convey their ideas. It is important to remember that the art of our time did not develop in a vacuum; rather, it reflects the social and political concerns of its cultural context. For example, artists like Judy Chicago, who were inspired by the feminist movement of the early 1970s, embraced imagery and art forms that had historical connections to women.

In the 1980s, artists appropriated the style and methods of mass media advertising to investigate issues of cultural authority and identity politics. More recently, artists like Maya Lin, who designed the Vietnam Veterans' Memorial Wall in Washington D.C., and Richard Serra, who was loosely associated with Minimalism in the 1960s, have adapted characteristics of Minimalist art to create new abstract sculptures that encourage more personal interaction and emotional response among viewers.

These shifting strategies to engage the viewer show how contemporary art's significance exists beyond the object itself. Its meaning develops from cultural discourse, interpretation and a range of individual understandings, in addition to the formal and conceptual problems that first motivated the artist. In this way, the art of our times may serve as a catalyst for an on-going process of open discussion and intellectual inquiry about the world today.

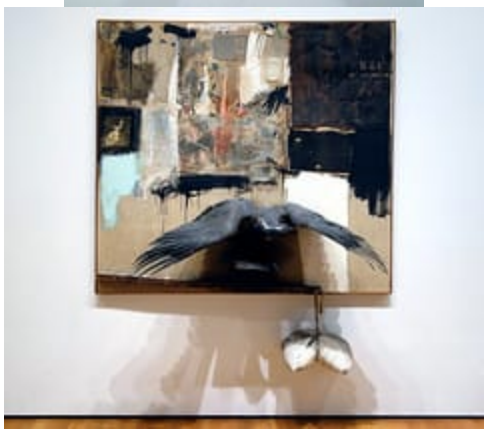
Smarthistory images for teaching and learning:

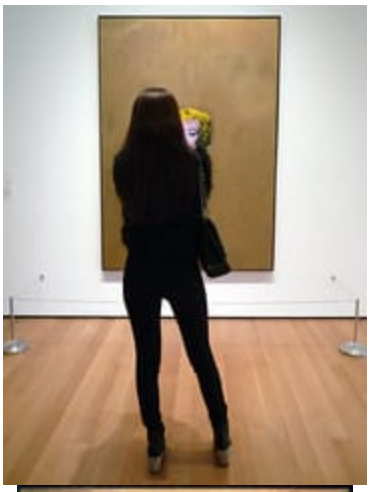

revealing my true truths
the truth is the world is full of lies















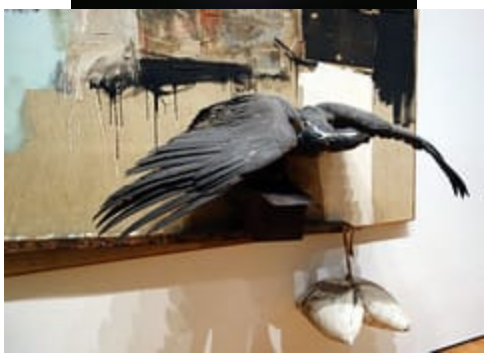




Figure 4.10.1.1.3: More Smarthistory images...

The Case for Copying

by THE ART ASSIGNMENT

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.1.1: Speaker: Sarah Urist Green

The YBAs: The London-based Young British Artists

by ROSE AIDIN



Figure 4.10.1.1.4: Rachel Whiteread, Holocaust Memorial, Judenplatz, Vienna, steel and concrete, 2000

"Young British Artists" (or YBAs as they swiftly became known) is now something of a misnomer. For this group of artists can no longer be described as young—they are mostly now in their fifties—and they are very international, and barely share a common style. Yet this small group of London-based artists, who came to prominence in the nineties, changed the international art world. The YBA phenomenon directly contributed to the climate of acceptance of modern and contemporary art in the U.K. which enabled the success of Tate Modern when it opened in 2000. The YBA remain a powerful force in the international art world today.

I first encountered the Young British Artists as a freelance journalist covering the arts for the mainstream press in the late nineties. By then art was no longer confined to single column reviews in remote arts pages, as it had been for decades. Instead, contemporary art was splashed over front and features pages. The Tate's annual **Turner Prize** for contemporary art had become headline news, with the award ceremony broadcast live on television, and for an intoxicating time, London was the center of the international creative world—all thanks largely to the YBAs.

So who and what are the YBAs?

The YBAs were a loose and disparate group, very much associated with London in the 1990s and the period of increased pride in popular British culture dubbed "Cool Britannia." YBA artists included Jake and Dinos Chapman, Tracey Emin, **Damien Hirst**, Gary Hume, Sarah Lucas, **Chris Ofili**, Marc Quinn, Sam Taylor-Johnson, Mark Wallinger, and Rachel Whiteread. Many of the artists had studied together at Goldsmiths College of Art in London, which had abolished the traditional separation between art forms (painting, sculpture, photography, printmaking) and focused on **conceptual art**, however there is no one single YBA style or approach. The work can be shocking, conceptual, or even traditional in its formal features: the principal link between the YBAs was social and attitudinal.

The majority of the artists came from non-establishment backgrounds, had grown up with Margaret Thatcher as prime minister and, perhaps as a result, had acquired an entrepreneurial, "can-do" approach to art and life. Then in their twenties and thirties, these artists were often glamorous and generally loved to party, and the nineties art world—and "Cool Britannia"—was happy to give them free rein.

Damien Hirst, *Freeze,* and Charles Saatchi

So how did the YBAs come into being? Damien Hirst was de facto ringleader of the YBAs. In 1988, while studying at Goldsmiths College, Hirst curated and promoted a "pop up" exhibition in an empty warehouse of work by him and his peers, entitled *Freeze*. Charles Saatchi, an advertising titan and art collector, bought work from Hirst's *Freeze* show and from the fledging artists' representatives. In 1992, the phrase "Young British Artists" was first used by *Art Forum* magazine to describe the group, and when Saatchi exhibited their work at his 30,000 square foot space in a converted paint factory in North London that same year, he entitled the show *Young British Artists*. And so a new movement was born. The work was new, fresh, and exciting: immediately accessible to the public, yet also with high art resonances and references.

The most expensive fish without chips

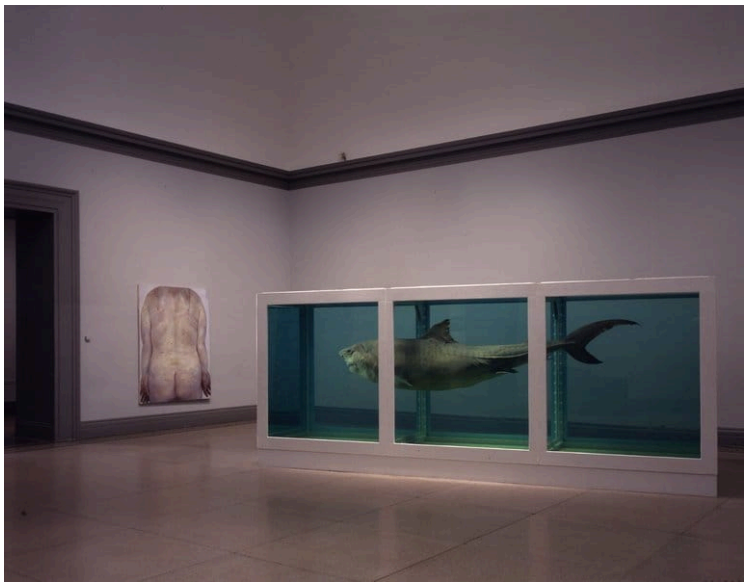


Figure 4.10.1.1.5: Damien Hirst, *The Physical Impossibility of Death in the Mind of Someone Living*, 1991, glass, painted steel, silicone, monofilament, shark and formaldehyde solution (private collection) at *Sensation: Young British Artists from the Saatchi Collection*, the Brooklyn Museum, October 2nd, 1999–January 9th, 2000



Figure 4.10.1.1.6: Damien Hirst, *The Physical Impossibility of Death in the Mind of Someone Living* at the Saatchi Gallery, 1991

Damien Hirst's *The Physical Impossibility of Death in the Mind of Someone Living* of 1991, a shark suspended and preserved in a tank of formaldehyde, looked sensational in the Saatchi Gallery's warehouse-style setting in the 1992 *Young British Artists* exhibition. *The Sun* tabloid newspaper ran a story about the piece entitled "£50,000 for fish without chips?" and "the shark" became an icon of nineties art and culture. As a result, Hirst was shortlisted for that year's Turner Prize, and in 1995 was awarded the prize, which was presented to him by Charles Saatchi. The YBA star was firmly in the ascendant.

Hirst's Turner Prize exhibition included ***Mother and Child Divided*** (1993), a cow and calf cut in half and preserved in a vitrine of formaldehyde. The work caused outrage among the animal-loving British public. Hirst commented, "I remember what Warhol said: you don't read your reviews, you weigh them." He might well have added another of Warhol's aphorisms: "Making money is art. And working is art. And good business is the best art."

YBAs at the heart of the establishment



Figure 4.10.1.1.7: ***Sensation: Young British Artists from the Saatchi Gallery*** at the Royal Academy, London

It was Charles Saatchi again, master of both presentation and media coverage, who positioned the YBAs firmly in the mainstream of popular culture with the 1997 exhibition *Sensation,* which filled the Royal Academy in London with 110 works by 42 artists from Saatchi's personal collection. It was the year that Princess Diana died and Tony Blair became Prime Minister. The country was ripe for a change. The YBA's column inches became column miles: the exhibition was visited by 285,000 people, almost half of them aged under thirty. A new audience and climate had been created for modern art. Contemporary art was now at the fore of public consciousness.

The path to Tate Modern

Until Tate Modern opened in 2000, London was the only major European city without a public art gallery for modern and contemporary art. Britain was resolutely philistine about the visual as epitomized by a controversy in 1976 triggered by the display of Carl Andre's ***Equivalent VIII*** (1966) as a recent acquisition at the Tate Gallery in Millbank (now Tate Britain). *The Evening Standard* referred to the sculpture as a "pile of bricks." Public outrage and protest focused on the expenditure of "tax payers' money" on this **Minimalist** work made of manufactured bricks. Evidently, much needed to change before a museum of modern art would be welcome in London. Private funds would be required in order for public collections to acquire modern and contemporary art, and ultimately to support a London museum dedicated to its display.

In 1984 the Tate's annual Turner Prize for new art was founded with the long-term goal of creating an open and understanding climate for modern and contemporary art. By the mid-nineties, thanks to the nominated Young British Artists' high profile and pulling power, the Turner Prize had become a major annual event, with record-breaking numbers of visitors to the Tate's exhibition of short-listed artists, and its gala dinners and prize-giving ceremonies avidly attended and covered, with the likes of Madonna presenting the prize. The purpose of the Turner Prize was accomplished, thanks in great part to the YBAs, and the public made ready for the opening of Tate Modern.

“Art is power”



Figure 4.10.1.1.8: Tate Modern from the Millennium Bridge, photo: **Michael Day** (CC BY-NC 2.0)

When Tate Modern (a museum dedicated to modern and contemporary art) opened in London in May 2000, its launch party for 4,000 people was the hottest ticket in town, and broadcast live on the BBC. Invitations were said to be changing hands for up to £1,000 and some left town rather than admit they were not on the list. “Everyone” was there, yet it was the Young British Artists who had done so much with their talent, energy and glamour to bring the art world’s focus to London for the first time in centuries (and to create a climate of acceptance for contemporary art), who provided the stardust. The YBAs ensured that Tate Modern’s opening party was the place to be and the museum was an instant success, with visitor numbers vastly higher than anticipated.

As the artistic duo **Gilbert & George** said as they opened the building earlier that day in front of the Queen of England, “Art is power.” The YBAs ruled the establishment: the artists were celebrities and everyone wanted to know more about them. And that, for a while, was how I made my living. Then it all suddenly came to an end, with 9/11 as a marker. Shortly after the twin tower attacks, Charles Saatchi closed the private gallery that had done so much to incubate the YBA movement, and there was a sense of moving on. I went into teaching and now teach the work of many of the artists I interviewed. The young adults I teach are consistently fascinated by the YBAs’ work, which speaks very strongly to them, and convinces me that even now—long after the parties and the scene have faded—the work itself will endure and stand the test of time.

Additional resources:

Tate on the Young British Artists

Damien Hirst: Art and Life (video)

The Saatchi Gallery on *Sensation* at the Royal Academy

Tate on The Turner Prize

Tate archive on Carl Andre’s *Equivalent VIII* and the “Bricks controversy”

Tate archive on the opening of Tate Modern

Rose Aidin, “The Comeback King,” *The Saturday Telegraph Magazine* (October 2, 2001)

Rose Aidin, “Brit Art’s square dealer moves on,” *The Guardian* (September 22, 2002)

“Tate Gallery Buys Pile of Bricks—Or Is It Art?,” The New York Times (February 20, 1976)

This page titled 4.10.1.1: A beginner's guide is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12.1: A beginner's guide by Smarthistory is licensed CC BY-NC-SA 4.0.

4.10.1.2: Appropriation and ideological critique

Appropriation and ideological critique

Contemporary artists use copying and other visual methods to deconstruct the myths that inform our daily lives.

1980 - present

Masami Teraoka, *American Kabuki*

by EMMA ACKER AT THE FINE ARTS MUSEUMS OF SAN FRANCISCO and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.1: Masami Teraoka, *American Kabuki (Oishiiwa)*, 1986, watercolor and sumi ink on paper mounted on a four-panel screen, 196.9 x 393.7 x 3 cm (de Young Museum, Fine Arts Museums of San Francisco), © Masami Teraoka Seeing America video Speakers: Emma Acker, Associate Curator of American Art, Fine Arts Museums of San Francisco and Steven Zucker

Additional resources:

This painted screen at the de Young Museum, Fine Arts Museums of San Francisco

Ai Weiwei

The Case for Ai Weiwei

by THE ART ASSIGNMENT

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.2: Speaker: Sarah Urist Green

Additional resources:

Ai WeiWei's website

Ai WeiWei on Art21

Ai Weiwei, *Dropping a Han Dynasty Urn*

by TIFFANY WAI-YING BERES

How can the destruction of an artifact also be an act of preservation? *Dropping a Han Dynasty Urn* (1995) by **Ai Weiwei** is a highly provocative work of art. This series of three black and white photographs portray the artist holding a 2,000-year-old Han dynasty urn that, frame by frame, he drops, it falls, and shatters. As much a work of photography as a work of **performance art**, in each still an unaffected Ai looks directly at the camera aware of his destructiveness. In fact, to capture the action on film (rather than digital photography, which lets you review the image immediately), the artist actually broke two ceramic vessels, just in case. This kind of blatant destruction of artifacts may seem highly irreverent, yet it also forces viewers to consider issues of transformation and destruction of the past.



Figure 4.10.1.2.1: Ai Weiwei, *Dropping a Han Dynasty Urn*, 1995 (printed 2017), Three gelatin silver prints, 148 x 121 cm each (photo: © Ai Weiwei)

Ai Weiwei

Born in Beijing, China, in 1957, Ai Weiwei is an activist, filmmaker, curator and one of the world's most famous artists. Ai began his artistic career in New York City, where he lived from 1981 to 1993. When he returned to China in the mid-90s, a time of rapid modernization for his home country, he was shocked to discover that certain objects of **cultural patrimony** were not highly valued. Ai explains that when he came across these Han dynasty ceramic objects, they were just a dime a dozen: "I still have a photo of when I was in Xi'an. There was a farmer sleeping on top of these two urns waiting for someone to pay him a few hundred yuan. For him that was a few months' salary, but even then nobody wanted them." [1] Ai realized that during that period, most of his fellow countrymen were not nearly as interested in their country's historic art objects as he was. For this reason, Ai began collecting antiquities, particularly ancient vessels and furniture, and eventually began converting these objects into contemporary artworks. Whether he reworks a discarded four-hundred-year-old wooden stool into a standing sculpture or creates an installation from hundreds of salvaged blue and white ceramic shards, Ai is interested in giving these historical found objects a second life as contemporary art.



Figure 4.10.1.2.2: Shang Dynasty jade from the tomb of Fu Hao, 1300-1046 B.C.E., Anyang, China (photo: © National Museum of China, Beijing)

Historical legacy

This kind of repurposing of the past also relates to Chinese aesthetics and culture. In China, there is a long and rarified tradition of collecting ancient material remains and transforming them into new art. For millennia before the advent of modern scientific archeology, rulers and elites collected ancient materials and acted to preserve them or emulate them in new works, whether it was preserving important documents by recording them on durable surfaces like stone steles or incorporating ancient designs into bronze or ceramics. For example, Fu Hao's tomb in Anyang, a Shang dynasty (1600-1046 B.C.E.) royal burial tomb excavated in the 1980s, enabled scholars to push the history of antique collecting in China back to the thirteenth century B.C.E. The 775 **jade** carvings found in this tomb of a powerful Shang queen included both a collection of prehistoric jades as well a collection made in her era but modeled on earlier **Neolithic** prototypes. [2] This is an important revelation because it suggests that more than three thousand years ago, antique collections were already providing references and inspirations for making new works of art. This tradition of collecting and revitalizing antiquity has encouraged generations of Chinese artists and craftsmen to look to the past in making contemporary art.



Figure 4.10.1.2.3: Tomb of Fu Hao, late 13th century B.C.E., Shang dynasty, Anyang, China (photo: **Gary Todd**, CC0 1.0)



Figure 4.10.1.2.4: Ai Weiwei, *Dropping a Han Dynasty Urn* (second image), 1995 (photo: © Ai Weiwei)

Act of revitalization?

Ai Weiwei has chosen an unusual way of continuing this legacy of transforming the material past while at the same time expressing dissent against a country that sometimes obliterates its own cultural heritage: through direct confrontation. On the one hand we can view his work as a destruction of another artist's work; on the other, Ai's act can also be thought of as a kind of collaboration with an ancient artist over thousands of years—a revitalization. Once an ancient receptacle, the urn in *Dropping a Han Dynasty Urn* takes on new meaning as contemporary art. In Ai's work, the object is less a vessel than an emblem of Chinese history. For this performance, it seems that the object selection is almost immaterial—it might as well have been any ancient object. However, in recognition of Ai's own celebrity, the artist has transformed this urn into something of great significance just by selecting it to become the subject of his art, by including its name in the title, and, of course, by destroying it. The sensationalism of breaking something so old and rare is what modern audiences find so compelling. Here the nostalgia for what once was serves as a mirror, reminding us that China's past remains important and relevant today.

Destruction as preservation

The event that Ai Weiwei created and captured in these photographs is one of violence. Many feel that it is unethical to destroy an artifact under any circumstances—that such an act indicates a lack of value and respect. Indeed, law professor Joseph Sax calls such destruction a kind of "unqualified ownership" because it enables "the indulgence of private vice to obliterate public benefits." [3] Certainly, the destruction of art for ideological or egoistic reasons reflects badly on a collector of ancient objects. Yet was *Dropping a Han Dynasty Urn* a true obliteration? The Han dynasty urn still exists for the public but it has been transformed into the form of captured film stills. The loss of one object gives the new artwork its potency.



Figure 4.10.1.2.5: Ai Weiwei "According to What" exhibition, Art Gallery of Ontario, (photo: **Joseph Morris**, CC BY-ND 2.0)

Ai himself says that he considers the act of dropping the urn one of creation rather than destruction: "People always ask me: how could you drop it? I say it's a kind of love. At least there is a kind of attention to that piece [because of the photograph]." [4] From the artist's point of view, his act was one of preservation through transformation. Indeed, this triptych (set of three photographs) and the shadow of the vessel captured within it now receive unprecedented attention. These photographs are displayed in museums and public institutions around the world. The work is widely available online, and even the focus of academic essays like this one. Given Ai's own celebrity status and the significance of this artwork, *Dropping a Han Dynasty Urn* is also now far more valuable than the original ceramic object. In 2016, this limited edition work **sold for nearly 1 million dollars** at Sotheby's Auctions in London. [5]

Dropping a Han Dynasty Urn is one of many works by Ai Weiwei that focuses on heritage loss and the importance of the past. According to the artist, "the power [of my artwork] comes not from the act but from the audience's attention, the challenge to their values. The act is easy—every day we can drop something, but it is when we are forced to come face to face with this action and make a judgment … that is the interesting part." [6] Ultimately the work demands a judgment: was the provocation and the global attention Ai garnered for the urn worth the destruction of the urn itself? This set of photographs encourages its viewers to question value of antiquity in our modern world and whether it is worth preserving.

Notes:

1. Tiffany Wai-Ying Beres, "A Battlefield of Judgments: Ai Weiwei as Collector," *Orientations* 46, no. 7 (2015), pp. 87–92.
2. Wu Hung, ed., *Reinventing the Past: Archaism and Antiquarianism in Chinese Art and Visual Culture* (Chicago: Art Media Resources, 2010), pp. 16–39.
3. Joseph L Sax, "Collectors: Private Vices, Public Benefits," in *Playing Darts with a Rembrandt: Public and Private Rights in Cultural Treasures* (Ann Arbor: University of Michigan Press, 2011), p. 63.
4. Beres, p. 92.
5. Sotheby's Auction: www.sothebys.com/en/auctions/ecatalogue/lot.42.html/2016/contemporary-art-evening-auction-l16020
6. Beres, p. 92.

Additional resources:

Ai Weiwei's website

The Art Assignment, "The Case for Ai Weiwei"

Ai Weiwei, *Kui Hua Zi (Sunflower Seeds)*

by MEGAN LORRAINE DEBIN

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.3: Video from **Tate**

Subversive seeds

Ai Weiwei often uses his art to critique political and economic injustice. This can be seen in work such as his 2010 installation, *Kui Hua Zi (Sunflower Seeds)* at Tate Modern, London.



Figure 4.10.1.2.6: Ai Weiwei, *Kui Hua Zi (Sunflower Seeds)*, 2010, one hundred million hand painted porcelain seeds (photo: **Drew Bates**, CC BY 2.0)

Kui Hua Zi (Sunflower Seeds) consists of more than 100 million tiny, handmade porcelain sunflower seeds, originally weighing in at 150 tons. They filled the enormous Turbine Hall at Tate Modern, an industrial building-turned-contemporary art space. Sunflower seeds evokes a warm personal memory for the artist, who recalls that while he was growing up, even the poorest in China would share sunflower seeds as a treat among friends. The use of sunflower seeds as the basis of his installation was also designed to subvert popular imagery rooted in the artist's childhood. Communist propaganda optimistically depicted leader Mao Zedong as the sun and the citizens of the People's Republic of China as sunflowers, turning toward their chairman. Ai Weiwei reasserts the sunflower seed as a symbol of camaraderie during difficult times.



Figure 4.10.1.2.7: Ai Weiwei, *Kui Hua Zi (Sunflower Seeds)*, 2010, one hundred million hand painted porcelain seeds (Tate Modern, London)

Though each of the 100 million carefully crafted individual seeds can draw the viewer's attention, once arranged together in a neat rectangle, or covering the floor of an entire room, the hyper-realistic seeds create a sense of vastness. In the Tate installation, there was a sense of precision in the arrangement of the seeds, creating visual order and uniformity. The individual seed is lost among the millions, a critique of the conformity and censorship inherent in modern China.



Figure 4.10.1.2.8: Ai Weiwei, *Kui Hua Zi (Sunflower Seeds)*, 2010, one hundred million hand painted porcelain seeds (Tate Modern, London) (photo: **Waldopepper**, CC BY-NC 2.0)

Made In China

More than 1,600 artisans worked to make the individual porcelain seeds by hand in Jingdzhen, the city known as the "Porcelain Capital," where artists have been producing pottery for nearly 2000 years. Porcelain, first produced during the Han dynasty in about 200 B.C.E. and later mastered during the Tang dynasty, is made by heating white clay (kaolin) to a temperature over 1200 degrees Celsius. The fusion of the particles within the clay during firing allowed artists to create vessels with thin but strong walls. Porcelain— a symbol of imperial culture in China—was also made for export via the Silk Road and became important to the creation of the idea of China in the West.



Figure 4.10.1.2.9: Some of the 1,600 highly skilled craftspeople from Jingdezhen hired to create and paint porcelain sunflower seeds

Ai Weiwei's use of porcelain comments on the long history of this prized material while also rejecting the common negative connotations of the modern term "Made in China." Utilizing skilled artisans known for their exquisite craftsmanship to make objects that can only be differentiated one from another upon close inspection, alludes to the important porcelain tradition in Jingdzhen, as well as to the uniformity and diffusion of modern (cheap and fast) labor that is responsible for China's hard-won place in the world economy. *Sunflower Seeds* asks us to examine how our consumption of foreign-made goods affects the lives of others across the globe.

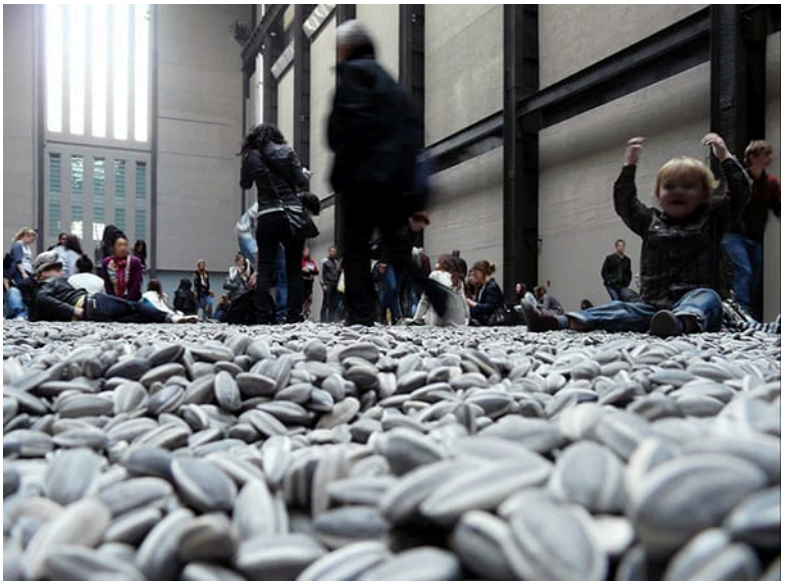


Figure 4.10.1.2.10: Ai Weiwei, Kui Hua Zi (Sunflower Seeds), 2010, one hundred million hand-painted porcelain seeds (Tate Modern, London) (photo: **Loz Flowers** CC BY-SA 2.0)

How we experience an artwork impacts our perception of the work. In the tradition of participatory contemporary art, *Sunflower Seeds* asks the public to physically interact with the art. Initially, Tate visitors were invited to walk over and lie on the seeds, though the museum, in consultation with the artist, suspended this opportunity about a week into the exhibition because of safety concerns.

Art and activism

Ai Weiwei was arrested at the Beijing Capital International Airport on April 3, 2011 during his Tate exhibition.[1] He was detained

for 81 days. The artist, along with many in the international community, asserted that his true offense was his political activism for democracy and human rights. Ai Weiwei had blogged for four years—investigating cover-ups and corruption in the government's handling of a devastating 2008 earthquake in Sichuan and the country's hosting of the Olympics. Ai Weiwei's blog was shut down in 2009. Since then, he has turned to Twitter and Instagram. During his detention, the international community, including major US art institutions, rallied for his release. Officials eventually released him, charging Ai Weiwei with tax evasion, but his passport was withheld, preventing him from leaving the country for four years. It was returned in 2015.

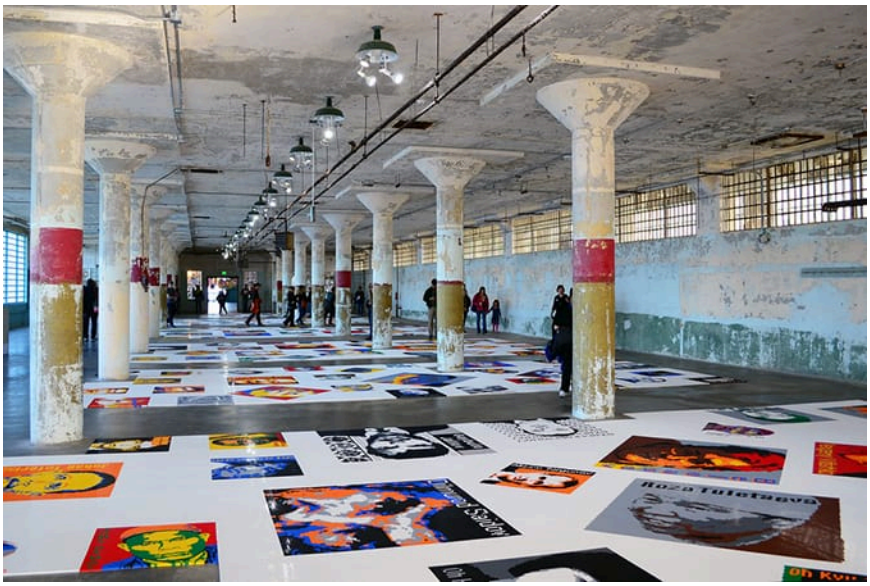


Figure 4.10.1.2.11: Ai Weiwei's continues to address issues of human rights in his work. The 2015 exhibit *@Large*, installed on Alcatraz, the former island prison in the San Francisco Bay, comments on surveillance, freedom, and political prisoners by mixing fine and traditional arts with pop culture materials including silk dragon kites and Lego portraits (above).

[1] Andrew Jacobs, "**China Takes Dissident Artist Into Custody,**" *The New York Times*, 4/3/11, A4

Additional resources:

You can follow Ai Weiwei on Instagram and Twitter @aiww

More information on Ai Weiwei's Sunflower Seeds

Sunflower Seeds exhibition at the Tate

Ai Weiwei from art21

Ai Weiwei, *Remembering* and the Politics of Dissent

by JP MCMAHON



Figure 4.10.1.2.12: Ai Weiwei, *Remembering*, 2009, backpacks on the facade of the Haus der Kunst* (Munich)

Dangerous Art

All art is political in the sense that all art takes place in the public arena and engages with an already existing ideology. Yet there are times when art becomes dangerously political for both the artist and the viewers who engage with that art. Think of Jacques-Louis David's involvement in the French Revolution—his individual investment in art following the bloodshed —and his imprisonment during the reign of terror. If it were not for certain sympathisers, David may well have ended up another victim of the guillotine. Goya is another example of an artist who fell foul of government power. There are instances in the 20th century when artists have faced down political power directly. Consider the photomontages of John Heartfield. Heartfield risked his life at times to produce covers for the magazine A/Z, which defied both Hitler and the Nazi Party.

Ai Weiwei

The Chinese artist, Ai Weiwei, offers is an important contemporary example. In 2011, Weiwei was arrested in China following a crack down by the government on so-called "political dissidents" (a specific category that the Chinese government uses to classify those who seek to subvert state power) for "alleged economic crimes" against the Chinese state. Weiwei has used his art to address both the corruption of the Chinese communist government and its outright neglect of human rights, particularly in the realm of the freedom of speech and thought. Weiwei has been successful in using the internet (which is severely restricted in China) as a medium for his art. His work is informed by two interconnected strands, his involvement with the Chinese avant-garde group "Stars" (which he helped found in 1978 during his time in the Beijing Film Academy) and the fact that he spent some of his formative years in New York, engaging there with the ideas of conceptual art, in particular the idea of the readymade. Many of the concepts and much of the material that Weiwei uses in his art practice are informed by post-conceptual thinking.



Figure 4.10.1.2.13: Ai Weiwei, *Sunflower Seeds*, 2010, one hundred million hand painted porcelain seeds (Tate Modern)

An International Audience



Figure 4.10.1.2.14: Handpainted seeds (detail), Ai Weiwei, *Sunflower Seeds*, 2010, one hundred million hand painted porcelain seeds (Tate Modern)

Weiwei has exhibited successfully in the West in many major shows, for example, the 48th Venice Biennale in Italy (1999) and Documenta 12 (2007). He also exhibited *Sunflower Seeds* (October, 2010) in the Turbine Hall in the Tate Modern. In this work, Weiwei filled the floor of the huge hall with one hundred million porcelain seeds, each individually hand-painted in the town of Jingdezhen by 1,600 Chinese artisans. Participants were encouraged to walk over the exhibited space (or even roll in the work) in order to experience the ideas of the effect of mass consumption on Chinese industry and 20th-century China's history of famine and collective work. However, on October 16, 2010, Tate Modern stopped people from walking on the exhibit due to health liability concerns over porcelain dust.

"...a natural disaster is a public matter."

Perhaps the work that contributed most to Weiwei's current imprisonment and the destruction of his studio was his investigation of corruption in the construction of the schools that collapsed during the 2008 earthquake in Sichuan, China. Like many others, Weiwei investigated how improper material and the contravention of civil engineering laws led to the wholesale destruction of schools (which led in turn to the deaths of thousands of children trapped within them), Weiwei has produced a list of all the victims

of the earthquake on his blog. This act is typical Weiwei's use of the internet to communicate information. This information is his "art", in much the way that American artists of the late 1960s used words and ideas as art.



Figure 4.10.1.2.15: Visitors entering the Ai Weiwei show *So Sorry* in the Haus der Kunst (detail), Ai Weiwei, *Remembering,* 2009, backpacks on the facade of the Haus der Kunst* (Munich)

So Sorry

In his retrospective show *So Sorry* (October 2009 to January 2010, Munich, Germany), Weiwei created the installation *Remembering* on the façade of the Haus der Kunst. It was constructed from nine thousand children's backpacks. They spelled out the sentence "She lived happily for seven years in this world" in Chinese characters (this was a quote from a mother whose child died in the earthquake). Regarding this work, Weiwei said,

> **The idea to use backpacks came from my visit to Sichuan after the earthquake in May 2008. During the earthquake many schools collapsed. Thousands of young students lost their lives, and you could see bags and study material everywhere. Then you realize individual life, media, and the lives of the students are serving very different purposes. The lives of the students disappeared within the state propaganda, and very soon everybody will forget everything.**

The title of the show referred to the apologies frequently expressed by governments and corporations when their negligence leads to tragedies, such as the collapse of schools during the earthquake. Two months before the opening of this exhibition Weiwei suffered a severe beating from Chinese police in Chengdu in August 2009, where he was trying to testify for Tan Zuoren, a fellow investigator of the shoddy construction and the student casualties. Weiwei underwent emergency brain surgery for internal bleeding as a result of the assault.

The Arrest



Figure 4.10.1.2.16: Blue, yellow, and red backpacks (detail), Ai Weiwei, *Remembering,* 2009, backpacks on the facade of the Haus der Kunst* (Munich)

On April 3rd 2011, Weiwei was arrested at Beijing's airport while while waiting for a flight to Hong Kong. While his detention is broadly believed to be linked to his criticism of the Chinese government, the Chinese Ministry of Foreign Affairs declared that he is "under investigation for alleged economic crimes." Weiwei's participation in the Jasmine Rallies, a series of peaceful protests which took place all over China in February, no doubt contributed to his arrest.

Additional Resources:

*Historical Note on the Haus der Kunst: The Haus der Kunst (designed by Paul Ludwig Troost, "first master builder to the führer") was sited by Adolf Hitler and sought to express Nazi ideology by using stone from German quarries and with its references to the work of Klenze and Schinkel. From its opening in 1937, the Haus der Kunst held exhibitions glorifying the "Blood and Soil" propaganda of the Nazi regime.

Ai Weiwei's TED Video

Tate Modern: Sunflower Seeds Video

Simon Elegant, "Ai Weiwei: Interview Transcript", *Time,* May 12, 2009

Roberta Smith, "12 Heads Do the Talking for a Silenced Artist," *The New York Times*, May 2011

Hans Haacke, *Seurat's "Les Poseuses" (small version), 1884-1975*

by SAL KHAN, DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.4: Hans Haacke, *Seurat's "Les Poseuses" (small version), 1884-1975*, 1975

Keith Haring, *Subway Drawings*

by DR. AMY RAFFEL

<a href="http://www.haring.com/!/art-work/33#.WK-I8xIrKqA" target="_blank"
Keith Haring,
Untitled
, 1984, chalk on paper, 88 1 /2 x 46 inches, photographer: Ivan Dalla Rana © Keith Haring Foundation" aria-describedby="caption-attachment-17760" height="200" src="
https://smarthistory.org/wp-content/.../subway_01.jpg
" width="157">

Figure 4.10.1.2.17: **Keith Haring, *Untitled*, 1984, chalk on paper, 88 1 /2 x 46 inches, photographer: Ivan Dalla Rana © Keith Haring Foundation**

An international art star, Keith Haring and his work have often been characterized as quintessentially of the eighties—an embodiment of the decade's street art, hip hop, and urban energy in New York. While his career involved a diverse range of art making—painting, drawing, performance, video, murals, and art merchandising—his subway drawings stand among his most well-known and celebrated work.

Haring drew over 5,000 chalk drawings over a five-year period, from 1980 to 1985, in New York City subway stations (visit the **Keith Haring Foundation website** to see his work year by year). Since the beginning of his career, Haring was determined to create art that could be for everyone, both through an accessible style and by locating his work in easily reachable, public locations. Creating art on the street meant that a bigger audience could see his work, outside of the more insular space of an art gallery.

Previous Street Art

Haring's subway drawings were not his first intervention into public, urban space. In New York City, early in 1980, he began to subtly alter street advertisements, such as one for Chardón Jeans, in which he blocked out letters, so the ad read "hard on Jeans." He also posted small collages on street lamps made up of images appropriated from print media and bits of painted paper. In the summer of 1980, Haring made more overtly political collages by cutting and rearranging headlines from the *New York Post*, to say things like "**REAGAN SLAIN BY HERO COP**" and "POPE KILLED FOR FREED HOSTAGE." He xeroxed these works by the hundreds and posted them all over the city in an effort to undermine the political conservatism of the period. These early experiments helped set the stage for Haring's subway drawings.

Subway Drawings



Figure 4.10.1.2.18: **Keith Haring working in the subway. Photographer, Chantal Regnault 1983**

In late 1980, Haring noticed that New York City subway's blank advertising spaces were covered with black matte paper when advertising subscriptions expired. He immediately purchased some chalk, and started drawing. Over the next five years, this became a daily, repetitive obsession: he would ride the subway, look for these empty spaces of black paper, and draw

quickly—without any preparation—and then leave on the next train. Through incessant repetition,Haring's subway drawings allowed him to perfect his highly recognizable reduced linear vocabulary, and to create an inventory of images. Simplification was practical: he needed to complete his drawings as fast as possible to avoid being arrested. He created characters, such as the barking dog and the radiating baby, which he drew on flat planes with no spatial depth, often with only a horizon line or a staircase to suggest space. Drawn close to the surface like cartoons, his images had immediacy and impact, and could carry multiple meanings through various combinations.

The **radiant baby**, for example, could represent birth or purity, but could also be read as a symbol of nuclear energy or bodily corruption depending on what he drew around it. Haring intentionally sanitized the subject matter of his subway drawings, leaving out any explicit sexual and political imagery. He wanted his audience, which included children, to enjoy his works. This made his drawings more ambiguous to an extent, but also more outwardly positive and universal in theme. This work, though, while seemingly straightforward, did incorporate some darker references, including generalized themes of oppression and the abuse of power (image below left), but these were often simplified to such an extent that they remained open to multiple interpretations.



Figure 4.10.1.2.19: **Keith Haring, *Untitled* (Subway Drawing), 1982, chalk on paper @ Keith Haring Foundation**

Graffiti scene

Haring's arrival in New York coincided with graffiti's peak in 1978-79, when artists covered subway cars, walls, and storefront gates throughout the city. Haring's well-defined style benefited from graffiti, which offered lessons in how to make graphic images visible in a cluttered urban environment and stressed the importance of motion, speed, and improvisation. Haring never considered himself to be a graffiti artist however. His subway drawings significantly differed from graffiti in location, timing, and medium. Haring often used white chalk and worked during the day so that he could interact with his audience. In contrast, graffiti artists usually used spray paint or markers, working at night. Graffiti encompassed a subculture at the social margins of New York City that excluded artists like Haring both racially and socio-economically.

Downtown Arts Scene

Other artists of Haring's generation worked within the public spaces of New York City to create and display art including **Jean-Michel Basquiat**, Kenny Scharf, Barbara Kruger, Jenny Holzer, and Richard Hambleton. In addition the artist collectives Colab, Fashion Moda, Gran Fury, and Group Material used the street as canvas. Like Haring, these artists experimented with alternate distribution systems to expand their reach outside of the commercial art world. Through posters, billboards, or small sculptures, or by engaging the community through artist-run events, pop-up exhibition spaces, or activist demonstrations, these downtown artists (like Haring) regularly put their art and ideas on the street to be enjoyed, and to inform and involve the public. Their intention was inclusion, rather than to alienate or confuse.

Burgeoning Celebrity

Haring drew several works of art every day, over many years in the New York City subway, a system used by millions of people. While he made his subway drawings for free, they proved to be a promotional tool that catapulted him into the public spotlight and helped launch his gallery career. In effect, he co-opted spots meant for advertising and campaigned for himself. His drawing was also performative—often attracting an audience captivated by his quick actions and improvisation. He promoted his subway

work in other media, including one instance in which a friend taped one of his arrests by the MTA police, which was then featured on CBS News on a nationwide special. He also designed buttons illustrating his characters and gave away thousands to subway riders. Attached to shirts and bags, these buttons enhanced the visibility of his work.

In 1982, Haring joined the Tony Shafrazi gallery, but continued to work in the subway. This was a strategy he used throughout his career: operating in both the contemporary art world and in public spaces. His gallery career helped to fund his time making street art for free, and they both reinforced his public presence. Eventually, Haring's popularity meant that his work in the subways became so valuable that people began to steal panels as soon as he drew them, ending this phase of his work. He continued to create art for all through posters and prints, merchandising, and large scale public murals in cities around the world. Before Haring became a worldwide celebrity, however, he was a local celebrity—generating his first fame through his subway drawings.

Additional resources:

The Keith Haring Foundation

Henry Geldzhaler, Introduction to *Art in Transit*

Michael Auping, *Urban Theater: New York Art in the 1980*s (New York: Rizzoli, 2014).

Peter Belsito, *Notes from the Pop Underground* (Berkeley, CA: Last Gasp of San Francisco, 1985).

Jeffrey Deitch and Carlo McCormick. *Keith Haring: 31 Subway Drawings* (New York: Art Issue Editions, 2012).

John Gruen, *Keith Haring: The Authorized Biography* (New York: Prentice Hall Press, 1991).

Keith Haring and Robert Harris Thompson, *Keith Haring Journals* (New York: Viking, 1996).

Tseng Kwong Chi and Henry Geldzahler, Keith Haring, *Art in Transit: Subway Drawings* (New York: Harmony Books, 1984).

Keith Haring: Journey of the Radiant Baby (Piermont, N.H.: Bunker Hill Pub., 2006).

Cedar Lewisohn, *Street Art: The Graffiti Revolution* (New York: Abrams, 2008).

Anselm Kiefer

Anselm Kiefer, *Shulamite*

by REBECCA TAYLOR



Figure 4.10.1.2.20: Anselm Kiefer, *Shulamite*, 1983, oil, emulsion, woodcut, shellac, acrylic, and straw on canvas, 213 x 145″ / 541 x 368.3 cm (Doris and Donald Fisher Collection) © Anselm Kiefer, courtesy of the artist

Black milk of morning we drink you at night
we drink you at noontime Death is a gang-boss aus Deutschland
we drink you at dusktime and dawntime
we drink and drink Death is a gang-boss aus Deutschland his eye is blue
he shoots you with leaden bullets his aim is true
there's a man in this house your golden hair Margareta
he sets his dogs on our trail he gives us a grave in the sky
he cultivates snakes and he dreams Death is a gang-boss aus Deutschland
your golden hair Margareta
your ashen hair Shulamite

—the final lines of Paul Celan's poem, "Death Fugue," published 1947 (trans. Jerome Rothenberg)

Breaking postwar silence

Born in Germany just months shy of the end of World War II, Anselm Kiefer came of age in the late 1960s when the silence surrounding the crimes of the Nazi regime was ruptured by a vocal younger generation horrified by their collective German "past," struggling to reconcile such shame and redefine what it meant to be German in a post-Nazi world.

For Kiefer, who had studied with the artists Peter Dreher in Karlsruhe and Joseph Beuys in Dusseldorf, painting became the arena to vocalize and elucidate his contempt for the Nazis and their reprehensible legacy, instilling every brush stroke with palpable rage, grief, and shame. In the 1970s, Kiefer developed a signature style that was influenced in part by the Neo-expressionist style of Georg Baselitz, but also by his teacher Beuys, particularly Beuys's tendency to use commonplace materials, such as fat and felt within his artistic practice. Kiefer augmented his thick layers of impasto with lead, glass, straw, wood, dried flowers, and more, yielding highly textured, viscous surfaces. As his list of materials grew, so too did the scale of his canvases, which though large and formidable, felt ephemeral and fragile as a result of the materials he utilized.

A thick impasto

All of the canonical elements of Kiefer's work are present in *Shulamite*—a thick impasto resulting from a hardened mixture of oil, acrylic, emulsion, and shellac; a brittle, textured surface infused with commonplace materials (in this case, straw and ash); mythological or biblical references (Shulamite refers to the heroine in the Song of Solomon); a literary reference (Celan's "Death Fugue"); and a historical subject or location (a Nazi Memorial Hall in Berlin).



Figure 4.10.1.2.21: Wilhelm Kreis, Funeral Hall for the Great German Soldier in the Hall of Soldiers, c. 1939 (Berlin)

Kiefer's hall is not a memorial to great men with patriotic flags waving boldly, but a gateway to damnation, a dark and foreboding road to hell, enclosed by low arches and paved with massive stones —the whole mise-en-scène (a stage set that tells a story) suggestive of an oven (immediately bringing to mind the hyperactivity of the crematoria at the Nazi death camps). Sulamith, is inscribed in the upper left hand corner, a graffiti-like testament in white paint upon the stone, to Celan's brave young Jewish girl consumed by this living hell, who came to her death in a chamber such as this because she had not the golden hair of Aryan Margarete but the dark "ashen hair" of Shulamite. Kiefer transformed architecture meant to honor Nazi heros into a memorial for their victims.

Emotional honesty

Comparisons to Jackson Pollock in terms of both scale and expressive, gestural style are understandable, but for me Kiefer's paint handling is even more reminiscent of Vincent van Gogh, in terms of raw beauty and emotional honesty. Just as van Gogh's paint can transport me into the Dutch or French countryside and fill my nose with the smell of fresh sunflowers or irises, so too can Kiefer transport me to another place in time and space—but rather than a hayfield in Holland it is the dark abyss of a concentration camp with the stomach-churning smell of burning flesh sullying the air.

Special thanks to Sandy Heller, The Heller Group, LLC

Additional Resources:

Paul Celan, Death Fugue, Copyright © 2005 by Paul Celan and Jerome Rothenberg. From Paul Celan: Selections. Reprinted with permission of the University of California Press. Poets.org

Nicolas Wroe, "Life in Art: Anselm Kiefer," essay in the Guardian Newspaper, March 18 2011

Anselm Kiefer, *Bohemia Lies by the Sea*

by COREY D'AUGUSTINE and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.5: The conservator's eye: Anselm Kiefer, *Bohemia Lies by the Sea*, 1996, oil, emulsion, shellac, charcoal, and powdered paint on burlap, 75 1/4 in. × 18 ft. 5 inches / 191.1 × 561.3 cm (The Metropolitan Museum of Art). Speakers: Corey D'Augustine and Steven Zucker.

Julie Mehretu, *Stadia II*

by DR. ALLISON YOUNG



Figure 4.10.1.2.22

Opening / Ceremonies

When looking at *Stadia II*, first try to isolate the black lines from the rest of the composition. Does this centrifugal structure remind you of a sports arena, an amphitheater or opera house? Perhaps a political chamber? It could denote all of these, broadly invoking our experiences as individuals and collective bodies in such spaces. The built environment, for Mehretu, provides a setting in which people can gather, protest, pray, and riot in mass numbers.

Now, try to imagine yourself in a large stadium, at an important athletic championship such as the FIFA World Cup or the Olympics. How do the crowds behave? What types of phrases or slogans are they shouting, and at what volume? Think about the matching clothing and the painted faces of spectators wearing team colors, or the flags and banners that they wave over their heads.

In her monumental paintings, murals, and works on paper, Julie Mehretu overlays architectural plans, diagrams, and maps of the urban environment with abstract forms and personal notations. The resulting compositions convey the energy and chaos of today's globalized world. *Stadia II* is part of a triptych of works created in 2004, and explores themes such as nationalism and revolution as they occur in the worlds of art, sports, and contemporary politics.

Gaze back into the painting and observe the various shards of color floating over the work's architectural skeleton. The scene, however abstract, could easily represent our visualization of the sports arena. Small circles, dots, and hash marks float through the open space at the center of the composition, resembling the eruption of confetti that announces a winning team's victory (or, alternately, that of a lucky political candidate on Election Day).



Figure 4.10.1.2.23: Julie Mehretu, detail, *Stadia II*, 2004, ink and acrylic on canvas, 108 x 144″ (Carnegie Museum of Art, Pittsburgh) (© Julie Mehretu)

Notice the larger circles, triangles, blocks and parallelograms that float across the upper register. Far from arbitrary, these basic pictorial elements could comprise the designs of nearly any country's national flag. The cluster of red and blue stripes, for instance, located along the top-right edge of the canvas, resemble the American flag, without necessarily resolving into a perfect match. We may also find corporate logos and religious symbols interspersed throughout; Mehretu is intentional in drawing analogies between these forms and the propagandistic ways in which they are often used.

Lastly, observe the painterly grey marks that seem to rise from the lower and central registers like plumes of smoke. Stadiums and capital buildings can represent triumph, pride and celebration, but they are also common targets for bombings and acts of terror, which are often motivated by a comparable degree of zealousness and ideological fervor.

Process

Mehretu's working process begins with the projection of maps and diagrams onto the work's blank surface. From these, the artist makes traces and hash marks that eventually grow into characters and communities. The first layer is coated with an acrylic-and-silica mixture that seals the drawing under a transparent ground. After drying, this ground is itself overlaid with more figures and photographs that are again assimilated into the composition.

The artist describes her final product as containing a "stratified, tectonic geology (...) with the characters themselves buried—as if they were fossils."[1] This distinct sense of temporality serves as a metaphor for history, memory, and the legacies of past cultural epochs that still influence contemporary life.

Utopian Abstraction

While nationalism, sports and global politics are key points of entry into the work, Mehretu also considers art historical precedents for these themes.



Figure 4.10.1.2.24: Julie Mehretu, detail, *Stadia II*, 2004, ink and acrylic on canvas, 108 x 144" (Carnegie Museum of Art, Pittsburgh) (© Julie Mehretu)

Take a look at the orange diamonds at the side edges, the black quadrilaterals interspersed above, or the dynamic red "X" found at the top edge. These lines and shapes are unmistakable references to the Russian constructivist and Bauhaus movements of the early twentieth century, and to artists such as Alexandr Rodchenko, Kasmir Malevich, El Lissitzky, and Wassily Kandinsky. These artists conceived of pure abstraction as a way to wipe clean the slate of history and to promote universalism and collectivity in art, politics and culture.

Mehretu has long explored the use of abstraction in service of revolution and utopian politics throughout the history of Modernist art, "I am (...) interested in what Kandinsky referred to in 'The Great Utopia' when he talked about the inevitable implosion and/or explosion of our constructed spaces out of the sheer necessity of agency. So, for me, the coliseum, the amphitheater, and the stadium are perfect metaphoric constructed spaces."[2] These can represent both the organized sterility of institutions and the "chaos, violence, and disorder" of revolution and mass gathering.

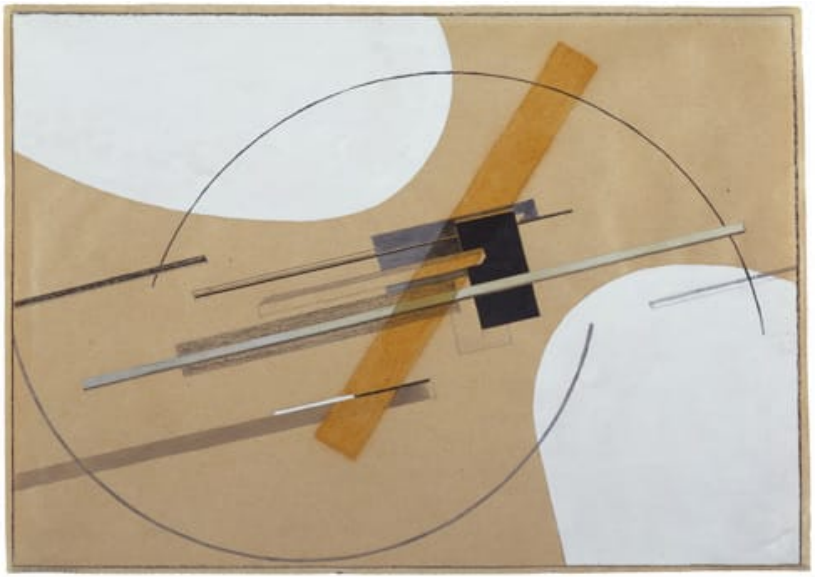


Figure 4.10.1.2.25: El Lissitzky, *Proun (Entwurf zu Proun, S.K.)*, 1922-23, watercolor, gouache, india ink,graphite, conté crayon, and varnish on buff paper, 8 7/16 × 11 3/4" / 21.4 × 29.7 cm (Solomon R. Guggenheim Museum, New York)

Global Networks

Because Mehretu builds her piece from multiple layers of figure and ground alike, the colors, shapes, and planar forms in *Stadia II* seem to be suspended between surfaces, and are often caught in a swirling motion around the axis of her compositions. The dynamism of the work makes reference to traffic patterns, wind and water currents, migrations, border crossings and travel.

Depicting patterns of movement, Mehretu emphasizes, on one hand, the militarization of bodies moving within and between national (or digital) spaces, and acknowledges the increasing speeds at which the world seems to be moving. Yet, while her compositions might be vertiginous and disorienting at times, we are given a chance to reflect on the potential and importance of such interconnectedness.

Born in Addis Ababa, Ethiopia, Mehretu has lived in Michigan, Rhode Island, and Dakar Senegal, and now resides in New York City.

1. Julie Mehretu, quoted in Thelma Golden, "Julie Mehretu's Eruptive Lines of Flight as Ethos of Revolution," in *Julie Mehretu: The Drawings*, ed. Catherine de Zegher and Thelma Golden, New York, NY: Rizzoli, 2007.

2. Julie Mehretu, "Looking Back: Email Interview between Julie Mehretu and Olukemi Ilesanmi, April 2003" in *Drawing into Painting*, Minneapolis, MN: Walker Art Center, 2003: 13-14.

Doris Salcedo, *Shibboleth*

by DR. DORIS MARIA-REINA BRAVO

The Turbine Hall

Since 2000, the Tate Modern has commissioned installations (the Unilever series) for the museum's enormous Turbine Hall, including Olafur Eliasson's *The Weather Project* (2003) and Ai Weiwei's *Sunflower Seeds* (2010). In the eighth iteration, the Colombian artist Doris Salcedo produced *Shibboleth*, a deep meandering crack in the floor. Despite the unassuming nature of this work, it defies neat description and exists in a limbo between sculpture and installation; and the provocative title complicates the work instead of decoding it.

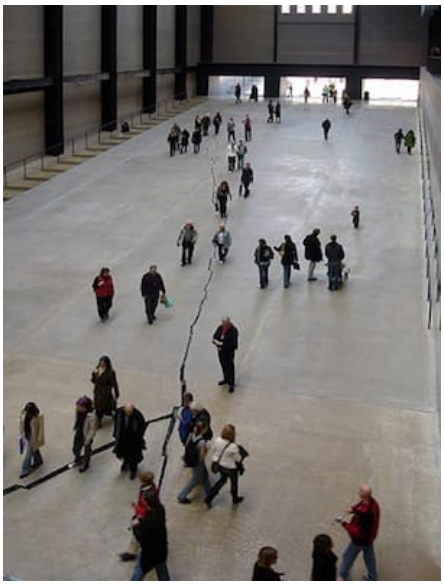


Figure 4.10.1.2.26: Doris Salcedo, *Shibboleth,* 2007-08, installation, Tate Modern © Doris Salcedo (photo: Nuno Nogueira/Nmnogueira, CC BY-SA 2.5-altered)

Salcedo has offered few explanations beyond stating how the fissure represents the immigrant experience in Europe. Though this theme is apparent in the work, it is by no means the only issue raised. As photographs of the installation demonstrate, visitors contorted their bodies in infinite ways as they tried to see below the crack. In *Shibboleth*, Salcedo elaborates a complex socio-political topic in a work with a tremendous formal presence.

Coded identification

Salcedo's installation requires attentive viewing. The rupture measures 548 feet in length but its width and depth vary (changing from a slight opening to one several inches wide and up to two feet in depth). The viewer's perception into the crevice alters, as he or she walks and shifts to better glimpse inside the cracks and appreciate the interior space, notably the wire mesh embedded along the sides.



Figure 4.10.1.2.27: Doris Salcedo, *Shibboleth,* 2007-08, installation, Tate Modern (photo: Chris Geatch, CC BY-NC 2.0-altered)

Change in perspective is one of Salcedo's goals. She quotes the Frankfurt School theorist Theodor Adorno: "We should all see the world from the perspective of the victim, like Jewish people that were killed with their head down in the Middle Ages. So he wonders, what is the perspective of a person that is agonizing in this position?"

To go from viewing this installation as a fissure in concrete to an artwork about the disenfranchised may seem like a big step. It is helpful to think of *Shibboleth* as a work of conceptual art since the ideas that frame the physical crack in the floor are of equal, if not greater importance than the material work itself. Salcedo's installation at the Tate Modern would be completely different if it were simply untitled; indeed, the analysis of the work would then settle exclusively on its formal qualities. But Salcedo has bestowed a curious and specific name: "Shibboleth," a codeword that distinguishes people who belong from those who do not.



Figure 4.10.1.2.28: Doris Salcedo, *Shibboleth,* 2007-08, Tate Modern (photo: Dallas Ewing, CC BY-NC-SA 2.0-altered)

Every community, culture, and nation has its shibboleth. Among the U.S. military, "lollapalooza" was used during World War II since its tricky pronunciation could identify native, English-speaking Americans. But the sinister history of the word "shibboleth" illustrates how friends and enemies are separated by fine, linguistic lines. Any stranger in a foreign land appreciates the vulnerability this entails, especially the fear of being outed as a foreigner and exposed in a hostile environment.

Irrevocably "other"

Salcedo's experience as a Colombian artist working abroad has made her especially sympathetic to the plight of marginalized people. Between 2002 and 2003, Salcedo completed two installations that make this clear. In the first work, the artist staged a performance where she lowered empty wooden chairs over the side of the Palace of Justice in Bogotá. The performance lasted 53 hours and commemorated the 1985 siege in that building where three hundred people were held hostage; the siege ended in a bloody confrontation between rebels and the military.

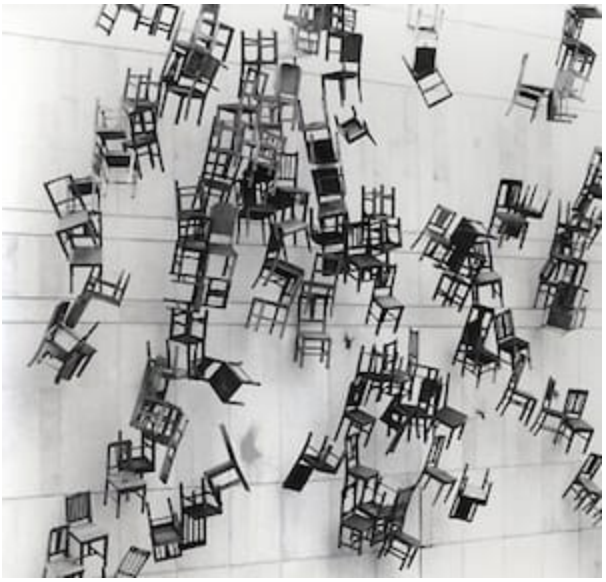


Figure 4.10.1.2.29: Doris Salcedo, *Noviembre 6 y 7,* 2002, Supreme Court, Bogotá © Doris Salcedo

The second installation also honored the victims of senseless violence. Salcedo piled more than 1,500 chairs into a space between two buildings in Istanbul. The breathtaking sight of this nearly three-story sculpture highlighted how warfare disrupts everyday life and creates refugees out of ordinary citizens as it recalls the countless shoes discovered at concentration camps at the end of World War II.

For Salcedo, the ravine in the Tate Modern's floor represents the immigrant experience in Europe, notably the racial segregation that marks people from the third-world as irrevocably "other," a permanent state apart. Yet, the artist offers some hope. After seven months, the show ended and the Tate Modern filled the crack, leaving a scarred floor. This is a remarkable symbol of the possibility of healing through figurative and literal closure; however, the mark is also an obstacle to any attempts to erase the past.



Figure 4.10.1.2.30: Shibboleth filled, Tate Modern (photo: Damien Everett, CC BY 2.0-altered)

Sources

From an institutional perspective, this scar is remarkable for other reasons: it is usually unimaginable for museum officials to permit an artist to permanently alter the exhibition space.



Figure 4.10.1.2.31: Lucio Fontana, *Spatial Concept: Expectations*, 1960, slashed canvas and gauze, 100.3 x 80.3 cm (MoMA) © 2013 Fondation Lucio Fontana

Salcedo's act remains transgressive: the act of deliberately breaking one's media (in this case a concrete floor) is an act of rebellion. In this way, *Shibboleth* joins a tradition of artists experimenting with surface. In the late 1940s Lucio Fontana developed "Spazialismo," an approach to art-making that converted the two-dimensional canvas into a three-dimensional space. Fontana slashed his monochrome canvases, and revealed a new space underneath the gashes. The artist's bold move to disrupt the canvas's nearly sacred surface was revolutionary and influenced later artists.



Figure 4.10.1.2.32: Gordon Matta-Clark, *Splitting,* 1974

Throughout the 1970s Gordon Matta-Clark sawed into the walls, floors, and ceilings of buildings, often leaving cracks like the line of light in *Splitting* (1974). For centuries, a canvas was a flat plane, the support for an image rather than an object in its own right. A building by definition sought to be structurally sound; any structural damage makes it unstable and dangerous. To highlight their subversion, these artists flaunt the negative space made by their incisions: Matta-Clark's cuts in *Splitting* are illuminated by blinding light, while Fontana's slashes and Shibboleth each reveal a startlingly dark void previously unseen.

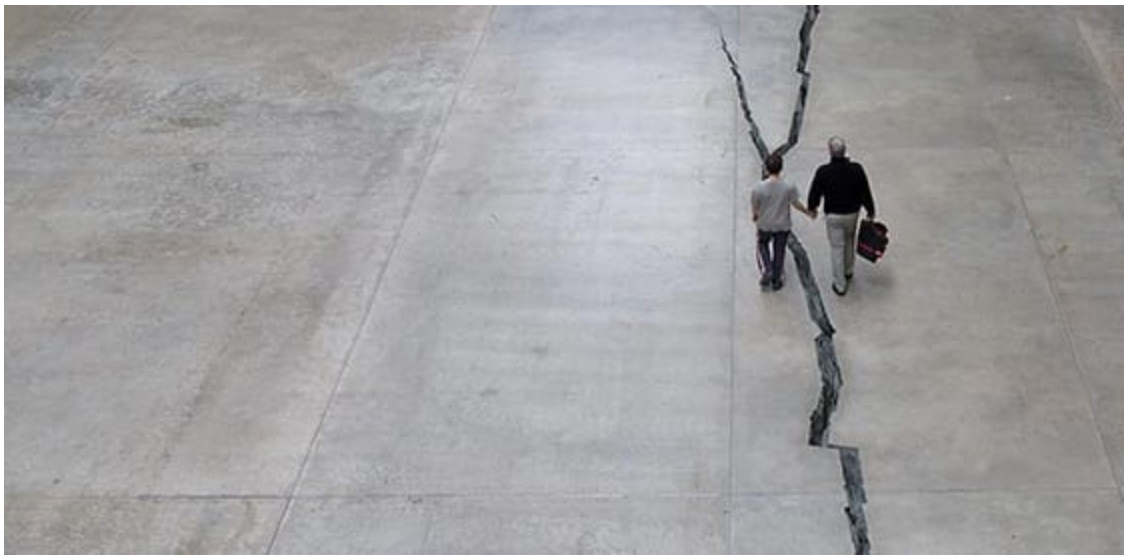


Figure 4.10.1.2.33: Doris Salcedo, *Shibboleth,* 2007-08, Tate Modern (photo: Wonderferret, CC BY 2.0-altered)

Meanings

Matta-Clark, Fontana, and Salcedo create art that is difficult to classify. Is this painting? sculpture? architecture? installation? intervention? Salcedo's strength as an artist is her ability to balance the formal impact of *Shibboleth* with its message, while preventing one from overshadowing the other. Salcedo's reticence to discuss her process and meaning at length is our opportunity to develop infinite interpretations.

Cindy Sherman

Cindy Sherman, *Untitled Film Still #21*

by DR. SHANA GALLAGHER-LINDSAY and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.6: Cindy Sherman, *Untitled Film Still #21*, 1978, gelatin silver print, 7.5 x 9.5 inches or 19.1 x 24.1 cm (MoMA)

Cindy Sherman, *Untitled #228*

by MARY BETH LOONEY



Figure 4.10.1.2.34: Cindy Sherman, *Untitled #228*, from the History portraits series, 1990, chromogenic color print, 6′ 10 1/16″ x 48″ (208.4 x 122 cm) (The Museum of Modern Art)

This photograph is from Sherman's History Portraits series—where she draws inspiration from the history of art.

Description

The artist depicts herself in costume, standing in front of printed textiles parted slightly to reveal darkness beyond. She wears a red satin, full length dress, which is cinched by a dark blue sash across the shoulders, just under the bust line, and also well below a seemingly swollen abdomen. A gold sash wraps around her head and neck and drapes over each shoulder. In one hand she holds the head or mask of an old person, with a wrinkled, receding hairline, a large nose and bloodshot eyes. In the other hand, which is bloody, she holds a knife.

The figure tilts her head slightly to one side as she gazes at the viewer with a blank expression. The face is artificially made up with thin, arching brows and lips stained red in the center to suggest that they are puckered, as if about to kiss. Bare feet point outward, and appear enlarged in proportion to the rest of the figure.

Judith

In *Untitled #228,* Sherman cites the story of Judith and Holofernes—a popular subject during the Renaissance and Baroque periods (especially the 16th-17th century).

The Book of Judith (included In some versions of the Bible), recounts the story of Judith, who, to save her people (the Israelites in the town of Bethulia) from the Assyrian King Nebuchadnezzar, entered the tent of the invading general (named Holofernes), who found her attractive. She seduced him into drinking too much, and then beheaded him. In triumph, she brought the severed head back to the Jewish people.



Figure 4.10.1.2.35: Elisabetta Sirani, *Judith with the Head of Holofernes*, 1638-55, oil on canvas, 129.5 x 91.7 cm (The Walters Art Museum)

For Renaissance and Baroque audiences, the story of Judith and Holofernes symbolized triumph over tyranny (much like the story of David and Goliath). Painters such as Caravaggio, Artemisia Gentileschi and Elisabetta Sirani provided patrons with select stages in the story—at times depicting Judith in the act of severing Holofernes' head, sneaking away from the darkened enemy encampment while carrying the severed head, or marching forward in triumph, holding aloft the head by the hair, as the citizens of Bethulia look on.

Sherman's photographic interpretation of this subject conflates two of those picture types. While Judith (enacted by Sherman herself) stands, holding the general's head in a fully lit space, the array of printed textiles draped behind her evokes a middle Eastern motif—referencing Holofernes' tent. The darkened parting between two cloths implies that Judith has just left.

The subject is pushed forward in the picture plane, backgrounded by the row of hanging textiles (this treatment of space is typical of Baroque art of the 17th century). She occupies a shallow stage. Her feet splay outwards, perhaps as a reminder of proto-Renaissance artists' struggles with foreshortening of forms intended to project towards the viewer (see frescos by Giotto, for example).



Figure 4.10.1.2.36: Raphael, *The Small Cowper Madonna*, c. 1505, oil on panel, 59.5 x 44 cm (National Gallery of Art)

In a nod to Raphael's many High Renaissance Madonna images (right), the rich primary colors of red, blue and yellow figure prominently, and the two heads, arms and hand form a small, triangular composition within an otherwise vertically

oriented format. The suggestion of a swollen abdomen may refer to Renaissance era fashion, in which women's empire-waisted garments deemphasized natural waists and hips. It may also be a way of conflating the figure of the Virgin Mary of the New Testament—typically portrayed in reds and blues in the Renaissance period—with the Old Testament heroine Judith.

Props

Sherman's work in this series is characterized by the blatant use of props and prosthetic devices. The full mask or head appears to be a store-bought "fright mask" typically used for Halloween. It is a jarringly out-of-place element in an image that historically featured a somewhat younger adult man. Both the rounded belly and the overly large feet are also obvious prosthetic enhancements. Sherman's facial makeup exaggerates the overall effect of artificiality.



Figure 4.10.1.2.37: Artemisia Gentileschi, *Judith and Holofernes*, 1620-21, oil on canvas, 162.5 x 199 cm (Uffizi Gallery, Florence)

Sherman asks the viewer to consider layers of un-realities, beginning with the props and prosthetics she has employed in the image. Sherman herself is a prop: a real stand-in for the idealized Judiths of art history. As the props undermine the seriousness with which we might consider the scene, the image also questions the complex implications of a violent murder. As in many of the historical paintings, Judith's hands are bloody, but her garments and face remain clean. Her face—like the bland faces of so many other images of Judith is matter-of-fact, revealing no trace of the grim act that was purportedly committed (the exception to this is Artemisia Gentileschi's *Judith*). The direct studio lighting of Sherman's image dampens the drama and further heightens the artificiality of the scene.

The artist invites the viewer to consider how all of these matters converge in a photograph. In the early 19th century, painters struggled to supplant or utilize the technical advantages of photography. Both painting and photography can and do afford the opportunity for invention. By adopting contrivances from prior centuries and adding multiple contemporary contrivances to her interpretation, Sherman's *Untitled #228* both blatantly exposes and provides an art historical context for her contemplations on the nature of narrative and pictorial invention.

Additional resources:

Smarthistory essay on Gentileschi's *Judith Slaying Holofernes*

Cindy Sherman from Art21

Interview with Sherman from the Walker Art Center

Cindy Sherman at MoMA

Kara Walker, *Darkytown Rebellion*

by DR. DORIS MARIA-REINA BRAVO

Brilliant patterns

The Art of Kara Walker, a "PBS Culture Shock" web activity, tests the participant's tolerance for imagery that occupies the nebulous space between racism and race affirmation. Though the activity gives the participant only two options at the end (whether or not to feature one of Walker's silhouettes on the "Culture Shock" homepage), the activity explores the multiple and complex reactions Walker's work elicits. Yet to focus solely on the controversy Walker's art generates is a disservice to her artistic training and the strength of her art, especially in a stunning and absorbing installation like *Darkytown Rebellion*. Here, a brilliant pattern of colors washes over a wall full of silhouettes enacting a dramatic rebellion, giving the viewer the unforgettable experience of stepping into a work of art. Walker's talent is not about creating controversy for its own sake, but building a world that unleashes horrors even as it seduces viewers.



Figure 4.10.1.2.38: Kara Walker, *Darkytown Rebellion*, 2001, cut paper and projection on wall, 4.3 x 11.3m, (Musée d'Art Moderne Grand-Duc Jean, Luxembourg) © Kara Walker

In contrast to larger-scale works like the 85 foot, *Slavery! Slavery!* (1997), *Darkytown Rebellion* occupies a 37 foot wide corner of a gallery. This ensemble, made up of over a dozen characters, plays out a nightmarish scene on a single plane: one figure stands upright over his severed limb, despite his bleeding leg stump, with bones protruding from his hips; another figure, also exhibiting a severed limb, rolls on his back; a woman with a bonnet and voluminous hoop skirt may be attacking a smaller figure on its back, perhaps a crying baby, with a long, plunger-like instrument.

Silhouettes and concealment

What is most remarkable about these scenes is how much each silhouette conceals. Without interior detail, the viewer can lose the information needed to determine gender, gauge whether a left or right leg was severed, or discern what exactly is in the black puddle beneath the woman's murderous tool. The color projections, whose abstract shapes recall the 1960s liquid light shows projected with psychedelic music, heighten the surreality of the scene.

Walker is a well-rounded multimedia artist, having begun her career in painting and expanded into film as well as works on paper. The layering she achieves with the color projections and silhouettes in *Darkytown Rebellion* anticipates her later work with shadow puppet films.

In addition to creating a striking viewer experience, *Darkytown Rebellion* reflects on the historical representation of African Americans in American visual culture. From the infamous Brookes slave ship print (1789), to *Birth of a Nation* (1915) to the Aunt Jemima logo (c.1890-today), powerful visuals shape African-American stereotypes and inform how popular culture perceives this

community. Walker is one of several African-American women who use art to engage with and challenge visualizations of race within popular culture; others include Renee Cox, Adrian Piper, and Faith Ringgold.

Perverse ingenuity

Walker anchors much of her work in documents reflecting life before and after the Civil War. *The Daily Constitution 1878* (2011) emerged after Walker read an 1878 article from the eponymous Atlanta newspaper about a mob lynching a black woman and the brutal way the tree flung the woman's body into the air. Walker converted the article into a drawing because, as she stated, "it's this completely absurd, extreme, violent situation that required so much perverse ingenuity."[1]

Darkytown Rebellion is also born from a desire to translate the past into visual form. Walker discovered a landscape painting in *American Primitive Painting*, a book featuring artwork by unschooled artists. One anonymous landscape, mysteriously titled *Darkytown*, intrigued Walker and inspired her to remove the over-sized African-American caricatures. She placed them, along with more figures (a jockey, a rebel, and others), within a scene of rebellion, hence the re-worked title of her 2001 installation. Through *Darkytown Rebellion*, Walker is not attempting to correct a late-nineteenth century depiction of African-Americans but rather to broach a discussion: are these merely images from the past or do these caricatures still resonate in the twenty-first century?

Incomplete histories

Walker's dedication to recovering lost histories through art is a way of battling the historical erasure that plagues African Americans, like the woman lynched by the mob in Atlanta. Though this lynching was published, how many more have been forgotten? Who was this woman, what did she look like, why was she murdered? The impossibility of answering these questions finds a visual equivalent in the silhouetted voids in Walker's artistic practice.

Silhouettes began as a courtly art form in sixteenth-century Europe and became a suitable hobby for ladies and an economical alternative to painted miniatures, before devolving into a craft in the twentieth century. Traditionally silhouettes were made of the sitter's bust profile, cut into paper, affixed to a non-black background, and framed. Except for the outline of a forehead, nose, lips, and chin all the subject's facial details are lost in a silhouette, thus reducing the sitter to a few personal characteristics. In Walker's hands the minimalist silhouette becomes a tool for exploring racial identification. All things being equal, what distinguishes the white master from his slave in *Darkytown Rebellion*? Walker forces the viewer to confront the visual cues that make up stereotypes: these cues distill human forms into basic and arbitrary shapes that compose the basis of racial discrimination.

Though *Darkytown Rebellion* is full of shapes lacking detail, Walker reserves sharp outlines for faces and limbs. Walker's silhouettes are (mostly) full-bodied figures, captured in various poses from the traditional profile, to a three-quarter turn, to full frontal. This plurality of poses, often in a single body, is another example of obscured detail within the silhouette tradition: here not only is the face absent, but the body's action is also ambiguous. As mentioned earlier, it is impossible to make out which leg is severed on the standing figure near the corner, yet Walker manages to give the gory details of that man's tragedy. If traditional silhouettes illustrated a contained shape, Walker's figures overflow these boundaries, whether through graphic violence or metaphorically, in terms of subject matter.

Getting at the truth

In contrast to *The Daily Constitution 1878*, which was born from a news article, Walker herself developed the narrative for the orphaned figures that compose *Darkytown Rebellion*. Though the title suggests a historical event, both the original nineteenth-century painting and Walker's response are visual inventions rather than documents in a traditional sense. Walker enjoys this ambiguity between history and fiction: "I'm not making work about reality; I'm making work about images. I'm making work about fictions that have been handed down to me, and I'm interested in those fictions because I'm an artist, and any sort of attempt at getting at the truth of a thing, you kind of have to wade through these levels of fictions, and that's where the work is coming from."[2]

Darkytown Rebellion does not attempt to stitch together facts, but rather to create something more potent, to imagine the unimaginable brutalities of an era in a single glance.

1. Laura Barnett, "**Kara Walker's Art: Shadows of Slavery**," *The Guardian* (October 10, 2013)

2. "**Kara Walker Rattles Art World Again**," NPR (March 07, 2008)

Art, Race, and the Internet: Mendi + Keith Obadike's *Black.Net.Art Actions*

by DR. MEGAN DRISCOLL



Figure 4.10.1.2.39: Logo for *New Black Portraitures*, Rhizome website

Looking at the landscape of the internet today, it's hard to imagine conversations about race not being a central part of net culture. Consider "Black Twitter," a concept that goes beyond user demographics to describe the significant role the internet plays in promoting dialogues about race in all parts of our lives.[1] Or spend some time exploring the many social media accounts dedicated to the cultural heritage of specific racial and ethnic groups, from **influential Asian Pacific Islander women** to **artists of Africa and the African diaspora**. You'll also find these conversations happening in art-specific venues like Rhizome, which in 2017 hosted *First Look: New Black Portraitures*, a primarily online exhibition that links the history of portraiture to questions surrounding blackness, representation, and image making in our networked present.[2]

However, net culture looked very different back in the 1990s when internet use first started to become popular. It's not that no one was talking about race online—there were actually quite a few email lists and other proto-social networks focused on race and ethnicity—but these discussions tended to be ignored in the mainstream, or simply treated as peripheral.[3] Cyber enthusiasts had long promoted the misguided perception that virtual communication could allow users to interact without the prejudices associated with physical difference such as race, gender, or disability.[4] When advertisers seized on this premise as a strategy for making the strange new world of the internet seem more approachable, they popularized the idea that, to quote a **1997 internet ad for telecom MCI**, on the internet "there is no race." In fact, the notion that race was simply irrelevant to life online became so prevalent that sociologist Alondra Nelson once declared it the "founding fiction of the digital age."[5]

During this same period internet art, or net art, was becoming a more widely recognized category of artistic practice. Like in the rest of net culture, race was not a common topic in early net art—but that doesn't mean there weren't artists addressing it.[6] Here, we'll focus on Mendi + Keith Obadike's *Black.Net.Art Actions* (2001–2003), a suite of retroactively grouped artworks that argue that racial discourses aren't just relevant online, they are essential to how we interact with computer networks.

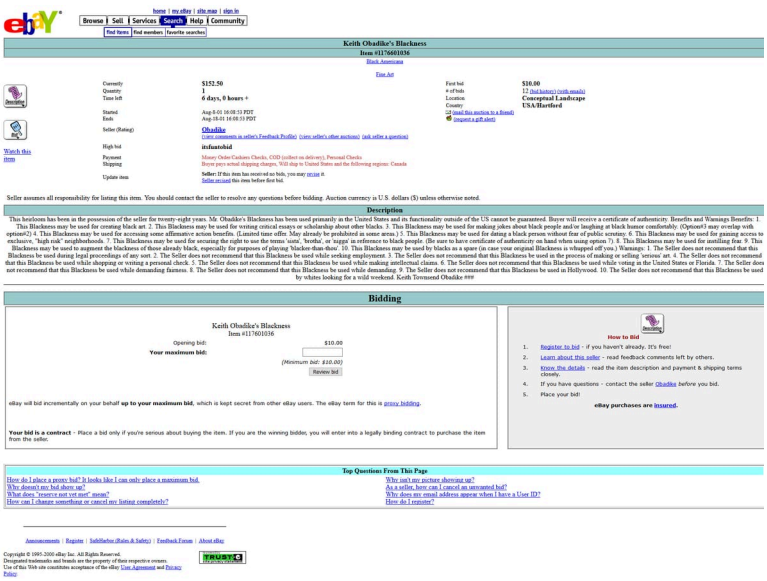


Figure 4.10.1.2.40: Mendi + Keith Obadike, *Blackness for Sale*, 2001, online performance from *Black.Net.Art.Actions* (**Rhizome**)

Blackness for Sale

In 2001 the Obadikes released ***Blackness for Sale***, an online performance in which they attempted to auction Keith's Blackness on eBay. It received twelve bids over four days before eBay shut the project down, calling it "inappropriate." The item description includes benefits like "This Blackness may be used for making jokes about black people and/or laughing at black humor comfortably" as well as warnings like "The Seller does not recommend that this Blackness be used while voting in the United States or Florida."[7] The work thus reminds us that "Blackness" never just refers to a value-neutral color or the hue of a person's skin. Rather, it is bound to a complex history, simultaneously recalling the experiences of one individual and the condition of race relations across the United States.

By highlighting the field of meaning that surrounds language, *Blackness for Sale* also directs attention to how we talk about the platform that hosted it: eBay. As Keith Obadike has pointed out, many of the words we use to describe our activities online also describe the activities of colonization and slavery.[8] We cross the new electronic frontier, taking browsers like Navigator, Explorer, and Safari to plunder the Amazon and trade in the eBay. There we find representations of the Black body returned to the auction block, not just in this artwork but in the mammy figurines and other racist memorabilia sold alongside it as "Fine Arts and Black Americana."[9] *Blackness for Sale* argues that this digital frontierism is ideologically linked to the "real world" histories of colonialism and the slave trade, histories that cannot be divorced from how we interact online. In other words, even though our internet exchanges may appear to be virtual and therefore disembodied, what MCI called "communicating mind to mind," we still come to those exchanges with the experiences of our bodies and all of the histories that shape them.



Figure 4.10.1.2.41: Mendi + Keith Obadike, *The Interaction of Coloreds*, 2002, website originally produced for the Whitney Museum's Artport gate page program (**Rhizome**)

Website for the Whitney Museum

The Obadikes continued their investigation into how color and race signify online with ***The Interaction of Coloreds*** (2002), a website they originally produced for the Whitney Museum's now-defunct **Artport gate page program**. Both the work's title and the grid format of its opening page reference Josef Albers's *Interaction of Color* (1963), a modernist text that theorizes the relationship between color and personal preference. Moving your mouse over that grid reveals famous lyrics from a Big Bill Broonzy song that remind us how such color preferences emerge in our ideas about race: "if you're white you're right / if you're black get back / if you're brown stick around / if you're yellow you're mellow."



Figure 4.10.1.2.42: Mendi + Keith Obadike, *The Interaction of Coloreds*, Color Check, 2002, website originally produced for the Whitney Museum's Artport gate page program (**Rhizome**)

When you enter the main site you find the IOC Color Check System®, which the artists describe as a "brown paper bag test for the internet."[10] Using photographs of applicants' skin alongside answers to a "Hyper-Race Analysis" questionnaire, the System promises to return a precise hexadecimal color for your skin. This is a six digit HTML (hypertext markup language) code that tells your web browser what color to show you—or, in this case, assigns a color value to a human being. Now, the System exults, "Websafe colors aren't just for webmasters," a reference to the fact that when IOC was produced there were only a limited number of "websafe" codes that would display consistently on all browsers. By proposing that the color of a person can also be used to designate her as "websafe," IOC demonstrates how social meanings are reasserted when human beings interpret the apparently neutral mathematical system of HTML. In the Color Check System® the "true white" of #FFFFFF is like the "right white" of the Big Bill Broonzy song, representing not just a full amount of additive light but also a full human being. And the #000000 of "absolute black" ("get back") doesn't just signify a lack of light; it signifies the lack of humanity too often associated with blackness. (Or, as *Blackness for Sale* put it, "The Seller does not recommend that this Blackness be used while making intellectual claims.")



Figure 4.10.1.2.43: Mendi + Keith Obadike, *The Interaction of Coloreds*, top of System, 2002, website originally produced for the Whitney Museum's Artport gate page program (**Rhizome**)

The IOC Color Check System® also invites us to consider for whom we are being designated "websafe." In addition to wry mentions of dating websites and airlines hoping to "offer lower rates on the web to customers with non-threatening bodies," the System suggests that it may be useful to a "new African-American web portal or an old Negro social club looking for a way to maintain your club's discriminating tastes in the information age." This is a reference to the racially oriented proto-social networks that flourished during the 1990s, such as the immensely popular BlackPlanet. Although these networks offered an important platform for many people who didn't see themselves reflected in other areas of internet culture, IOC points out that they also

threatened to exaggerate racial segmentation and reduce Black internet users to a consumer category. In this way, the Obadikes not only challenge the idea that race is irrelevant on the internet, they also critique the assumption that simply having more Black people online will make the internet a more equitable place.[11]



Figure 4.10.1.2.44: Mendi + Keith Obadike, *The Pink of Stealth*, 2003, web interactive (**Mendi + Kieth Obadike**)

The Pink of Stealth or *Keeping Up Appearances*

The final work the Obadikes choose to include in the *Black.Net.Art Actions* varies depending on the url where it is accessed. In some publications it's ***The Pink of Stealth*** (2003); in others, it's ***Keeping Up Appearances*** (2001).[12] What these two works share in common is an emphasis on the gender and sexual politics that are only hinted at in *Blackness for Sale* and *The Interaction of Coloreds*. *Keeping Up Appearances* is a hypertextimonial poem by Mendi Obadike that explores the relationship between Blackness and femininity, in part through the visual signifier of the color pink. This signifier is picked up by *The Pink of Stealth*, which integrates a website, hypertext poem, sound collage, and Flash game to play with the different class, gender, sexual, and even health-related meanings that have been associated with pinkness over time. The inclusion of either work in the *Black.Net.Art Actions* rounds out the suite's focus on the multiple meanings of color language by insisting that racial discourses cannot be separated from their intersections with all of the other factors that influence our experiences—online as well as off.



Figure 4.10.1.2.45: Mendi Obadike, *Keeping Up Appearances*, 2001, hypertextimonial poem (**Rhizome**)

As discussed at the beginning, the fact that race no longer feels peripheral on the internet is a dramatic change from the years when the *Black.Net.Art Actions* were being produced. In the 1990s and early 2000s, the myth that race disappears online still shaped how many people understood the emancipatory potential of computer networks. The Actions helped to counter that myth by revealing how the histories that influence our ideas and experiences of race persist throughout our encounters on the network. In the process, these artworks also demonstrated that the relationship between race and computer networks is an essential subject for internet-based art.

Notes:

1. Donovan X. Ramsey and Meredith D. Clark, "The Truth About Black Twitter," *The Atlantic* (April 10, 2015), https://www.theatlantic.com/technolo...witter/390120/
2. Aria Dean, "An Introduction to New Black Portraitures," *Rhizome* (blog), October 26, 2017, http://rhizome.org/editorial/2017/oc...-portraitures/.
3. Email lists like the Afro-Am Listserv started popping up in the early 1990s, and by the end of the decade commercial enterprises like Community Connect were launching racially oriented social networks such as AsianAvenue and BlackPlanet. The latter quickly became a sprawling platform that would only be eclipsed in size and popularity by the rise of MySpace.
4. Two of the most well-known promoters of the model of the internet as disembodied home of the mind are John Perry Barlow,

co-founder of the internet advocacy group the Electronic Frontier Foundation (EFF), and Howard Rheingold, author of *The Virtual Community: Homesteading on the Electronic Frontier* (1993), an oft-cited book on The WELL, the internet's first social network. This well-meaning argument is based on the assumption that a world of the mind would be inherently more just. However, it ignores the reality that embodied experience does shape life online, for better and worse, as well as the fact that not everyone is able to shed the histories associated with their bodily characteristics even in an apparently all virtual environment—nor does everyone want to.

5. Alondra Nelson, "Introduction: FUTURE TEXTS," *Social Text* 20, no. 2 (71) (Summer 2002): 1, https://doi.org/10.1215/01642472-20-2_71-1. In 1998, Nelson founded the influential Afrofuturism online discussion group. While scholarship on race in early net culture was also relatively rare, she's not the only person working in this area. Other prominent voices include Lisa Nakamura, Wendy Hui Kyong Chun, Jennifer González, and Tara McPherson.
6. It's important to note that while race wasn't central to early net art, it wasn't entirely marginalized either. Guillermo Gómez-Peña, the Mongrel group, Prema Murthy, Tana Hargest, and Mendi + Keith Obadike are just a few examples of artists who made relatively well-known work addressing the relationship between race and computer networks during the 1990s and early 2000s.
7. This is a reference to large-scale voter disenfranchisement in Florida during the 2000 US presidential election, which disproportionately affected Black voters. See Ari Berman, "How the 2000 Election in Florida Led to a New Wave of Voter Disenfranchisement," *The Nation*, July 28, 2015, https://www.thenation.com/article/ar...franchisement/.
8. Coco Fusco, "All Too Real: The Tale of an On-Line Black Sale; Coco Fusco Interviews Keith Townsend Obadike," September 24, 2001, http://blacknetart.com/coco.html.
9. This is the category to which the Obadikes submitted *Blackness for Sale* in 2001. eBay has since changed their categories, but a search for "Black Americana" still turns up plenty of racist memorabilia, much of it filed under "Ethnic & Cultural Collectibles."
10. The brown paper bag test is an historical form of colorism (racial prejudice within communities of color) that is said to have been used to admit—or deny—access to certain African American social institutions. Stories about this test claim that only those whose skin was lighter than a brown paper bag were allowed in.
11. The one area in which scholars did focus on the relationship between race and computer networks during this period was the question of access, often referred to as the "digital divide." While being able to use the internet had already become undeniably important, scholars such as Alondra Nelson argue that the digital divide narrative tends to frame Black people as inherently anti-technological while paying little attention to how race influences experience once people are online.
12. The Obadikes feature *The Pink of Stealth* as the third work in the *Black.Net.Art Actions* in Keith + Mendi Obadike, "The Black.Net.Art Actions: Blackness for Sale (2001), The Interaction of Coloreds (2002), and The Pink of Stealth (2003)," in *Re:Skin*, ed. Mary Flanagan and Austin. Booth (Cambridge, Mass.: MIT Press, 2006), 245–50. It was later replaced by *Keeping Up Appearances* in the *Black.Net.Art Actions*' **entry into the Rhizome Net Art Anthology**. Neither source is more authoritative; rather, this reflects the fluidity of internet art, which, like performance art, is often characterized by change over time.

Nari Ward, *We the People* (black version)

by DR. MINDY BESAW, CRYSTAL BRIDGES MUSEUM OF AMERICAN ART and DR. STEVEN ZUCKER

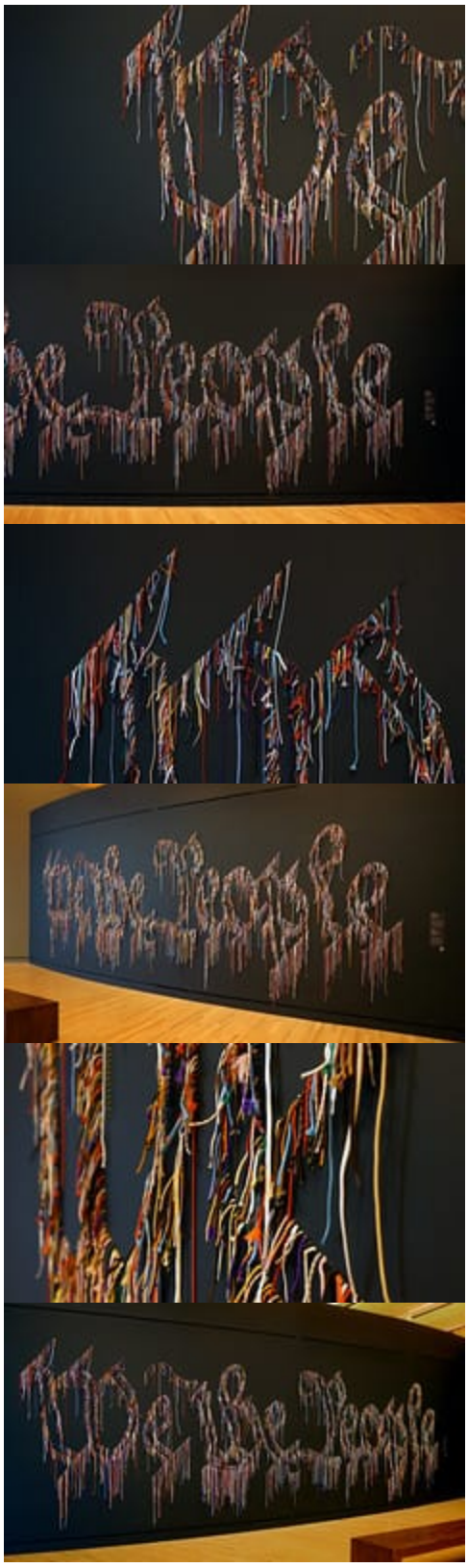
YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.2.7: Nari Ward, *We the People (black version)*, 2015, shoelaces, 8 × 27 feet (Crystal Bridges Museum of American Art), a Seeing America video

Smarthistory images for teaching and learning:



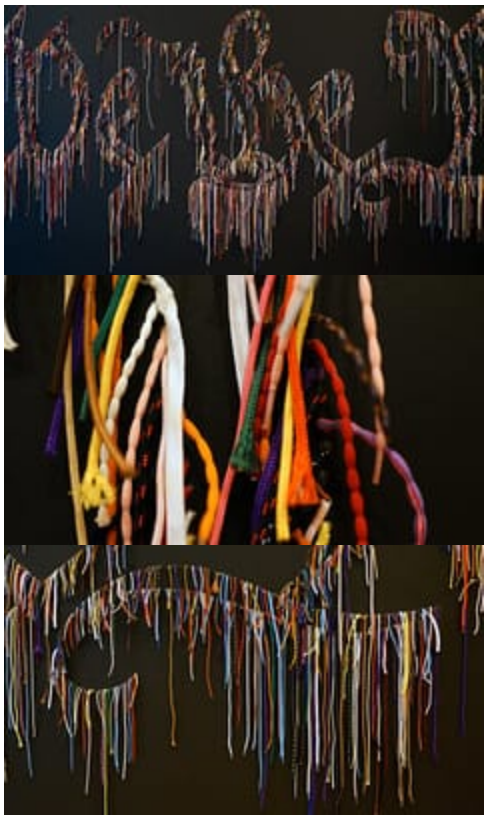


Figure 4.10.1.2.46: More Smarthistory images...

Alfredo Jaar, *A Logo for America*

by DR. DORIS MARIA-REINA BRAVO



Figure 4.10.1.2.47: Alfredo Jaar, *A Logo for America*, 1987, Spectacolor animation, Times Square, New York City, 42 seconds (photos: **Jane Dickson/Public Art Fund**)

In the spring of 1987, visitors to Times Square were confronted by a puzzling 45-second animation among the glittering billboards characteristic of this part of Manhattan. The animation consisted of three digital renderings that each combined images (maps and a flag) with simple lines of text. What mystified some viewers were not the images themselves, but the text that accompanied them: in the first frame, "This is Not America" was superimposed on a map of the United States; in the second frame, "This is Not America's Flag" was superimposed on the image of the United States flag; and in the last frame, the single word "AMERICA" was superimposed on the image of the North and South American continents together.

In less than a minute, artist Alfredo Jaar succeeded in provoking patriotic inhabitants of the United States by asserting that they are not the only "Americans." Jaar's message gave credence to a long-standing belief among Latin Americans in other countries that they, too, have the right to call themselves by that term. Nearly thirty years later, Jaar's *A Logo for America* remains a powerful example of art that uses the language of commercial advertising to convey a pointed political message.

Messages in Spectacolor



Figure 4.10.1.2.48: Catalina Parra, *USA, Where Liberty is a Statue*, 1987, Spectacolor animation, Times Square, New York City (photo: **Jane Dickson, Public Art Fund**)

In 1982, New York City's Public Art Fund launched the *Messages to the Public* program with the goal of exposing viewers to media-based artworks through Times Square's Spectacolor board. For nearly a decade, dozens of artists created short animations that would appear within loops of commercial advertising. A new "Message" would appear every month, providing the viewing public with a fresh animation. According to the project's originator, the painter Jane Dickson (who was working as a designer for Spectacolor at the time), the purpose was to inject a political message into daily life. "I picked that title," she said of *Messages to the Public*, "because I thought the propaganda potential from this project was terrific." [1] Other Latin American artists involved in the *Messages* project also used this opportunity to highlight their critical perspectives on U.S. culture. For example, Catalina Parra's *USA, Where Liberty is a Statue* (see image) critiques the promise of the modern immigrant experience using the country's most iconic symbol of liberty.

Jaar's message

Jaar illustrates two iconic symbols of the United States of America—the map of the country and the flag—and embeds them with messages that subvert their traditional meanings. The contrast is meant to pose the question, What exactly *is* America? As a potential answer, Jaar ends his animation with a rendering suggesting that the entire hemisphere is, in fact, "America." For those living in Mexico, Central, and South America, this is an argument that has often fallen on deaf ears. For example, it is common for someone from Chile—Jaar's country of birth—to simultaneously consider themselves a Chilean and an American. The distinction is simply the difference between national and continental affiliations. When Jaar was commissioned to create this work of art, he had only been living in the United States for a few years, and it would likely have struck him as odd to hear the term "America" being used to define only citizens of the United States.

Defining "America"



Figure 4.10.1.2.49: Alfredo Jaar, *A Logo for America*, 1987, Spectacolor animation, Times Square, New York City (Photos: Jane Dickson/Public Art Fund)

However, for many people living within the United States, this question is likely rarely, if ever considered: for them, "America" implies one country, one flag, and one nationality. According to Jaar, "Some of [the viewers] said live on national radio, 'This is illegal. How could they let him do this?' It is so embedded in their education that the U.S. is America, whereas the rest of the continent is erased." [2] Jaar elicited this reaction by appropriating a national symbol to critique mainstream ideas about

Americanness—not only about the definition of the term itself, but the ways that the term's use in the United States implies superiority over other American countries and cultures. The final frame of his animation, which shows the outline of North, Central, and South America along with the word "AMERICA," is the new "logo" referenced in Jaar's title. It is a literal re-rendering—a "rebranding," to use the language of advertising—of the American continents that **Europeans encountered** in the late fifteenth century. Afterall, the lands of the Western hemisphere which came to be called America after the explorer and mapmaker Amerigo Vespucci, were perceived as one geographic entity, despite political subdivisions.



Figure 4.10.1.2.50: The first map to name America (after the explorer and cartographer, Amerigo Vespucci) and to show America and Asia as separate continents. Martin Waldseemüller, *Universalis Cosmographia*, 1507, composite map, 128 x 233 cm (**Library of Congress, Washington D.C.**)

Pop and propaganda

What does it mean to make this logo for America, a type of symbol normally used to represent products or corporations? A useful example can be seen in the earlier movement, **Pop Art**, and its use of consumer culture as a source of inspiration. Artists like Richard Hamilton, Roy Lichtenstein, and Andy Warhol appropriated the slick, graphic sensibility of mid-century advertising as well as the means and materials of industrial production. Warhol's *Brillo Boxes,* for instance, perfectly mimicked factory-made boxes, simultaneously drawing attention to the aesthetic appeal of what might otherwise be passed over as an unremarkable, mass-produced package, while critiquing high-minded notions of art that fetishized unique, handmade objects.



Figure 4.10.1.2.51: Andy Warhol, *Brillo Boxes*, c. 1964, house paint and silkscreen on plywood (Whitney Museum of American Art, photo: Dr. Steven Zucker)

However, unlike Warhol's *Brillo Boxes* which are exhibited within galleries and museums, *Messages to the Public* existed within a stream of actual advertising, emphasizing its critical opposition. Like the Pop artists before him, Jaar not only made use of the formal language of advertising, but in taking it out of the object-centric realm of the gallery and into the virtual space of the advertising screen, he also questioned the very definition of art-making, which he described as primarily a process of thinking:

> **I think that artists are thinkers, they're intellectuals. And art is about thinking. For me, art is about 99% thinking and 1% making. So I spend most of my time, and I ask my students to spend 99% of their time, thinking. [...] Only at the end of a very long thinking process [do] we make something [...] And in my case I do not work with a specific medium. The medium I use is the one that I feel speaks the better for the ideas I'm working with. [3]**

Just as Jaar asserted the importance of thinking in creating his art, the viewer is also rewarded for investing time considering it—something one might not normally do in the face of advertising.

A Logo for America is still considered a seminal work of Latin American Art. It was acquired by the Guggenheim Museum as part of the Guggenheim UBS MAP Global Art Initiative and was featured in the museum's 2014 exhibition, *Under the Same Sun: Art from Latin America Today*. Concurrent with this show, Jaar's video returned to Times Square for a month-long reenactment, playing every night on dozens of screens. Despite its simplicity, Jaar's message continues to stir emotions and serve as a daring intellectual exercise.

[1] Alfredo Jaar—Messages to the Public: A Logo for America," **Public Art Fund**.

[2] "In Conversation: Alfredo Jaar," **The Brooklyn Rail, April 6, 2009**.

[3] "Focus on: Alfredo Jaar," **Vogue Italia**.

Additional Resources:

This work at the Guggenheim

This work on the Public Art Fund website

Messages to the Public on the Public Art Fund website

Catalina Parra's *USA, Where Liberty is a Statue* on the Public Art Fund website

"A Logo for America" in the New Yorker, August 27, 2014

This page titled 4.10.1.2: Appropriation and ideological critique is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12.2: Appropriation and ideological critique by Smarthistory is licensed CC BY-NC-SA 4.0.

4.10.1.3: Identity and the body

Identity and the body

Contemporary artists use the body as both medium and subject.

1980 - now

Barbara Kruger, *Untitled (Your gaze hits the side of my face)*

by DR. TOM FOLLAND

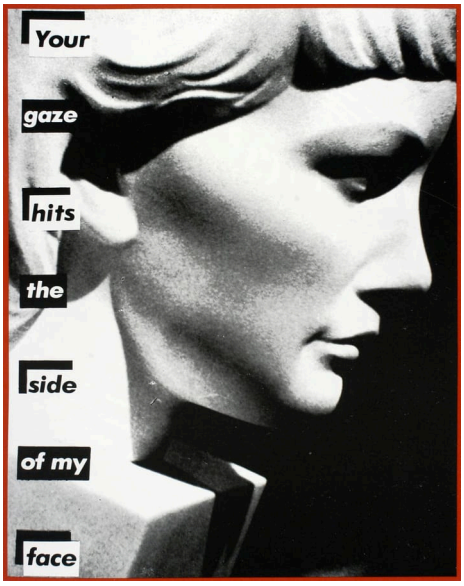


Figure 4.10.1.3.1: Barbara Kruger, *Untitled (Your gaze hits the side of my face)*, 1981

Has an artwork ever been more direct in acknowledging that the simple act of looking is a gendered (and gendering) act? “Your gaze hits the side of my face,” admonishes Barbara Kruger in *Untitled* (1981). The phrase is made stark and impersonal by arranging the words in a vertical stack, like those of a ransom note, to the left of a photograph of a female portrait bust in profile. Notice how the head is equally depersonalized; a stylized version in the classical tradition whose neck disappears into a block of stone, the suggestion here is that women are rendered inert in the act of being looked at. With an assumed male viewer — the subject of the possessive phrase “your gaze” — the subject of the portrait bust readily conforms to patriarchal fantasies of the passive female object.

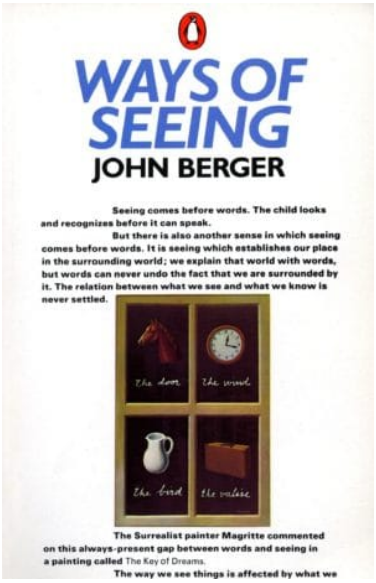


Figure 4.10.1.3.2: John Berger, cover of *Ways of Seeing*, 1972

In 1981 the concept of the male gaze spelled out a crucial problematic of feminist theory. Could women truly be liberated from the objectification implied in this act of being looked at? John Berger in his 1972 book *Ways of Seeing* described the history of Western oil painting as a catalogue of submissive nude women arranged for the pleasure of male viewers. Kruger confronts this tradition head on. The phrase "male gaze" referenced in Kruger's title is taken from Laura Mulvey, who coined the phrase in her 1975 essay "Visual Pleasure and Narrative Cinema," a landmark text of feminist theory.

Kruger's art is characterized by a visual wit sharpened in the trenches of the advertising world where the savvy combination of graphic imagery and pithy phrasing targeted a growing population of consumers in the post-World War II years. The portrait bust she uses for *Untitled (Your gaze hits the side of my face)* is a found picture, one of any number the artist would have encountered in her early career in graphic design. This included a stint at *Mademoiselle* magazine, whose glossy pages were a virtual catalogue of stereotypical images of femininity. In the late 1970s, Kruger began to choose for her photomontages images of women that were often heightened examples of such stereotypes to which her addition of text would, often humorously, expose and thereby deconstruct the supposed realism of such imagery.



Figure 4.10.1.3.3: Barbara Kruger, *Unititled (We have received orders not to move)*, 1982

A 1982 work, for example, shows a silhouette of a woman's body partially outlined by dressmaker's pins and leaning forward in a chair marked with the words "We have received orders not to move." The text here is laid across the body's midsection, adding another layer of the idea of being pinned in place. The sense that women were trapped or immobilized in the act of being seen

runs throughout her body of work from this period and underlines how common this kind of depiction of women was in advertising, particularly during the mid-twentieth century, the period from which many of Kruger's images were culled.

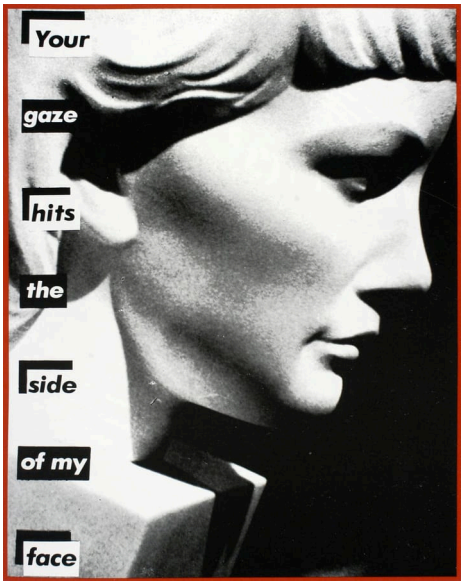


Figure 4.10.1.3.4: Barbara Kruger, *Untitled (Your gaze hits the side of my face)*, 1981

Kruger offers some resistance to the objectifying gaze of the titular male viewer. Only hitting the side in *Untitled (Your gaze hits the side of my face)*, one imagines it bouncing off as if merely ricocheting. But it nevertheless makes strategically visible the tacit assumption of Western visual traditions: women are looked at; men do the looking. In feminist terms, this means that women are negatively defined as lacking subjectivity or agency. Kruger staged an intervention, one could say, and it is in this way that her work is considered part of the feminist art canon.



Figure 4.10.1.3.5: Left: Eleanor Antin, *Carving: A Traditional Sculpture* (detail), 1972 (**Henry Moore Foundation**); right: Sylvia Sleigh, *The Turkish Bath*, 1973 (**Smart Museum of Art**, The University of Chicago, Purchase, Paul and Miriam Kirkley Fund for Acquisitions, 2000.104)

During the second wave of feminism in the 1970s, women artists sought, in different ways, to confront the problem of women's representation in art. Sylvia Sleigh's painting *The Turkish Bath* (1973), for example, renders a group of nude men in a traditional portrait genre usually reserved for women typified by the Neoclassical painter **Jean-Dominque Ingres**. Other artists, like **Eleanor Antin** (who also riffs off the classical sculptural tradition in *Carving: A Traditional Sculpture*, an important antecedent for Kruger) sought to subvert the usual depiction of women through unidealized and un-sexualized representations of the artist's own body.

Mary Kelly, Post-Partum Document, 1973-79, perspex units, white card, sugar paper, crayon, 1 of the 13 units, 35.5 x 28 cm each

Figure 4.10.1.3.6: Mary Kelly, *Post-Partum Document*, 1973-79, perspex units, white card, sugar paper, crayon, 1 of the 13 units, 35.5 x 28 cm each

A different tactic was to refuse representation of women's bodies altogether. **Mary Kelly**'s monumental *Post-Partum Document* (1975), while an extensive portrayal of female subjectivity in relation to the mother-child relationship in psychoanalytic terms, makes no visual reference to herself or her body. Yet another approach was to develop a separate aesthetic predicated entirely upon women's experiences: ***Womanhouse*** was created by Miriam Schapiro and **Judy Chicago** in the early 1970s as a space to showcase feminist performances about rape or installations about menstruation. Finally, there is the use of craft traditions typically associated with the domestic labor of women. Elevating "craft" to a fine art became a symbol of the elevation of women themselves as they strove for inclusion and representation. Kruger's first artworks, in fact, were wall hangings that reframed craft in feminist terms. Despite the variances in approaches, at issue in feminist art practice was the place of imagery of women and artwork by women within patriarchy and in dialogue with political issues around gender and sexuality.

Kruger's work differs from her predecessors whose work I have just briefly outlined. She came of age as an artist at a time when many were taking existing imagery and then re-staging it in slightly altered form. The term for this was "appropriation," and it defined the strategy of a new generation of artists who wanted to refute modernism through invalidating ideas of originality, uniqueness, and even authorship. They became known, as did Kruger, as postmodern artists. Interestingly, many of these artists were women. Already critical of modernism because of its male-centered ideology, they filled the ranks of postmodernism to such extent that the critic Craig Owens described this congruence as a "crossing of the feminist critique of patriarchy and the postmodernist critique of representation." **Sherrie Levine** re-photographed a suite of images by the photographer Walker Evans in order to void his authorship. **Cindy Sherman** appropriated the cinematic tropes of Hollywood whose stock and trade was the vulnerable female in trouble and re-staged them using herself as model. While feminist art (and postmodern art) was largely a white movement, later artists such as Lorna Simpson, **Carrie Mae Weems** or **Kara Walker** would expand upon these earlier artistic strategies to address the intersection of race and gender.



Figure 4.10.1.3.7: Barbara Kruger, *Untitled (Your body is a battleground)*, 1989

The art of the "**Pictures Generation**" as these postmodern artists came to be called, was glossier, slicker, and more enamored of media culture than what had come before, to such an extent that the cultural critic Fredric Jameson worried that art and advertising had become one. Of course the aim was to critically analyze such imagery; Kruger redeployed its seductive techniques, usually pressed into the service of enticing consumers (and historically much of it was aimed at women consumers), to expose the subtle and pervasive ways in which stereotypes of gender roles were reinforced through advertising and cinema (later works by Kruger would target consumerism directly).

Deconstructing the supposed naturalism or ordinariness of these cultural fictions of femininity took on, within the larger political context of the feminist movement, an often agitprop or activist gloss. *"Your body is a battleground"* was produced for a 1989 women's march on Washington. Confining her imagery to black and white with the eventual addition of red was clearly a nod to the **photomontages** of Russian avant-garde artists in the early twentieth century. In the first years after the Russian Revolution, artists sought to harness the power of technology using photography and film to reach mass audiences and unmask false ideologies.

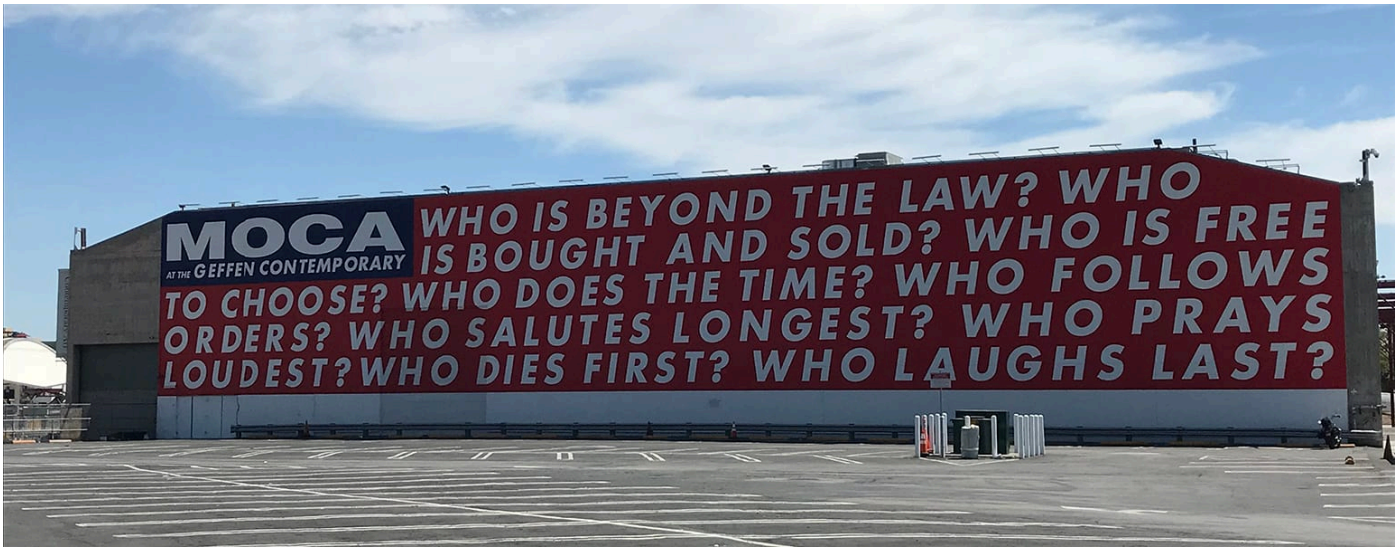


Figure 4.10.1.3.8: Barbara Kruger, *Untitled (Questions)*, 1990/2018 (**Geffen Contemporary;** photo: **rocor**, CC BY-NC 2.0)

Figure 4.10.1.3.9: Logo for the clothing brand Supreme

Much like the factory murals and posters of Russian avant-garde art, Kruger sought a broader audience outside the gallery. Her work would appear on billboards, train station platforms, bus stops, public parks, and even matchbook covers. In the early 2000s the street clothing brand Supreme acknowledged that Barbara Kruger was an inspiration for their logo, a white Futura font within a red box. Despite its critical stance toward the advertising industry, Kruger's unique graphic style couldn't help but ultimately become influential in packaging and product design. Had Jameson been right about the collapse of art and advertising? Did the promotional and publicity structures of a consumer society eventually absorb postmodernism and thereby render its critique neutral?

Additional resources:

1. Laura Mulvey, "Visual Pleasure and Narrative Cinema," *Screen*, Volume 16, Issue 3, (Autumn 1975): 6–18.
2. Craig Owens, "The Discourse of Others: Feminists and Postmodernism," in Hal Foster, ed., *The Anti-Aesthetic: Essays on Postmodern Culture* (Seattle: Bay Press 1983): 78.

Jane Alexander, *Butcher Boys*

by DR. AMY NYGAARD MICKELSON

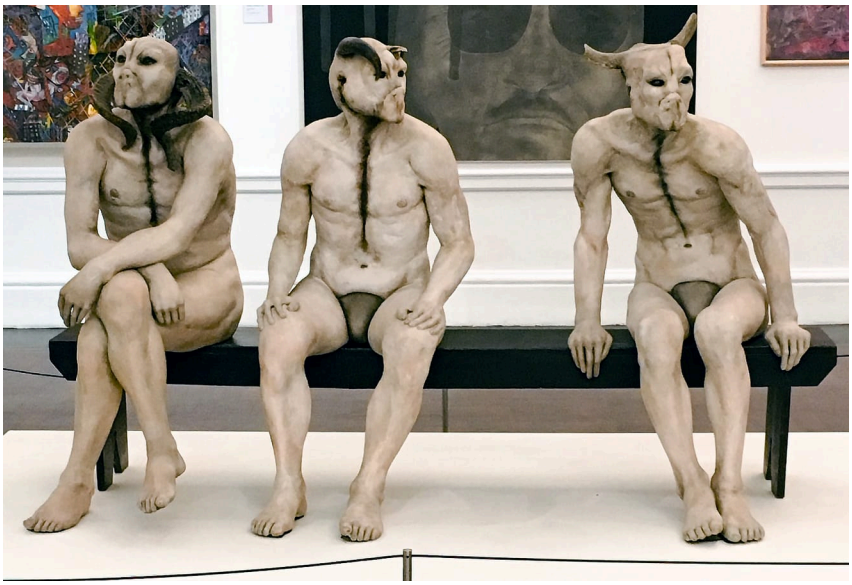


Figure 4.10.1.3.9: Jane Alexander, *Butcher Boys*, 1985/86, mixed media (Iziko South African National Gallery, Cape Town, photo: **Goggins World**, CC BY-NC-ND 2.0)

Men or beasts?

Inside the Iziko South African National Gallery there are three monstrous figures that sit casually on a wooden bench thoroughly indifferent to their environment. Their indifference confounds gallery-goers who struggle to answer questions such as: Are these figures men or beasts? What do these figures represent? South African artist Jane Alexander created the life-sized sculpture, titled *Butcher Boys*, in 1985/86 while a graduate student at the University of Witwatersrand in Johannesburg. The figures are composed of reinforced plaster, animal bones, horns, oil paint, and the wooden bench on which they sit.



Figure 4.10.1.3.10: Marion Walgate, *Cecil John Rhodes*, 1934 (University of Capetown, photo: Danie van der Merwe, CC BY 2.0)

Uncanny resemblance

The forceful impact of the *Butcher Boys* resides in the figures' uncanny resemblance to us. Their figures are not all together unfamiliar within the history of art. There are flashes of resemblances to the familiar and celebrated figurative sculptures of the Greco-Roman tradition. The scale, definition in form, and physical proportions seen in Alexander's *Butcher Boys* echo those of the Hellenistic ***Boxer at Rest*** by Apollonius. Other stylistic associations to seated and contemplative figures, such as the now

notorious monument to Cecil John Rhodes, can also be made.



Figure 4.10.1.3.11: Jane Alexander, *Butcher Boys*, 1985/86, mixed media (Iziko South African National Gallery, Cape Town, photo: **Ctac**, CC BY-SA 3.0)

However, Alexander's figures are not, of course, continuations of these figurative traditions. Rather, hers are a critique in which she transforms the symbolic body of heroic/stately strength into a grotesque mockery of classicism. Their scarred flesh, exposed spinal bones, horned crania, and vacant black eyes undermine any sense of beauty to be found in their carefully modeled bodies. The *Butcher Boys* discomforts us because their form comes too close to that of humans, yet their anatomy is riddled with nonhuman elements and mutations. Alexander has eliminated, or grossly mutated, each figure's sense of sound, sight, smell, and taste. Each figure has irregular concavities where, perhaps, ears once protruded, but have otherwise been removed. They have the slightest suggestion of nasal cavities, which makes their lack of any oral cavity all the more prominent and perplexing. Additionally, deep scars traverse the larynx, past the heart and end just above the navel. Their limbs and torsos are decidedly human. Their arms and legs are without mutation, however, deep wounds down their spinal columns expose fragments of bones.

Viewers of the *Butcher Boys* confront an uncanny image of brutalization. The figures are not sympathetic victims or overtly threatening monsters. They are intimidating; yet, the violence against their bodies elicits a certain amount of empathy. They are unnamable beings without classification. They are neither man nor beast but rather both.



Figure 4.10.1.3.12: Jane Alexander, *Butcher Boys*, detail, 1985/86, mixed media (Iziko South African National Gallery, Cape Town, photo: **Goggins World**, CC BY-NC-ND 2.0)

Crime against humanity

The National Party in South Africa came to power in 1948 and was founded on white-supremacy and driven by an ideological platform of extreme segregation known as apartheid, or in Afrikaans, “apartness” or “apart-hood.” In 1985, the same year Alexander created *Butcher Boys*, South Africa was consumed by violent and non-violent resistance to apartheid. This was followed by a state of emergency (the second) issued by the National Party and state-sanctioned violence.

The earliest apartheid laws were distinctly concerned with the control and management of South Africans to assert and maintain white supremacy. The first two laws passed by the apartheid government were anti-miscegenation laws that criminalized marriage and sexual relations between “a European and a non-European.” The third, the “Population Registration Act” of 1950, forced citizens to register with the government according to its racial caste system. By 1973 the General Assembly of the United Nations recognized South African apartheid as a “crime against humanity.” This reality, of course, had long been recognized by those who fought against the regime. Despite growing international condemnation and internal resistance, the National Party continued to violently oppress any challenge to their power throughout the later decades of the 20th century. Given this context of brutality, Alexander’s *Butcher Boys* are commonly linked to the violence of apartheid and particularly the second state emergency. Art critic Ivor Powell wrote that “the *Butcher Boys* . . . [is] probably the most enduringly iconic image of the sinister and apocalyptic brutalisations of apartheid.”[1]

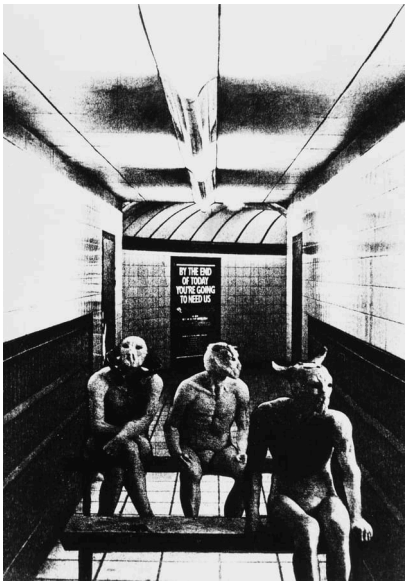


Figure 4.10.1.3.13: Jane Alexander, *BY THE END OF TODAY YOU’RE GOING TO NEED US*, 1986, fibre-based silver print, 29 x 20 cm (**Stevenson**)



Figure 4.10.1.3.14: Jane Alexander, *Ford, 1986*, 32 x 24 cm

Art, trauma, and political violence

Alexander, featured the *Butcher Boys* in photomontages, such as *BY THE END OF TODAY YOU'RE GOING TO NEED US* (1986), *Ford* (1986), and *Transmitter* (2007) among others. Since they are so commonly associated with apartheid violence and trauma, their presence becomes a potent symbol of that violence and trauma. Through the repetition of their image in photomontages, outside of the white-walled gallery space, Alexander appears to provide evidence of the *Butcher Boys'* existence within our world. In these photomontages, Alexander blurs and obscures the visual field just enough to give a candid or accidental aura to each image. It's as if the *Butcher Boys* are unwitting subjects within the series of photographs taken from everyday life.

By placing the *Butcher Boys* in a variety of scenes—on the outskirts of Cape Town, within a salvage yard, and waiting for a subway train—Alexander moves the audience beyond the physical components of the *Butcher Boys* and into a deeper consideration of their existence. This is the key to the work's iconic status. It is not just the shock of the physical, but even more so, the chilling recognition of the environment as the source of their trauma.



Figure 4.10.1.3.15: Pablo Picasso, *Guernica*, 1937, oil on canvas, 349 cm × 776 cm. (Museo Reina Sofia, Madrid)

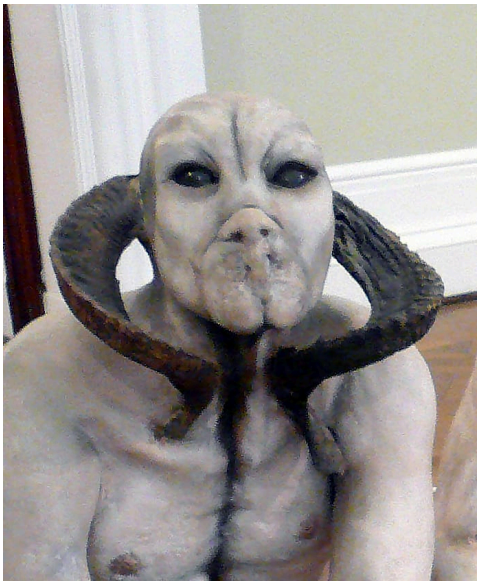


Figure 4.10.1.3.16: Jane Alexander, *Butcher Boys,* detail, 1985/86, mixed media (Iziko South African National Gallery, Cape Town, photo: **Ctac,** CC BY-SA 3.0)

What Alexander achieved with *Butcher Boys* can be likened to Picasso's ***Guernica***. Both were created in the context of atrocities, which the governments (Franco's Spain and the National Party's South Africa respectively), inflicted on their own people. *Guernica*

is so named because it depicts the bombing of a civilian target, the Basque city of Guernica in Spain. Its subject is local and specific; however, its reception propelled it into a totalizing indictment of fascism, much in the same way that Goya's ***Third of May, 1808*** depicts the events of a singular day of Napoleonic violence in Spain, but has come to represent the horrors of war more generally.



Figure 4.10.1.3.17: Francisco de Goya, *Third of May, 1808*, 1814, oil on canvas, 266 x 345.1 cm (Museo del Prado. Madrid)

Both Picasso's and Goya's paintings highlight an unsettling normalization of political violence. They give their viewers a chilling assessment of the unaffected banality of the environments from which these atrocities sprang. In so doing, these paintings resonate beyond their record of time and artistic movements as they reflect our seemingly endless slippage into enacting and accepting brutal violence. What sets Alexander's *Butcher Boys* apart from Picasso's and Goya's iconic paintings is that her work does not point to a singular event. Rather it is the totality of the apartheid's regime of violence that is called into question.

The *Butcher Boys* may be part man and part beast. Their identity as such, however, is less important than what they represent—violence and trauma. The *Butcher Boys* can be seen as a response to the public's willingness to depersonalize violence by ascribing such behavior to the monstrous. To acknowledge the truly violent nature of humankind is to implicate one's self in a relationship to such atrocities. These bodies visualize violence in a way that emphasizes how we dehumanize each other. It is easier to dehumanize violence than it is to see humanity in violence, and this transitional state of being between man and monster is where the *Butcher Boys* reside.

Notes:

1. Ivor Powell, "Inside and Outside of History," *Art South Africa* vol. 5, no. 4 (Winter 2007), pp. 32-38.

Additional resources:

Iziko South African National Gallery

Tate Modern, "Who is Jane Alexander?"

South African History Online, "Jane Alexander"

Pep Subirós, ed., *Jane Alexander: Surveys from the Cape of Good Hope* (New York: Museum of African Art, 2011).

Sophie Perryer, ed., *Personal Affects: Power and Poetics in Contemporary South African Art* (New York: Museum of African Art, 2004).

Sue Williamson, *Resistance Art in South Africa* (Southern Africa: David Philip, Publisher, 1989).

Jamie Wyeth, *Kalounna in Frogtown*

by TAYLOR L. POULIN and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.3.1: Jamie Wyeth, *Kalounna in Frogtown*, 1986, oil on masonite, 91.4 x 127.3 cm (Terra Foundation for American Art, Daniel J. Terra Collection, 1992.163) ©Jamie Wyeth, a Seeing America video speakers: Taylor L. Poulin, Assistant Curator, Terra Foundation for American Art and Beth Harris

Additional resources

This painting at the Terra Foundation for American Art

Marc Quinn, *Self*

by MATTHEW WILSON



Figure 4.10.1.3.18: Marc Quinn, *Self*, 1991, blood (artist's), stainless steel, Perspex and refrigeration equipment, 208 x 63 x 63 cm (originally collection of Charles Saatchi, now collection of Steve Cohen, New York)

The shock of the new

Shock value has been an important aspect of art since the nineteenth century. But is provocation always merely a case of superficial attention-grabbing, or can it ever have depth? Marc Quinn's *Self*, a sculpture depicting the artist's head made from his own frozen blood, is a perfect artwork for mulling over such questions. Shock is the probably the foremost element in its success and lasting impact on viewers: once seen, *Self* is not easily forgotten. The sight of blood often has this effect. For some it is an extremely distressing spectacle in its own right, and even for those of us used to transgressive artistic acts, the public display

of real bodily fluids still retains its sense of taboo. But once the shock wears off, what are we left with? Does its meaningfulness erode over time, like a joke whose amusement diminishes on each rehearing?

Process and meaning



Figure 4.10.1.3.19: Making *Self* (1991): collecting blood

It is probably wise to first acknowledge the extraordinary amount of preparation and the lengthy ordeal Quinn put himself through to create *Self*. First, he took blood from his body – as you would do during a blood donation – over five separate sessions to stockpile a total of ten pints (5.7 liters). He then made a cast of his head by covering it with an all-over mask of plaster of Paris (leaving breathing holes for his nose). This perfect impression of the artist's facial features was then removed, filled with the blood and frozen. When it was solid, the blood head was mounted within a Perspex box filled with silicone oil at a subzero temperature.



Figure 4.10.1.3.20: Making *Self* (1991): making the cast

This careful, quasi-medical process indicates the seriousness and meticulous planning that lie behind Quinn's shock tactics. Ten pints is the average amount of blood in a human body, so among the other effects of *Self* is to make the spectator aware of the modest volume of this vital substance required to sustain a life. The freezing process is also one that might trigger thoughts of other modern medical practises such as cryopreservation (the technique of storing biological samples — and sometimes whole bodies — by keeping them at low temperatures for future regeneration). Quinn's sculpture is, among other things, a life support system. It therefore suggests wider issues of life and healthcare in the modern world: *Self* is as dependent on science as our own

lives are, and it leaves us space to contemplate the magical promises of medical technology, as well as its limits.



Figure 4.10.1.3.21: Marc Quinn, *Self*, 1991, blood (artist's), stainless steel, Perspex and refrigeration equipment, 208 x 63 x 63 cm (originally collection of Charles Saatchi, now collection of Steve Cohen, New York)

Quinn's education as a student of History and History of Art at the University of Cambridge can be seen as a vital component of his work as a whole, and here his engagement appears to be with ancient tomb sculptures. Much of what we study as art from early civilizations (such as from **Egypt** and **China**) is from burial chambers, where the intention was to preserve bodies and spiritually conquer death. Also, one of the chief purposes of all portraits has been to conserve an individual's legacy. Quinn's engagement with cryopreservation in a gallery setting reminds us of art's ancient role in ensuring posterity.

Blood simple



Figure 4.10.1.3.22: Left: Marc Quinn, *Self,* 1991, blood (artist's), stainless steel, Perspex and refrigeration equipment, 208 x 63 x 63 cm (originally collection of Charles Saatchi, now collection of Steve Cohen, New York); Right: *Head of a Roman Patrician* from Otricoli, c. 75-50 BCE, marble (Palazzo Torlonia, Rome)

Disregarding the startling choice of sculptural material, there is little in the appearance of *Self* to cause alarm. In some respects, its presentation is rather archaic. It is a portrait bust, a format which originates in Europe with the **Romans**, and it sits on a plinth behind a glass case, much like an exhibit in a museum of antiquities. The head is subtly upturned with its lips pursed and eyes closed, giving it a sense of peacefulness and serenity — as if asleep or gracefully deceased. The casting process that Quinn used

has picked up many tender textures from the surface of Quinn's face such as the eye lashes, creases on lips and the folds of flesh on the ears. A sense of the macabre is thus conveyed only through its bruised, red and blue coloration, and arguably also the surface texture which bears marks left behind from the mold used in the process of casting and makes the head look scarred or decayed. Casting is a very old sculpting technique, but it looks as though Quinn is making reference specifically to the tradition of death masks, which were used by the Romans to record the physiognomy of deceased family members.

A literal portrait

Unlike more traditional materials of western sculpture such as marble, blood is not durable and will decay if not frozen. Similarly, the process of casting is traditional, but usually it is done with bronze or other precious metals, and not a bodily fluid. Value therefore becomes a significant theme, as blood — unlike marble and bronze — lacks monetary worth and yet is essential to life. The use of bodily fluids increases the sculpture's status as a 'true' self-portrait in which the artwork serves not only to depict the artist but is also composed of a part of the artist's own body, his DNA. As mentioned before, the presence of a refrigeration unit underscores the sculpture's dependence on a source of power, arguably increasing its sense of vulnerability. Quinn has commented on the autobiographical dimension of *Self* saying that it reflects his alcoholism, as it is entirely dependent on electricity, just as he was reliant on alcohol. This self-expressive aim is also attested by Quinn's aim to pay homage to **Rembrandt, who repeatedly created self-portraits** in the latter stages of his career, by making a new 10-pint blood *Self* every 5 years.



Figure 4.10.1.3.23: Rembrandt, *Self-portrait with Shaded Eyes*, 1634, oil on panel, 71.1 x 56 cm (The Leiden Collection)

Sacrifice

Historically, blood is associated with sacrifice and ritual, such as in the **Aztec Empire** and Mithraism (an ancient Roman mystery religion centered on the god Mithras), and in some religions had been applied to sculptures in order to "animate" them. In Christianity the blood of Christ is also sacred and celebrated at the **Eucharist**. In other contexts, blood is symbolic of truth and family lineage — one speaks of a "bloodline" and agreements have sometimes been sealed by mingling blood. Quinn's self-portrait can be identified in the crossroads of these various associations, indicating the potent, generative powers of blood, the veracity and individuality of the artist's personal identity, as well as his self-sacrifice in the name of art.

The trope of the artist as a suffering, outcast martyr has been with us since at least the **Romantic** period. And it is not unrelated to the trope that this essay began with: that of the artist as provocateur, intent on shock tactics to turn heads. According to this stereotype, **artists should behave like outsiders** who position themselves beyond society, only in order to castigate and shock it with their piercing commentary. This tradition was given its most forceful early voice with Manet and his provocative works of the 1860s with such works as ***Le Déjeuner sur l'herbe***. In the fierce competition of the art world every young artist needs to court notoriety if they want to be noticed — quiet conservatism seldom makes for front-page news. Causing shock is relatively easy, but the outrage quick wears off if the work lacks dimension, and there will be many forgotten names in the history of twentieth-century art, music and cinema who resorted to the kind of superficial shock whose impact petered out all too quickly.



Figure 4.10.1.3.24: Édouard Manet, *Le déjeuner sur l'herbe (Luncheon on the Grass)*, oil on canvas, 1863 (Musée d'Orsay, Paris)

Does *Self* fall into this category? A defense of its merits would point to the breadth of themes addressed in this essay: its painstaking process, its appropriation of medical technology, its art-historical reference points and its aim to act as a vehicle of the artist's self-expression. *Self*, such an argument would run, serves as an example of provocation with a purpose, where medium, technique and message coalesce, and the art achieves both a memorable aesthetic and a satisfying quantity of conceptual ballast.

Additional resources:

The work of art at the artist's website

Making the work of art at the artist's website

Lucian Freud, *Standing by the Rags*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.3.2: Lucian Freud, *Standing by the Rags*, 1988-89, oil on canvas, 66.5 x 54.5″ / 168.9 x 138.4 cm (Tate Britain, London)

Smarthistory images for teaching and learning:





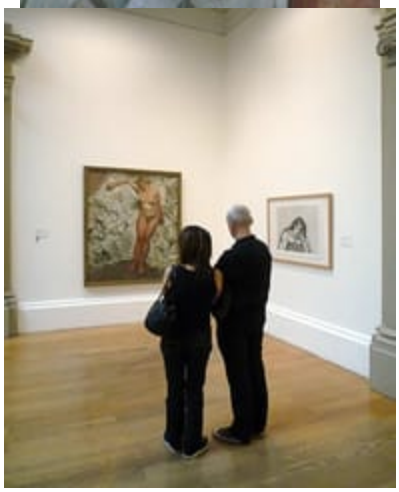




Figure 4.10.1.3.25: More Smarthistory images...

Carrie Mae Weems, *Untitled (Woman Feeding Bird)*, from *The Kitchen Table Series*

by LAUREN HAYNES, CRYSTAL BRIDGES MUSEUM OF AMERICAN ART) and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.3.3: Carrie Mae Weems, *Untitled (Woman Feeding Bird)*, *The Kitchen Table Series*, 1990, gelatin silver print (printed 2015), 27.94 x 27.94 cm @ Carrie Mae Weems (Crystal Bridges Museum of American Art)

Felix Gonzalez-Torres, *"Untitled" (billboard of an empty bed)*

by DR. TOM FOLLAND



Figure 4.10.1.3.26: Felix Gonzalez-Torres, *"Untitled" (billboard of an empty bed)* 1991, printed billboard, dimensions variable © The Felix Gonzalez-Torres Foundation

Untitled (billboard of an empty bed) is a stark, black-and-white image of the rumpled sheets and pillows of an unmade bed. The depression in the center of each pillow, suggesting a recent presence, conveys a profound sense of intimacy. But this scenario is in jarring contrast to its public location—on a billboard. First exhibited on the streets of Manhattan, this evocation of absent bodies soon came to define all of Felix Gonzalez-Torres' work up until his death in 1996 from AIDS-related causes. The artist is most known for ephemeral installations: a pile of candy in a corner (below), a stack of posters on the floor, or strings of lights dangling from a ceiling—all of which recall the reduced visual and formal language of Conceptual and Minimalist art from the 1960s and 1970s.



Figure 4.10.1.3.27: Felix Gonzalez-Torres, *"Untitled" (Portrait of Ross in L.A.)*, 1991, multicolored candies, ideal weight 175 lbs., dimensions variable © The Felix Gonzalez-Torres Foundation (photo: **henskechristine**, CC BY-NC-ND 2.0)



Figure 4.10.1.3.28: Felix Gonzalez-Torres, *Untitled (for Stockholm)*, 1992, light bulbs, porcelain light sockets and extension cords, dimensions variable © The Felix Gonzalez-Torres Foundation (photo: **Andrew Russeth**, CC CC BY-SA 2.0)

Yet Gonzalez-Torres didn't merely reference the work of earlier Minimalist artists like Donald Judd and Dan Flavin—he introduced a specifically contemporary note into his work. In the late 1980s and early 1990s artists were asking new questions around the construction of identity—including gay identity. For instance, the lights in his work were redolent of the environment of a dance club (left), and the candy on the floor was a perverse reference to the drug AZT used to combat HIV. And the bed? Much like the paired wall clocks he created the same year entitled *Perfect Lovers* that marched slightly out of step with one another (one is a few seconds off), the censored image of same-sex love slowly makes its imprint.

Bed's sexual politics

By 1987, a new era of gay activism had begun. The Aids Coalition to Unleash Power (ACTUP) formed and suddenly old questions around the relationship between art and politics took on new significance for gay artists. Artist-collectives like Gran Fury used appropriated image and text to convey overt political messages around the politics of AIDS. But Gonzalez-Torres did not follow this route. His disappearing but perpetually replenished works (viewers were allowed to remove a poster or take a piece of candy) took a more elegiac path: it was one in which any direct representation of homosexuality was seldom apparent. Thus his art became an abstract memorialization of loss. Gonzalez-Torres' memorialization resonated especially during a time when Ronald Reagan (U.S. President from 1981 until 1989) notoriously never uttered the word "AIDS" because of its predominant association with homosexuality. Heads pressed onto pillows in the *Untitled* billboard thus becomes a simultaneous declaration and disavowal of same-sex love—writ large within an urban landscape.

As an artist, Gonzalez-Torres came of age during the 1980s (he was born in 1957 in Cuba). At that time, Postmodern artists often worked with existing imagery and text, appropriating and examining an increasingly media-saturated world. His earliest work

was in that vein. In the manner of Jenny Holzer, who reproduced found slogans or random sentiments on wheat-pasted posters throughout the streets of lower Manhattan in the late 1970s, one of Gonzalez-Torres' earliest works is a framed photostat (an early version of a photocopy) from 1988 of a sentence. It's really a jumble of words—white letters on a black background that read "supreme 1986 court crash stock market crash 1929 sodomy stock market crash supreme 1987." In this way, he offered a poetic commentary on the erasure of gay history by sandwiching a reference to the 1986 Supreme Court ruling that upheld the state of Georgia's sodomy laws (which effectively criminalized homosexuality) between significant dates in economic history.[1]

Back to the future

Gonzalez-Torres' *Untitled (billboard of an empty bed)* marked an important threshold in contemporary art history. In the late 1980s the art world underwent significant changes. It seemed to many critics at the time that postmodern art existed only to illustrate complex philosophical concepts, while the felt aspects of experience, important for the renewed surge of identity politics (political alliances based on identity, like the women's movement), were ignored. Foregrounding the bodily dimension of experience, artists like Robert Gober, Kiki Smith and Jane Alexander created sculptural works with visceral impact. Artists began to return to discarded artistic strategies like narrative, constructed (rather than appropriated) forms—anything that would invoke a sense of the contemporary, lived aspect of everyday experience without mediation. Bodies were often splayed upon the gallery floor or its parts protruded from a wall.

Gonzalez-Torres' art had, in a sense, a foot in both camps: *Untitled (billboard of an empty bed)* bore resemblance to the billboards Barbara Kruger had done as early as 1985. Her *Surveillance is Your Busy Work* is one that was unveiled in Minneapolis that year and featured her trademark use of advertising imagery reconfigured with text to correspond to discussions around public space, gender and corporate culture. But Gonzalez-Torres's image of a disheveled bed was shorn of any textual or even didactic directive. Significantly, the image is of his own bed. *Untitled (billboard of an empty bed)* suggested—even if it did not portray—a tangible if disappearing presence.

1. This ruling was eventually overturned.

Additional resources:

Print/Out: Felix Gonzalez-Torres, on Inside/Out, MoMA's blog (April 4, 2012)

Biography of the artist from Oxford University Press on MoMA.org

The Felix Gonzalez-Torres Foundation

Art and Photography: the 1980s on The Metropolitan Museum of Art's Heilbrunn Timeline of Art History

Yinka Shonibare, *The Swing (After Fragonard)*

by DR. ALLISON YOUNG



Figure 4.10.1.3.29: Yinka Shonibare MBE, *The Swing (After Fragonard)*, 2001 (Tate, London) © Yinka Shonibare

With her fingers delicately grasping the thickly coiled rope of a swing suspended mid-flight, a life-sized female mannequin flirtatiously kicks up her left foot, projecting her slipper into the air where it hovers above a tangle of branches. Our gaze is directed from the arch of her foot towards the vibrant trim of her petticoat, gown and coat.

A recreation of a Rococo painting

The Swing (After Fragonard) is a three-dimensional recreation of the Rococo painting after which it was titled, which itself offers testimony to the opulence and frivolity of pre-Revolutionary France. Painted in 1767, Jean-Honoré Fragonard's *The Swing* depicts a coquettish young girl swinging in a lush and fertile forest and, of course, playfully kicking up her shoe. A sculpture of a bashful cherub looks on, but he is not alone; the female figure is flanked by two male figures lurking in the shadows, one seems to push her swing from behind, as the other mischievously glances up the layers of her dress to catch a glimpse of what is beneath.

Living with History

Living in England, with my colonial relationship to this country, one cannot escape all these Victorian things, because they are everywhere: in architecture, culture, attitude...



Figure 4.10.1.3.30: Jean-Honoré Fragonard, *The Swing*, oil on canvas, 1767 (Wallace Collection, London

Shonibare's quotations of eighteenth- and nineteenth-century style and sensibility are visually captivating; at the same time, tableaux such as *The Swing* contain some dark undertones. To begin with, the beautiful young protagonist of Fragonard's painting

has somehow become headless. This is likely a reference to the use of the guillotine during the Reign of Terror in the 1790s, when members of the French aristocracy were publicly beheaded. Drawing our attention to questions of excess, class and morality that were raised by revolutionaries two centuries ago, Shonibare invites us to also consider the increasing disparity between economic classes today, especially alongside the growing culture of paranoia, terror and xenophobia in global politics since 9/11.

As a British-born Nigerian, raised between Lagos and London, Shonibare is especially perceptive to the ways in which issues of access, nationalism and belonging have their roots in modern European history, particularly with regards to the United Kingdom and its relationship to its former colonies. Here is where the specific fabrics that Shonibare utilizes become more relevant, as their symbolism is steeped in histories of cultural appropriation, imperialism and power.

Indonesian motifs, made by Europeans, sold in West Africa

Though tailored in the fashion of eighteenth-century French aristocratic style, the costume that is modeled by Shonibare's protagonist has been sewn from colorful and abstractly patterned fabrics with quite different origins: the bright golds, reds and blues arranged in geometric motifs across her ruffled skirt are typical of the "African" Dutch wax fabrics that Shonibare has famously used to adorn his figural tableaux throughout his career.



Figure 4.10.1.3.31: Dutch wax print fabrics (photo: **ipercher**, CC BY-NC 2.0)

While these fabrics have come to signify African identity today, the patterns on Dutch wax fabrics were originally based on motifs found in Indonesian batiks, and were manufactured in England and Holland in the nineteenth-century. Predictably, the European imitations did not prove lucrative when sold in South Asian markets, so Dutch manufacturers then marketed the textiles to their West African colonies, where they have since been appropriated and integrated into local visual culture.

As such, Dutch wax fabrics as we know them today are the product of the complex economic and cultural entanglements that resulted from European imperialism. As curator Okwui Enwezor has explained, Shonibare uses the fabrics "as a tool to investigate the place of ethnicity and the stereotype in modernist representation. (...) The textile is neither Dutch nor African, therefore, the itinerary of ideas it circulates are never quite stable in their authority or meaning."

Aesthetics and Authenticity

As fictional as their "African-ness" may appear to be, however, the fabrics have now been completely assimilated in places like Nigeria, where Shonibare grew up. As Enwezor points out, the material is "both fake and authentic, both readymade and original," not to mention indisputably cosmopolitan.

The question of what is "authentically" African has personal resonance for Shonibare, who, as an art student in London, was shocked when one of his instructors suggested that he make work that expressed his African identity. This conversation prompted him to think about stereotypes and the areas that exist between categories of identity and culture. The artist began using the material in 1992.

In Pursuit of Leisure

What might Shonibare wish to communicate by bringing together these “African” textiles with Fragonard’s Rococo images, or any of the other European masterpieces that the artist has appropriated in his sculptural installations?

In imaging this particular moment in European history, Shonibare wishes to forge connections between imperialism, the aristocracy, and the “colonized wealthy class.” In *The Swing (After Fragonard)*, which is loaded with references to the French Revolution, the Age of Enlightenment and colonial expansion into Africa, Shonibare asks us to consider how a simple act of leisure can be so controversial.

While the leisure pursuit might look frivolous (…) my depiction of it is a way of engaging in that power. It is actually an expression of something much more profoundly serious insofar as the accumulation of wealth and power that is personified in leisure was no doubt a product of exploiting people.

In this and other works, Shonibare chooses stories—including biographies, world events, and works of art—which are already effective allegories concerning race, class, corruption and greed, calling our attention to some of the darker moments in Western history. However, his use of the Dutch Wax fabric, with its spurious origins and its misleading aesthetic identity, serve as a reminder that history and truth are also themselves constructions.

Rineke Dijkstra, *Odessa, Ukraine, August 4, 1993*

by JOSH R. ROSE



Figure 4.10.1.3.32: Rineke Dijkstra, *Odessa, Ukraine, August 4, 1993*, 1993, Chromogenic print, 153 x 128.9 cm, © Rineke Dijkstra, courtesy of the artist

What makes a portrait so compelling? Historically, portraits were reserved for the elite and wealthy, but with the advent of the camera in 1839 portraiture became increasingly democratized and accessible across social classes. Today, we all appear in numerous portraits: family photos, formal school pictures, even the increasingly common “selfie” created for social networks. In an age of ubiquitous portraiture, what makes Dutch artist Rineke Dijkstra’s photograph of a teenage boy standing on a Ukrainian shoreline so evocative?

Working in series

Dijkstra’s photograph *Odessa, Ukraine, August 4, 1993* comes from the series *Beaches*, which was created between 1992 and 1998 across locations as diverse as Poland, Great Britain, South Carolina, Belgium, Coney Island, and the Ukraine. Typically working in series, Dijkstra prefers single subjects documented over time or multiple subjects recorded after moments of intensity, such as new mothers in the days after giving birth or Portuguese bullfighters immediately after a match. Working in series

necessitates revealing through comparison.

In *Beaches*, her earliest series, Dijkstra was interested not just in capturing young men and women on the cusp of adulthood, but the unexpected social and cultural nuances that became apparent by portraying teenagers from different parts of the world:

“I think that in Poland [the subjects’ bathing suits] reminded me of the ‘60s, they have twenty-year old bathing suits and no one cares…They were very easygoing. The Americans had very fancy bathing costumes and the poses were more self-conscious. One girl was really holding her belly in and her mother was behind her yelling ‘You’re too fat.’ She was so unhappy.”[1]

These powerful emotional responses are expressed through intricately captured details across the series *Beaches* and in each of the individual portraits. Dijkstra draws us in with the details captured using a flash (even in sunlight), from the type of swimming garment (full length swimsuit, speedo, underwear, cut-off jeans) to the expressions on the subjects’ faces (cool, pensive, inquisitive).

Standing on a beach

Dijkstra’s process entailed asking unknown adolescents to pose for her at the shore, and while she set up lighting and prepared her camera on a tripod, her subjects assumed their own stance.[2] As with each photograph in this series, the anonymous boy’s vertical body is set against the rigid horizontals of the shore and horizon. He stands in contrapposto, causing his angular shoulders to protrude up and out, and his gangly frame is sunken in at the torso.

The careful lighting, which one writer has described as “clinical,” starkly contrasts his pale skin against the cool tones of sky, water, and sand. The overwhelming blues and greys are augmented by the boy’s dark red trunks that extend to the sharp bend of his pelvis, appearing unnaturally flattened as if pasted on the image afterward. In contrast to his young body, his mature face stares outward unabashedly, which is daunting when seen in its six foot tall printed form.

Behind his emotionless expression is a self-awareness that appears mature, relaxed, and casual. Dijkstra often strives to capture self-consciousness: “People think that they present themselves one way,” the photographer once stated, “but they cannot help but show something else as well. It’s impossible to have everything under control.”[3] Dijkstra bridges the difficult gulf between self-presentation and photographic representation by allowing the subjects to assume their own pose. Despite choosing nearly identical settings for each photographs in the series, Dijkstra’s portraits transcend simple visual documentation and become revelatory images of the awkwardness and transitory nature of puberty.

Typologies?

Because her title emphasizes location and date but excludes the name, Dijkstra intends for her subject to remain unknown. This insistence on anonymity and working in series is suggestive of a typology, or a system of classification based on type. As Allen Sekula has discussed, photographic typologies became increasingly common at the end of the nineteenth century, linked to the popular pseudo-sciences of physiognomy and phrenology.[4] Another photographer, the German August Sander, is important here. Dijkstra has often stated that Sander was a primary influence on her work and methodology; moreover, he also produced typological photographs.



Figure 4.10.1.3.33: August Sander, Sisters, 1927, gelatin silver print, 33 x 24.5 cm (The Museum of Modern Art, New York)

From 1910 to the early 1950s, Sander encyclopedically documented German people, emphasizing lifestyle and profession as an extensive photographic typology of *Menschen des 20. Jahrhunderts (People of the Twentieth Century)*. Although his visual approach was modified over time, Sander's photographs emphasized clothing, tools, ephemera, and setting. In Sander's 1927 photograph *Sisters*, the simple folk dresses of the young girls standing on a forest path suggest their lineage with traditional German customs and love of nature (though offset somewhat by their wristwatches!). Sander likely posed and carefully composed his portraits, evident by the visual alignment of the waistline embroidery on the sisters' dresses.

While the influence of Sander on Dijkstra's own work is important, there are some key differences, most notably her method of unifying the composition with the shoreline. This, along with allowing her subjects to settle into their own stance, does not classify as much as expose by focusing less on extraneous details and more on the expressions and bodies of her subjects.

Posing as art history

One interesting byproduct of Dijkstra's method of allowing her portrait subjects to be conscious of the pose they strike is that at times her figures end up in stances that are remarkably similar to famous works of art. In one *Beaches* photograph from Poland, a young girl unconsciously mirrors a pose similar to that of Botticelli's *Birth of Venus*. In the Odessa photograph, the young man's contrapposto and nearly nude figure evokes the idealized youthful males of Early Classical Greek statuary.

These references, which Dijkstra states are unintended by her, are quite evocative, and suggest an ingrained, resonant sense of how late twentieth-century adolescents wish themselves to be portrayed when a Dutch photographer asks them to pose for her while spending their day at the beach.

Special thanks to Sandy Heller, The Heller Group, LLC

[1] As quoted in an interview with Jennifer Morgan, *Rineke Dijkstra: Portraits. Hatje Cantz* (Institute of Contemporary Art, 2001), p. 80.

[2] Michael Fried, *Why Photography Matters As Art As Never Before* (Yale University Press: New Haven, 2008), p. 206.

[3] As quoted in Katy Siegel, "Real People," *Rineke Dijkstra: Portraits, Hatje Cantz* (Institute of Contemporary Art, 2001) p. 10.

[4] Allan Sekula, "The Body and the Archive," *October* 39 (1986), p. 3.

Additional Resources:

Dijkstra's work at the Saatchi Gallery

Dijkstra in conversation with Abigail Christenson (Tate video)

August Sander on The Museum of Modern Art website

Marlene Dumas, *Models*

by DR. TOM FOLLAND

I<em
Models, 1994, 100 drawings, watercolor and ink-wash on paper, each 24 7/16 x 19 11/16 inches / 62 x 50 cm (Van Abbemuseum, Eindhoven), installation view of the solo exhibition "Measuring your Own Grave," 2008, Museum of Contemporary Art, Los Angeles, copyright Marlene Dumas © 2016" aria-describedby="caption-attachment-12338" height="500" sizes="(max-width: 823px) 100vw, 823px" src="
https://smarthistory.org/wp-content/...ve-2008-44.jpg
" srcset="
https://smarthistory.org/wp-content/...ve-2008-44.jpg
823w,
https://smarthistory.org/wp-content/...44-300x182.jpg
300w" width="823">

Figure 4.10.1.3.34: Models, 1994, 100 drawings, watercolor and ink-wash on paper, each 24 7/16 x 19 11/16 inches / 62 x 50 cm (Van Abbemuseum, Eindhoven), installation view of the solo exhibition “Measuring your Own Grave,” 2008, Museum of Contemporary Art, Los Angeles, copyright Marlene Dumas © 2016

Painting Photography

The work of South African artist Marlene Dumas exists on a continuum between painting and photography. Simply put, she paints from photographic images. Or as she herself puts it: “I don’t paint people, I paint images.” Her sources range from the personal to the pornographic; from the medical to the political. Consisting of eerily rendered bodies and heads in thin washes of paint, ink or chalk, Dumas’s paintings approximate the genre of portraiture but her figures are stripped of any kind of individualizing features. Dumas’s portraits are, instead, rendered with a kind of dispassionate morbidity that is redolent of violence. A body or head in often sickly or garish colors and in broadly contoured outlines appears against a faint or blank backdrop. That her paintings seem bent on obliterating their photographic origins and reducing the figure to a lifeless prop, suggests that there is a profoundly social resonance to her work.



Figure 4.10.1.3.35: Single sheet from Marlene Dumas, *Models*, 1994, watercolor and ink wash on paper, 62 x 50 cm (Van Abbemuseum)

Models, 1994, is a case in point: it conjures up a catalogue of the dead and/or missing—an all too frequent reference point that underlines the global contemporary. Arranged in the form of a grid, *Models* presents 100 female faces as if they were the carefully

laid out heads of a morgue. Positioned on blank surfaces and retaining only a minimum of individualized features, each "model" stares frontally or is rotated to profile or three-quarter pose. Faces vary from light skinned to dark and some have pastel colored eyes, but these are not the warms blues, greens and browns one might expect: lavender or lime-green instead serves to only heightens the disconcerting appearance of these disembodied figures. Who are these so-called "models?" As Dumas describes it: "There are pictures of the insane, pictures of fashion models, you have pictures of my friends..." In her description, as in her painting, Dumas gives them equal treatment: one becomes virtually indistinguishable from the other.

Against Beauty

To unravel the meaning of this work, we might start with the title. What are we to make of it? Surely it is ironic. "Model" has a number of meanings—prominent among them is the life model, a venerable tradition in studio art. But Dumas dispenses with this approach; her models are not sourced from life. They are taken from polaroids (the friends she mentions), book illustrations (the "insane") and other sundry sources where clippings are readily available. The grim visages on display, casually acquired but so carefully reworked, suggest that Dumas is also not interested in idealized forms of beauty, as "model" might also suggest. Fashion models are the unobtainable standard of idealized female bodies in contemporary culture and have long been a site of intervention for feminist art. The term "model" in both popular culture and art history functions as an indicator of the "beautiful"—it means the female body perpetually displayed for the presumed male viewer.

One of the faces in *Models* is taken from an image of the feminist author Simone de Beauvoir and although it should not be taken as an overt symbol, it is clear that Dumas's critical interrogation of the "beautiful" is part of a feminist lineage in art that includes, to take only but a few examples, the photo-documented performance ***Carving—A Traditional Sculpture* (1971) by Eleanor Antin**, the photo-text work of **Lorna Simpson ("Twenty Questions (A Sampler) (1986)**, the self-portraits of **Cindy Sherman** or even the 1990s performances by **Vanessa Beecroft** where standing live models (actual models) were posed clad in heels with little else and faced an often awkward audience. But unlike her feminist counterparts who abandoned or rejected painting, Dumas compels us to consider the specific social force painting might have in contemporary culture. "I wanted to give more attention to what the painting does to the image, not only to what the image does to the painting" (as quoted in "**Who is Marlene Dumas**?" from Tate).

There is a deconstructive impulse in Dumas's work: she de-eroticizes the pornographic imagery she appropriates; she de-personalizes portraits of friends; she turns the image of a celebrity icon like Naomi Campbell into something strange and unrecognizable. Even her portraits of children tack towards the monstrous.

Troubling and compelling

Comparisons are often made to the German painter Gerhard Richter (**his notable series on the imprisoned Bader-Meinhof terrorist group** for example) as well as to Dumas's contemporary **Lucs Tuyman** whose faded paintings (indeed they look as if they are drained of color) seem to speak to a contemporary painting's inability to fully invoke scenes of political life. But Dumas's works provoke strong reactions. Is it because they speak so forcefully of violence done to persons? Persuasive arguments have been made that tie her work to the culture of apartheid she witnessed growing up as an Afrikaans-speaking Dutch descendant whose only access to the world was through print imagery (television did not come to South Africa until 1976). This certainly is a factor that underlines her work. But images of the dispossessed, the missing, and tortured are fairly routine fare in contemporary life.

Dumas's troubling images are compelling not because of the haunting figures they construct but because of her transformation of once discrete categories of portraiture into something almost unrecognizable. For example, we expect "model" as a term to not stray too far from a conventional meaning, and as an image we expect the subject to hew to certain conventions. In the interplay between photography and painting that exists in Dumas's work, the traditional function of portraiture is negated. It once served, in the history of oil painting, to commemorate the social status of an individual, to provide visual evidence of a marriage, or document the social bonds of family. In the nineteenth century photography usurped that job. The modern photographic portrait was supposed to capture something of the inner truth of the subject—one's psychological being. The poetic reveries of **Juliet Margaret Cameron** or the individualized studio portraits of **Felix Nadar** became the standard bearer for a newly emergent bourgeois identity where self trumped community. Photography's ability to capture likeness was soon harnessed by emerging ethnographic, psychological and jurisprudential discourses—criminals, and the insane all came under the powerful scientific gaze of the camera's lens.

The artist and critic Allan Sekula once described, in an influential essay, two exemplary modes of photographic representation, regimes of visibility one might say that determined, rather than represented, identity. One is honorific: the respectable bourgeois

portrait. The other is repressive: the cold mug shot of the criminal. In Dumas's painted portraits the subject that emerges is at once both and neither of these. In an increasingly uncertain global culture, Dumas paints the indeterminacies and terrors of social identity.

Shirin Neshat, *Rebellious Silence, Women of Allah* series

by DR. ALLISON YOUNG

In *Rebellious Silence*, the central figure's portrait is bisected along a vertical seam created by the long barrel of a rifle. Presumably the rifle is clasped in her hands near her lap, but the image is cropped so that the gun rises perpendicular to the lower edge of the photo and grazes her face at the lips, nose, and forehead. The woman's eyes stare intensely towards the viewer from both sides of this divide.

Shirin Neshat's photographic series *Women of Allah* examines the complexities of women's identities in the midst of a changing cultural landscape in the Middle East—both through the lens of Western representations of Muslim women, and through the more intimate subject of personal and religious conviction.

While the composition—defined by the hard edge of her black chador against the bright white background—appears sparse, measured and symmetrical, the split created by the weapon implies a more violent rupture or psychic fragmentation. A single subject, it suggests, might be host to internal contradictions alongside binaries such as tradition and modernity, East and West, beauty and violence. In the artist's own words, "every image, every woman's submissive gaze, suggests a far more complex and paradoxical reality behind the surface." [1]



Figure 4.10.1.3.36: Shirin Neshat, *Rebellious Silence, Women of Allah* series, 1994, black and white RC print and ink, photo by Cynthia Preston ©Shirin Neshat (courtesy Barbara Gladstone Gallery, New York and Brussels)

The *Women of Allah* series confronts this "paradoxical reality" through a haunting suite of black-and-white images. Each contains a set of four symbols that are associated with Western representations of the Muslim world: the veil, the gun, the text and the gaze. While these symbols have taken on a particular charge since 9/11, the series was created earlier and reflects changes that have taken place in the region since 1979, the year of the Islamic Revolution in Iran.

Islamic Revolution

Iran had been ruled by the Shah (Mohammad Reza Pahlavi), who took power in 1941 during the Second World War and reigned as King until 1979, when the Persian monarchy was overthrown by revolutionaries. His dictatorship was known for the violent repression of political and religious freedom, but also for its modernization of the country along Western cultural models. Post-war Iran was an ally of Britain and the United States, and was markedly progressive with regards to women's rights. The Shah's regime, however, steadily grew more restrictive, and revolutionaries eventually rose to abolish the monarchy in favor of a conservative

religious government headed by Ayatollah Khomeini.

Shirin Neshat was born in 1957 in the town of Qazvin. In line with the Shah's expansion of women's rights, her father prioritized his daughters' access to education, and the young artist attended a Catholic school where she learned about both Western and Iranian intellectual and cultural history. She left, however, in the mid-1970s, pursuing her studies in California as the environment in Iran grew increasingly hostile. It would be seventeen years before she returned to her homeland. When she did, she confronted a society that was completely opposed to the one that she had grown up in.

Looking back

One of the most visible signs of cultural change in Iran has been the requirement for all women to wear the veil in public. While many Muslim women find this practice empowering and affirmative of their religious identities, the veil has been coded in Western eyes as a sign of Islam's oppression of women. This opposition is made more clear, perhaps, when one considers the simultaneity of the Islamic Revolution with women's liberation movements in the U.S. and Europe, both developing throughout the 1970s. Neshat decided to explore this fraught symbol in her art as a way to reconcile her own conflicting feelings. In *Women of Allah*, initiated shortly after her return to Iran in 1991, the veil functions as both a symbol of freedom and of repression.

The veil and the gaze

The veil is intended to protect women's bodies from becoming the sexualized object of the male gaze, but it also protects women from being seen at all. The "gaze" in this context becomes a charged signifier of sexuality, sin, shame, and power. Neshat is cognizant of feminist theories that explain how the "male gaze" is normalized in visual and popular culture: Women's bodies are commonly paraded as objects of desire in advertising and film, available to be looked at without consequence. Many feminist artists have used the action of "gazing back" as a means to free the female body from this objectification. The gaze, here, might also reflect exotic fantasies of the East. In **Orientalist painting** of the eighteenth and nineteenth centuries, for instance, Eastern women are often depicted nude, surrounded by richly colored and patterned textiles and decorations; women are envisaged amongst other beautiful objects that can be possessed. In Neshat's images, women return the gaze, breaking free from centuries of subservience to male or European desire.



Figure 4.10.1.3.37: Shirin Neshat, *Faceless, Women of Allah* series, 1994, black and white RC print and ink, photo by Cynthia Preston ©Shirin Neshat (courtesy Barbara Gladstone Gallery, New York and Brussels)

Most of the subjects in the series are photographed holding a gun, sometimes passively, as in *Rebellious Silence*, and sometimes threateningly, with the muzzle pointed directly towards the camera lens. With the complex ideas of the "gaze" in mind, we might reflect on the double meaning of the word "shoot," and consider that the camera—especially during the colonial era—was used to violate women's bodies. The gun, aside from its obvious references to control, also represents religious martyrdom, a subject about which the artist feels ambivalently, as an outsider to Iranian revolutionary culture.

Poetry

The contradictions between piety and violence, empowerment and suppression, are most prevalent in the use of calligraphic text that is applied to each photograph. Western viewers who do not read Farsi may understand the calligraphy as an aesthetic signifier, a reference to the **importance of text** in the long history of Islamic art. Yet, most of the texts are transcriptions of poetry and other writings by women, which express multiple viewpoints and date both before and after the Revolution. Some of the texts that Neshat has chosen are feminist in nature. However, in *Rebellious Silence*, the script that runs across the artist's face is from Tahereh Saffarzadeh's poem "Allegiance with Wakefulness" which honors the conviction and bravery of martyrdom. Reflecting the paradoxical nature of each of these themes, histories and discourses, the photograph is both melancholic and powerful—invoking the quiet and intense beauty for which Neshat's work has become known.

As an outspoken, feminist and progressive artist, Neshat is aware that it would be dangerous to show her work in conservative modern-day Iran, and she has been living in exile in the United States since the 1990s. For audiences in the West, the "Women of Allah" series has allowed a more nuanced contemplation of common stereotypes and assumptions about Muslim women, and serves to challenge the suppression of female voices in any community.

[1] **Shirin Neshat, "Artist Statement," *Signs Journal*** (accessed July 2015)

Interactive Content

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this Interactive Content online

Video 4.10.1.3.4

Additional resources:

Neshat at Gladstone Gallery

Neshat on NPR (audio)

Neshat from LACMA

Interview with Neshat from PBS

Pepón Osorio, *En la barberia no se llora (No Crying Allowed in the Barbershop)*

by DR. MAYA JIMÉNEZ

The Puerto Rico born artist Pepón Osorio trained as a sociologist and became a social worker in the South Bronx. His work is inspired by each of these experiences and is rooted in the spaces, experiences, and people of American Latino culture, particularly Nuyorican communities (Nuyorican refers to the Puerto Rican diaspora living in New York, especially New York City). Osorio's large-scale installations are meant for a local audience, yet they have also been exhibited in mainstream cultural institutions (though after the 1993 Whitney Biennial, Osorio vowed to show his work first within the community, and then elsewhere).



Figure 4.10.1.3.38: Pepón Osorio, *En la barbaria no se llora (No Crying Allowed in the Barbershop)*, 1994 Installation at Real Art Ways, Hartford, Connecticut, mixed media installation with barbers' chairs, photographs, objects and videos (Collection of the Museum de Arte de Puerto Rico) (photo by Pepón Osorio)

Nuyorican

Puerto Rico is a United States territory. Its residents are United States citizens and carry an American passport, yet they cannot vote in presidential elections or have representatives voting for their interests in Washington. This sense of marginality is further complicated when one considers that Nuyoricans often retain a distinct sense of cultural pride that is informed by their dual American and Puerto Rican identities.

Having lived both experiences—that of a Puerto Rican and Nuyorican—Osorio is best known for large-scale installations that address street life, cultural clashes, and the rites of passage experienced by Puerto Ricans in the United States. Outside the traditional museum setting, and commissioned by Real Art Ways (RAW) from Hartford, Connecticut, *En la barberia no se llora* (*No Crying Allowed in the Babershop*) is a mixed-media installation located in the Puerto Rican community of Park Street in Hartford. Created in collaboration with local residents, Osorio engaged the public through conversation, workshops, and artistic collaborations. The art itself is visually lavish—his installations have often been dubbed "Nuyorican Baroque" (a reference to the seventeenth-century style characterized by theatricality and opulence and found in both Europe and Latin America).

Masculinity

Inspired from his first haircut in Santurce, Puerto Rico, Osorio recreates the space of the barbershop as one that is intensely packed with "masculine" symbols like barber chairs, car seats, sports paraphernalia, depictions of sperm and a boy's circumcision, phallic symbols, and male action figurines. Osorio boldly challenges the idea of masculinity, and particularly of machismo (a strong sense of masculine pride), in Latino communities.

Chucherías



Figure 4.10.1.3.39: Detail of Pepón Osorio, *The Scene of the Crime (Whose Crime?)* installation at The New Museum, 1993 (photo: **Hrag Vartanian**, CC BY-ND 2.0)

Spanish for trinkets or knick-knacks, and known to art historians as kitsch (mass produced objects characterized by—or ironically admired for—their bad taste), *chucherías* overpopulate Osorio's work. These include Puerto Rican flags, religious ornaments, plastic toys, dolls, ribbons, beads, etc., all of which function—to quote art historian Anna Indych-Lopez—as a "gesture of cultural resistance," presented as something universal yet personal.[1] The *chucherías* included in the installation *En la barberia no se llora*, (a flag, fake foliage, baseballs, framed portraits of famous Latin American and Latino men), serve to localize the work, yet these objects also raise issues of social class expressed here through taste, and the distinction between high and low art—effectively straddling a fine line between cultural celebration and social critique.

Video

One prominent aspect of *En la barberia no se llora* are the video installations featuring Latino men from Park Street in stereotypically "masculine" poses. The men vary in age. Osorio included older men from the retirement home, Casa del Elderly, presenting the issue of machismo as multi-generational and deeply ingrained in Nuyorican culture. As a foil to this construction, the artist also included videos of men crying, with the public reacting both in sympathy and disgust.

These same men then participated in workshops, in which they discussed how notions of masculinity had shaped their personal relationships as brothers, husbands, and fathers. Despite this participation of men, most of the visitors to the barbershop installation were, in fact, women.[2]

While *En la barberia no se llora (No Crying Allowed in the Babershop)* challenges definitions of masculinity, it also brings up—in a more subtle way—the relationship between machismo and homophobia, violence, and infidelity, and the ways in which popular culture, religion, and politics help craft these identities and issues.

1. "Nuyorican Baroque: Pepón Osorio's Chucherías," *Art Journal*, vol.60, issue 1, 2001, p. 75.

2. Erika Suderburg, Space, Site, Intervention: Situating Installation Art (University of Minnesota Press, 2000), p. 323.

Additional resources:

Pepón Osorio from art21 (video)

Pepón Osorio from the Ronald Feldman Gallery

Tracey Emin, *My Bed*

by DR. TOM FOLLAND

A Young British Artist

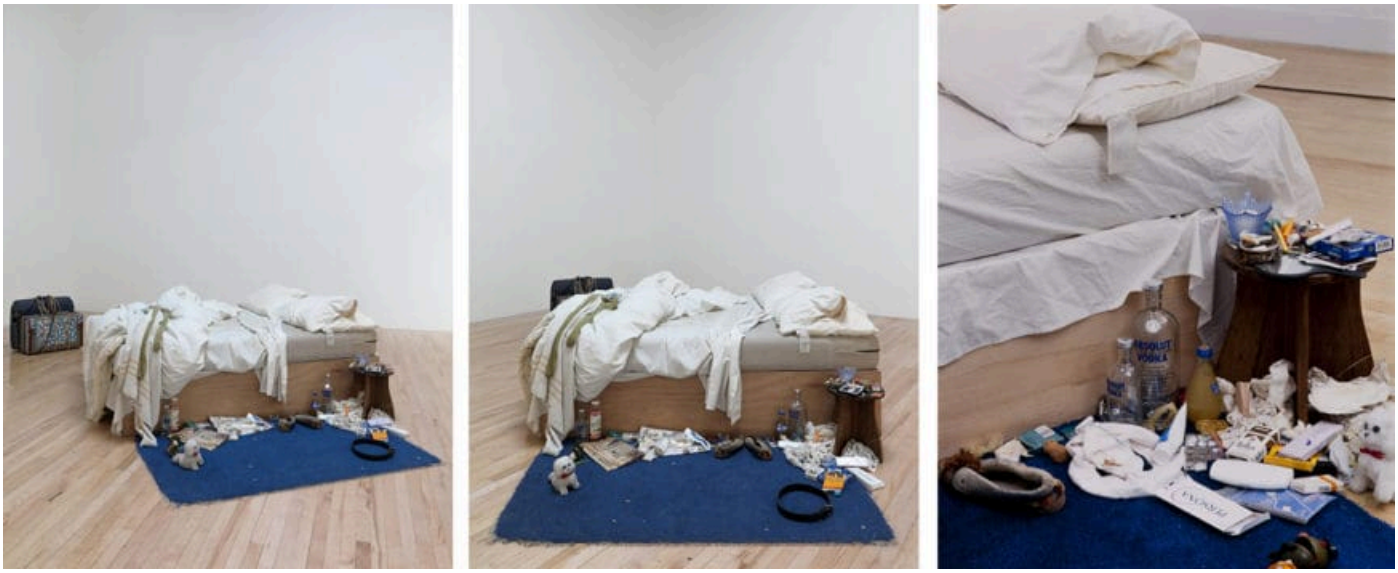


Figure 4.10.1.3.40: Tracey Emin, *My Bed*, 1998 (**Tate Britain**)

In 1998 the British artist Tracey Emin spent several days languishing in bed as the result of depression. When she emerged, she decided to turn the experience into art and the result was *My Bed*, an installation that consisted of her unmade bed and an assortment of sundry personal items associated with her time spent there. This was not the first time Emin made art about things that many would consider excruciatingly personal. She once exhibited, as art, a package of cigarettes belonging to an uncle killed in a car crash. In 1997, she created an installation entitled *Everyone I Have Ever Slept With 1963–1995*, which was a tent appliquéd with the requisite names. Parts of *My Bed* were so shocking—it included soiled underwear for example—that she became a tabloid sensation.



Figure 4.10.1.3.41: Tracey Emin, *Everyone I Have Ever Slept With 1963 – 1995,* 1995, appliquéd tent, mattress and light, 122 x 245 x 214 cm (**Saatchi Gallery**)

Emin was part of a group of artists who had studied at Goldsmith College and Royal College of Art in London and were dubbed the **YBAs** (Young British Artists). Members of this ad hoc group, including **Damien Hirst**, Sarah Lucas, Liam Gillick, and Gary Hume among others, very quickly coalesced into a movement, and began exhibiting together in warehouses and other informal spaces during the late 1980s. Hirst had organized the exhibition *Freeze*, widely acknowledged to have been the movement's origin, at an abandoned space in the London Docklands in 1988.



Figure 4.10.1.3.42: Damien Hirst, *Mother and Child (Divided)*, exhibition copy 2007 (original 1993), glass, stainless steel, Perspex, acrylic paint, cow, calf and formaldehyde solution, 2 parts: 208.6 × 322.5 × 109.2 cm, 208.6 × 322.5 × 109.2 cm (**Tate Britain**)



Figure 4.10.1.3.43: Sarah Lucas, *Self Portrait with Fried Eggs*, 1996, digital print on paper, 74.5 x 51.4 cm (**Tate Britain**)

YBA works quickly became associated with sensationalism and shock value, the impact of which was only heightened by the prevailing decade of **postmodern art** which, to a younger generation of artists, had increasingly become depersonalized and too reliant upon a dense theoretical framework. I remember an art school at the time in Canada issuing a call for work for a student exhibition with a list of caveats including "No hand wringing over the relationship between signifier and signified" (a reference to semiotic theory popular at the time). Everywhere it seemed a reaction to slick postmodernism was to be found in a return to a less technologically-mediated reality. The more visceral the better. Well-known YBA artworks include a calf suspended in formaldehyde (Damien Hirst), a sculpture of two fried eggs and a kebab arranged in the shape of a female body (Sarah Lucas) and of course Emin's *My Bed*, which scandalized a British public with its frank portrayal of the detritus of four days of depression spent in bed.

Shock value

Shock is of course not new in art; the art-going public have been routinely scandalized at least as far back as the nineteenth century, when artists first **went against accepted norms** for what constitutes art. The significance of Emin's installation, however, lies beyond its shock value. After all, shock is generally a short-lived phenomenon. Emin went on to become a nominee in 1999 for the Turner Prize, a prestigious visual arts award given annually in Britain. So what makes *My Bed* important as an artwork? Emin subjects to scrutiny one of the most abiding beliefs of art in Western modernism—the notion that art is always autobiographical, a reflection of the artist's inner being.



Figure 4.10.1.3.44: Albrecht Dürer, *Melencolia I*,1514, engraving, 24 x 18.5 cm (The Metropolitan Museum of Art)

As Western art increasingly became governed by more individualistic approaches to style and as religious and royal patronage gave way to the marketplace in the nineteenth century, the association of art with individual identity became an accepted norm. "Every painter paints himself" is a phrase known since the renaissance and it is a metaphor of this very idea that art is always an expression of the self at its core. But what does it actually mean? What aspect of self is expressed? When pressed, one is hard put to offer anything other than the most generic response: it represents emotions or feelings and perhaps a sensibility. What Emin does is take the meaning of self at its most literal sense and in the most provocative way possible. She does however present a portrait of the melancholic artist that references a tradition stretching as far back as the German renaissance artist Albrecht Dürer's 1514 engraving ***Melencolia I***, an allegorical winged female figure in a state of pensive gloom considered to be a portrait of the artist himself. But Emin's is an unvarnished and unidealized version of depression in which glorified myths of the artist are shed in favor of a frankly visceral portrait of an artist who has spent her days in bed drinking and having sex. Emin perverts that tradition and therein lies its challenge to conventional taste.

A new conceptual art



Figure 4.10.1.3.45: Chris Burden, *Through the Night Softly*, 1973, performance (**Gagosian**)

In the 1990s, as artists searched for new alternatives, many considered **conceptual art** of the 1970s an unfinished project. While rooted in conceptual art, postmodernism's focus on media spectacle and consumer objects had become too tied to a market-oriented idea of the art world. Artists began revisiting the strategies of earlier artists, particularly the more visceral bodily experience that was an important aspect of conceptual art. The unflinching realness of Emin's bed would not have been possible

in the postmodern '80s but it certainly existed in the 1970s when artists like Chris Burden crawled through broken glass (*Through the Night Softly*, 1973), or had himself nailed to the front of a car (*Trans-fixed*, 1974).



Figure 4.10.1.3.46: Vito Acconci, *Claim Performance,* 1971, graphite, pastel and black & white photograph collage mounted on board, 58 x 71 cm

From 1968 to 1971 **Valie Export** toured European cities with a structure made of styrofoam that allowed people to reach inside it and touch her breasts. The artist **Vito Acconci** had himself blindfolded in the basement of a gallery, and armed with metal pipes and a crowbar, would threaten to swing at anyone who came near (*Claim*, 1971). Challenging conventional ideas around artistic creativity, as these artists did, is, in fact, a venerable tradition in modern and contemporary art. Artists continually renew the conditions and parameters of what constitutes art or artistic authorship.

Much like conceptual artists who rejected the medium of painting as too conventional in favor of newer and more experimental forms and ideas, Emin had abandoned painting and even went so far as to destroy many of them. In a famous argument with artist and boyfriend Billy Childish, she referred to his paintings as "stuck" in time. In response, Childish formed a movement called "Stuckism" which promoted painting and creative expression while denouncing Emin's brand of conceptual art. "Stuckism" would prove to be short-lived, but Emin's *My Bed* would become one of the most resonant works of the 1990s.

Additional resources:

Read more about the YBAs at Smarthistory

Tracey Emin's works at Tate Britain

Kiki Smith, *Lying with the Wolf*

by DR. ALLISON YOUNG



Figure 4.10.1.3.47: Kiki Smith, *Lying with the Wolf*, 2001, ink and pencil on paper 88 x 73″ (Centre Pompidou, Paris) © Kiki Smith

This delicate but large-scale work on paper, which depicts a female nude reclining intimately alongside a wolf, represents the assimilation of several themes that Kiki Smith has explored throughout her decades-long career. Featuring an act of bonding between human and animal, the piece speaks not only to Smith's fascination with and reverence for the natural world, but also her noted interests in religious narratives and mythology, the history of figuration in western art, and contemporary notions of feminine domesticity, spiritual yearning, and sexual identity.

Lying with the Wolf is one in a short series of works executed between 2000 and 2002 that illustrates women's relationships with animals, drawing from representations found in visual, literary, and oral histories. Smith is most interested in narratives that speak to collectively shared mythologies; these include folk tales, biblical stories and Victorian literature, yet the once-familiar stories are then fragmented and conflated with one another to form new clusters of meaning and association.

Intimate Relationships with Nature



Figure 4.10.1.3.48: Kiki Smith, *Rapture,* 2001, bronze, 67-1/4 x 62 x 26-1/2″, edition of 3, © Kiki Smith

Many of Smith's works from this period feature a female protagonist who is based on Little Red Riding Hood as well Sainte Geneviève, the Patron Saint of Paris. Geneviève is herself often associated with Saint Francis of Assisi because of her close relationships with animals and her ability, in particular, to domesticate wolves.

Other works in the series include *Geneviève and the May Wolf*—a bronze sculpture in which a standing female figure calmly embraces the wolf—and *Rapture*, which is perhaps more closely aligned to Red Riding Hood, as it depicts a woman stepping out from the stomach of the recumbent creature.

The pair as depicted in *Lying with the Wolf*, however, seems locked in a more intimate embrace, as the wolf nuzzles affectionately into the nude woman's arms. She wraps herself around the animal's body in a gesture of comforting, her fingers stroking the soft fur beneath its ears and along the side of its stomach. The wolf's wildness is tamed, and both figures seem to nurture one another, floating within the abstract space of the textured paper surface upon which they are delicately drawn. Smith imbues a story that is normally quite violent with a kind of tenderness that is characteristic of her overall aesthetic.

Feminist Approaches to Narrative

It has been suggested by some critics that Smith's reinterpretations of Red Riding Hood and Sainte Geneviève represent a feminist approach to popular folktales. This is supported by her placement of "woman" amidst the natural world, but also, importantly, at a structural level: in the way in which the two narratives are fragmented and combined. Borrowing from divergent sources in order to forge a new storyline, Smith demonstrates the slippery relationship between a visual image and its multiple references, adopting a narrative style indebted to feminist re-writings of history.

As the curator Helaine Posner has explained: "Instead of presenting them in their traditional roles as predator and prey, Smith re-imagined these characters as companions, equals in purpose and scale." The distinction between "predator" and "prey" might be thought of as a metaphor for hierarchies of power in human relationships, which have traditionally been drawn along the lines of gender, race, and class. Because patriarchal societies typically grant more power to men, while requiring women to be submissive or dependent, we can think of this "overturning" in Smith's art as a political statement against such inequalities. The artistic narratives portrayed in her work are ones in which binaries are flipped and opposing qualities are merged; in so doing, Smith asserts a critical feminist position that favors the articulation of multiple meanings.

"Walking Around in a Garden"

"My career has stopped being linear. A couple of years ago, the story line or narrative fell apart..."[1]

As is the case with *Lying with the Wolf*, several of Smith's works integrate a diverse list of themes and motifs that she has accumulated over the course of her career. The artist continuously re-imagines tropes she has used in past works, with the result that her practice does not seem to progress through discrete artistic stages. Rather, she works in cycles and layers; she has described her career as an act of meandering, or "walking around in a garden."

Kiki Smith grew up in a vibrant artistic family; she is the daughter of the sculptor Tony Smith and the opera singer Jane Lawrence Smith. She has spoken fondly of the Victorian house in which she was raised in South Orange, New Jersey, and how it captured her young imagination, as a historical artifact with its own memories and indices to the past. The notion of "home" has been central to her practice, and she likens it to the human body, a theme that is pervasive across her oeuvre. Domesticity, fragility, and the humble materials of craft and folk arts feature strongly in her work.

Abjection and The Body

While Kiki Smith's early work is aligned with the collaborative and activist art scene of the 1980s, she became known for intimate explorations of the human body in the following decade, often through life-sized sculpture that honored the figural tradition in Western art.



Figure 4.10.1.3.49: Kiki Smith, *Blood Pool*, 1992, wax, gauze, and pigment, 42 x 24 x 16″, © Kiki Smith

These works emphasized the body's vulnerability and made reference to feminist theories of the "abject," which conceived of the body as a messy, porous, and boundary-less system. *Blood Pool*, for instance, features a small, apparently violated figure, huddled into a fetal position on the floor . Many other works of this period feature bodily fluids or marks of injury.

Mysticism and Mythologies

Throughout the 1990s, Smith would come to embrace her religious upbringing, creating works that are spiritual, ethereal, and markedly more decorative. Celestial motifs and references to the natural world became ubiquitous, although these themes are still deeply connected to the body. As an investigation of the body in its capacity for fertility, reproduction, and nurturing, this turn towards the natural environment would eventually lead Smith to her interest in animals and our connections to them.

Lying with the Wolf is an extension of this yearning to connect the earthly with the spiritual and the personal with the collective.

1. As quoted in Christopher Lyon, "Free Fall: Kiki Smith on Her Art" in *Kiki Smith*, ed. Helaine Posner and Christopher Lyon, New York, NY: The Monacelli Press, Inc: page 37.

Wangechi Mutu, *Preying Mantra*

by DR. SHAWNYA L. HARRIS



Figure 4.10.1.3.50: Wangechi Mutu, *Preying Mantra*, 2006, mixed media on mylar (Brooklyn Museum) © Wangechi Mutu, all rights reserved

Using the medium of collage, the artist Wangechi Mutu creates new worlds that re-imagine culture through the realm of fantasy.

Mutu was born in Nairobi, Kenya and educated in Europe and the United States. Her art is global in nature and she clearly relishes complicating both Western and non-Western cultural norms, questioning how we see gender, sexuality, and even cultural identity.

Wangechi Mutu's artistic practice includes video, installation, sculpture, and mixed-media collage. One of her recurrent themes concerns the violence of colonial domination in Africa (particularly in her native Kenya). Her images incorporate the female body, specifically an imagined "African" body, subjected to sexism and racism on a global scale.

Sources for Mutu's collages include fragments from fashion magazines, pornography, medical literature or even popular magazines such as National Geographic. Inspiration for her collages can be traced to the early photomontages of the German Dada artist Hannah Höch (below left) and the American artist Romare Bearden (below right). Mutu appreciates Bearden's use of collage—how it emphasizes community and the African American traditions found in jazz, while the spliced images in Höch's photomontages reflect Mutu's interest in disrupting societal convention in art. Mutu creates a space for exploring an informed consciousness about being "African" and female that incorporate these artists' techniques yet develops a new visual vocabulary.



Figure 4.10.1.3.50: Left: Hannah Höch, *Cut with the Kitchen Knife Dada Through the Last Weimar Beer-Belly Cultural Epoch of Germany*, collage, mixed media, 1919-1920 (Neue Nationalgalerie, Berlin); right: Romare Bearden, *The Calabash*, 1970, collage (Library of Congress)

Preying Mantra centers on female subjectivity, exoticism and the notion of hybridity—both in concept and imagery. Hybridity is a concept often used in postcolonial studies. It describes how mixing the cultures of colonized and the colonizer can produce a third space for newer and often disruptive understanding of cultural identity. Colonialism in Africa, which began in earnest in the nineteenth century, violently wrested power from Africans for the benefit of European nations through the enforcement of strict military and administrative controls. As colonialism waned during the mid-twentieth century, other social and political issues emerged. Mutu's work was shaped by this complex history and by issues such as the rights of women that came to the fore at the end of the century.

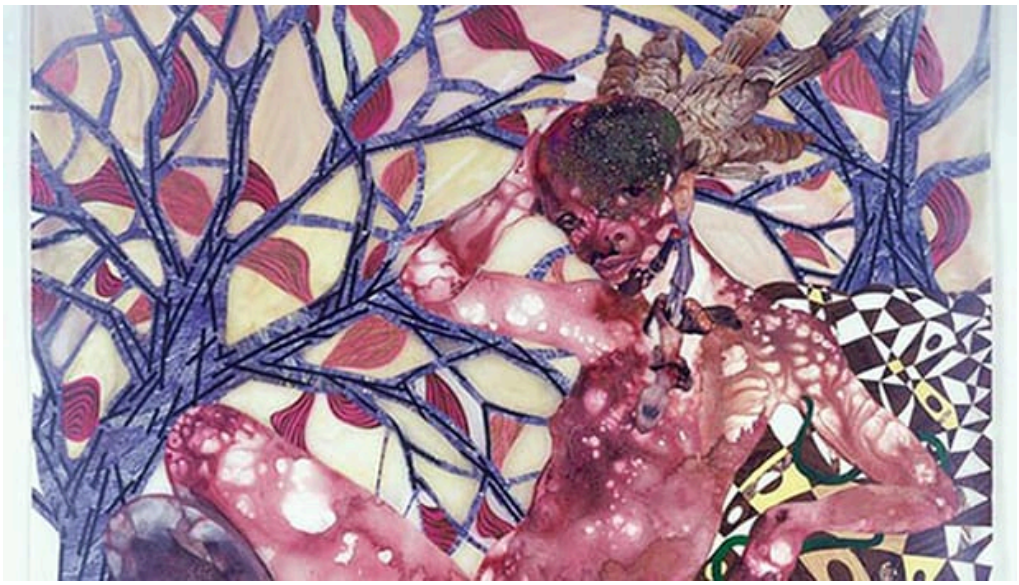


Figure 4.10.1.3.51: Wangechi Mutu, *Preying Mantra* (detail), 2006, mixed media on mylar (Brooklyn Museum) © Wangechi Mutu, all rights reserved

In Mutu's *Preying Mantra*, a female creature appears to recline on a geometrically patterned blanket that is sprawled between trees or perhaps on a tree branch. The blanket resembles a Kuba cloth (traditional fabric created by the Kuba people). Legs tightly crossed in front of her, the figure stares suggestively at the viewer with her right hand positioned behind her head, which is surmounted by a cone-like crown. Her relaxed posture is camouflaged by her skin, which appears dappled by sunlight and which mirrors the colors of the tree's leaves. Like the female body, the tree is emblematic of the creation myths found in many cultures, including Mutu's Kikuyu ancestors in Kenya. In her left hand, the figure holds a green serpent that rests on the blanket which fills much of the scene. The serpent, linked with the role of Eve in the biblical creation narrative, provides yet another cultural source for Mutu's protagonist. The tree envelops the female figure, reinforcing links between history and fiction, African and Non-African cultural myths as well as natural versus unnatural phenomena.



Figure 4.10.1.3.52: Wangechi Mutu, *Preying Mantra* (detail), 2006, mixed media on mylar (Brooklyn Museum) © Wangechi Mutu, all rights reserved

The title *Preying Mantra*, recalls the praying mantis—an insect that resembles the protagonist in Mutu's collage, with her prominently bent legs. As a carnivorous insect, praying mantises camouflage themselves to match their environment, snaring their prey with their enormous legs. During mating, the female can become a sexual cannibal—eating her submissive mate. Such imagery and its association with natural phenomena creates a primal sensibility. Despite this reference to a real praying mantis, Mutu's "preying mantra" is also vulnerable to our gaze, suggesting that the figure may be a victim that is "preyed" upon

by “mantras.” Mutu creates a natural, even primitive, fictional environment that entices and disturbs us even as she invites us to explore stereotypes about the African female body as explicitly sexual, dangerous, and aesthetically deformed in relation to Western standards. Given that elements of the collage are assembled from sociocultural documents found in popular literature from the West, the figure may be preying on the viewer’s own fears and desires.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.3.5

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.3.6

Additional resources:

This work at the Brooklyn Museum

Wangechi Mutu on Failure (Art21 Magazine)

Wangechi Mutu (Art21 Blog)

Wangechi Mutu + Santigold – The End of eating Everything – Nasher Museum at Duke, animated video by Mutu

Artist Breakfast With Wangechi Mutu (artnet video)

Wangechi Mutu: A Fantastic Journey (video from the Brooklyn Museum)

Trevor Schoonmaker, *Wangechi Mutu: A Fantastic Journey* (North Carolina: Nasher Museum of Art at Duke University, 2013)

Marina Abramović, *The Artist is Present*

by REBECCA TAYLOR



Figure 4.10.1.3.53: Marina Abramović sitting with Rebecca Taylor at *The Artist is Present* performance at The Museum of Modern Art, 2010

Transcendence

"Sit silently with the artist for a duration of your choosing"—so the instructions read on a small plaque in the second-floor atrium at The Museum of Modern Art. Behind the plaque, a queue of visitors forms, eager to enter a large square space—demarcated only by tape on the floor—to sit down at a wooden table across from a dark-haired woman in a navy-blue dress that conceals every part of her body save her face and her hands.

The woman is the pioneering artist Marina Abramović, but its likely that few of the people in line have any sense of this woman's indelible impact on contemporary art. As I wait, an anthology of her performances scrolling through my head. Watching her from afar, I look to see the courage and fearlessness in a woman capable of incising a five-pointed star on her own stomach, screaming until she loses consciousness, and living in a gallery for 12 days without food. Strangely, she doesn't seem reckless at all, but peaceful and wise. I then remember she trained with Tibetan Buddhists and has said she's able to transcend the limits of her own body and mind through meditation. She'll need these skills now more than ever as she attempts her longest performance-to-date, sitting at this table for every hour of every day that her retrospective is open at MoMA. No food. No water. No breaks.

My turn

So, I wait for my moment with the artist, a once-in-a-lifetime opportunity. A young girl is sitting across from Marina and the two seem engaged in a staring contest, though from that distance it's impossible to tell if they're actually making eye contact or simply staring ahead in a daze. Seventy-five minutes later she finally stands up and exits the square, declaring she lost all sense of time and thought it had only been a few minutes. Marina leans forward and closes her eyes, while the next sojourner steps forward and takes the empty seat. Marina sits up and another staring contest commences—this one lasting sixty-seven minutes. This process repeats—ten minutes, fifty-five minutes, twenty minutes, forty-five minutes, etc. Finally, the man in front of me takes the seat and I'm next. More than three hours from when I entered the succession I've seen only six people participate in the performance and more than thirty leave the line in frustration. The nameless, faceless strangers I queued with hours ago are now friends—an artist from Poughkeepsie, an art history undergrad from Chicago, a nurse from outside Philly—and we share our excitement as our turn approaches. Finally, after nearly four hours, my time has come.

I enter the square and approach the table, immediately noting the heat of the lights and the watchful eyes of the crowds gathered to gawk at the spectacle. I put my purse on the floor and take a seat. While Marina leans forward, I settle into the chair and imagine I'll last about ten minutes before I become either bored or totally uncomfortable. She begins to sit up and I try to prepare myself for the moment she opens her eyes. I have many skills, but sitting still and being silent are not traits I'm known for, so I was afraid: afraid of the judgment implicit in staring, afraid of the silence, afraid I wouldn't have the transformative experience that had captivated those before me, afraid, afraid, afraid. Her lids opened and our eyes locked, not in a stare but in a friendly gaze. For the first few minutes, I thought only about who this woman was—a renegade, a feminist, an inspiration—but quickly realized that those things were more about her persona than the person. I discarded my preconceived notions and expectations and, as

soon as I stopped thinking of her as an artist-celebrity, saw the woman behind the legend. We sat absolutely still in deafening silence, exchanging energy, and just being with each other. I've heard it said that couples married for decades can sit in silence and understand one another perfectly, but I'd never imagine that sort of intimacy could be possible between two total strangers. It is.

I could have stayed in that moment for hours but thought of my fellow line-mates, now friends, and decided it would be selfish to bask in this experience any longer. But, could I leave? It felt as rude as leaving a lecture in the middle. How would I leave? Abruptly just wouldn't do, so I said good-bye and thanked her. More than thirty minutes had passed, thirty minutes of epic silence I'll never forget.

Additional Resources:

MoMA exhibition website

"Performance Art Preserved, in the Flesh," *New York Times* article, 2010

Turning Uncle Tom's Cabin upside down, Alison Saar's Topsy

by DR. HALONA NORTON-WESTBROOK, TOLEDO MUSEUM OF ART and DR. BETH HARRIS

Jason and the Golden Fleece and the American anti-Slavery novel, Uncle Tom's Cabin combine to upend our own contemporary myths

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Additional resources

This sculpture at the museum

This page titled 4.10.1.3: Identity and the body is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12.3: Identity and the body by Smarthistory is licensed CC BY-NC-SA 4.0.

4.10.1.4: Banality and Kitsch

Banality and kitsch

Artists deploy mass-produced images to critique the impact of consumer culture and Modernism's disengagement with the everyday world.

1980 - now

Damien Hirst, *The Physical Impossibility of Death in the Mind of Someone Living*

by SAL KHAN, DR. BETH HARRIS and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.4.1: Damien Hirst, *The Physical Impossibility of Death in the Mind of Someone Living*, 1991

Jeff Koons, *Pink Panther*

by DR. TOM FOLLAND



Figure 4.10.1.4.1: Jeff Koons, *Pink Panther*, 1988, glazed porcelain, 104.1 x 52 x 48.2 cm (The Museum of Modern Art, New York) (photo: **LP**, CC BY-NC-ND 2.0)

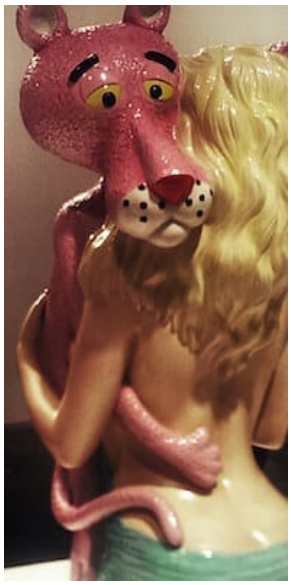


Figure 4.10.1.4.2: Jeff Koons, *Pink Panther*, 1988, glazed porcelain, 104.1 x 52 x 48.2 cm (The Museum of Modern Art, New York) (photo: **Jack Zalium**, CC BY-ND 2.0)

Banality

Imagine walking into an art gallery and seeing overgrown toys, or cartoon characters presented as sculpture. If, in 1988, you had wandered into the Sonnabend Gallery on West Broadway in New York City, this is indeed what you would have witnessed: it was an exhibition entitled "Banality" by New York artist Jeff Koons presenting some twenty sculptures in porcelain and polychromed wood. The work certainly strikes as an affront to taste: the sculptures are highly polished and gleaming. The colors—muted pale blue, pink, lavender, green and yellowish gold—seem to belong to the 1950s and 60s. The glossy textures look garish and factory-made, surfaces one associates with inexpensive commercial art. One would almost want to call these sculptures "figurines" were it not for their size. To add to this catalogue of horrors, the artist had farmed out the actual production to German and Italian artisans who made each work in triplicate! "Banality" thus debuted simultaneously in New York, Chicago, and Cologne.

A glazed porcelain statue entitled *Pink Panther* belongs to that body of work. It depicts a smiling, bare-breasted, blond woman scantily clad in a mint-green dress, head tilted back and to the left as if addressing a crowd of onlookers. The figure is based on the 1960s B-list Hollywood star Jayne Mansfield—here she clutches a limp pink panther in her left hand, while her right hand covers an exposed breast. From behind one sees that the pink panther has its head thrown over her shoulder and wears an expression of hapless weariness. It too is a product of Hollywood fantasy—the movie of the same name debuted the cartoon character in 1963. The colors are almost antiquated; do they harken back to the popular culture of a pre-civil rights era as a politically regressive statement of nostalgia? And what about the female figure—posed in a state of deshabille (carelessly and partially undressed)? At a time of increased feminist presence in the still male-dominated art world this could only be perceived as a rearguard move. Or was Koons—a postmodern provocateur like no other—simply parodying male authority as he had done in some of his other work?

Postmodernism: the artist as critic of mass culture



Figure 4.10.1.4.3: Cindy Sherman, *Untitled Film Still #2*, 1977, gelatin silver print, 24.1 x 19.2 cm (The Museum of Modern Art, New York)

Provocation is a mainstay of the modernist avant-gardes reaching at least as back as far as when Marcel Duchamp's *Fountain* of 1917, an ordinary urinal, was proposed as an artwork ("avant-garde" refers to artists whose work challenges established ideas). But whereas Duchamp eventually accrued near-mythical status, that same critical reception for Koons was not forthcoming—in fact, he would become one of the first artists of this period to achieve a level of success that depended more on the art market than on art criticism. He is still reviled. Only recently a review described Koons as "Duchamp with lots of ostentatious trimmings."[1] It's easy to see why he has continued to provoke: the postmodern 1980s inaugurated the contemporary sense of the artist as a critical and serious interrogator of mass culture and mass media. Cindy Sherman, one of the most prominent artists of that period, made photographs of herself that paraded the clichés of femininity before an audience that consumed critical theory about the constructed nature of reality and the oppressive manipulations of mass media. Her work was understood as a deconstruction (shorthand for the examination and analysis of the elements) of gender stereotypes. Another prominent postmodern artist of the period, Krzysztof Wodcizko, used high-powered projectors to cast politically charged imagery onto corporate façades after dark—imagery that often pointed to economic and social contradictions and prompted public discourse within an ephemeral and often provocative, public space.

Artists—postmodern artists—were supposed to counter the banality of evil that lurked behind public and popular culture, not giddily revel in it as Koons seemed to do. There appeared to be nothing serious about any of the works in the "Banality" exhibition: a life-sized bust of pop icon Michael Jackson and his pet monkey Bubbles; a ribbon-necked pig—especially egregious—in polychromed wood escorted by cherubic youths, two of which are winged. And of course *Pink Panther*, a work that seemed destined to insult rather than inform. It all seemed like kitsch posing as high art.



Figure 4.10.1.4.4: Jeff Koons, *Michael Jackson and Bubbles*, 1988, ceramic, glaze and paint, on view at Versailles, 2014 (photo: **Jean-Pierre Dalbéra**, CC BY 2.0)

Kitsch

What is kitsch? The American art critic Clement Greenberg once defined it as the opposite of what a truly progressive, avant-garde modernism embodied. Greenberg advocated for a modern art that was true to its materials, such as the gestural abstractions of New York School artists like Jackson Pollock, who splattered and spilled paint in abstract fashion on unprimed canvas—declaring a direct creative confrontation that was raw and honest. Kitsch, a word of German origin, refers to mass-produced imagery designed to please the broadest possible audience with objects of questionable taste (think of objects and images with popular, sentimental subject matter and style). Postmodern art attacked Greenberg's influential theory of modern art, creating images in direct opposition to modernism. While modernism championed painting, form and originality, postmodernism foregrounded photography, subject matter, and the reproduction, and responded to modernism's search for the profound by presenting the quotidian and banal aspects of experience. Postmodernism grounded the rarified atmosphere of genius that was prevalent in modernism in the politics of everyday life.



Figure 4.10.1.4.5: "A Little Boo Boo," Hummel figurine, porcelain

But postmodernism stopped short of fully embracing kitsch by insisting on a degree of self-aware critical distance. This is where Koons found a fault line that he fully exploited with works like *Pink Panther*. Hummel figurines and other popular collector's

items are the basis for the art in “Banality.” Koons rendered these saccharine and sentimental little figural groupings—cartoonish emblems of childhood innocence—at a life-size scale as an assault upon sincerity but also as an assault upon taste, and it is here that even the most daring of postmodern advocates drew a line in the sand. Like the modernist distinction between art and an everyday object drawn by Greenberg, *Pink Panther* challenged the distinction between an ironic appropriation of a mass-culture object and the object itself (seemingly without critical distance) thereby challenging the whole critical enterprise of postmodernism itself.

1. Jed Perl, “**The Cult of Jeff Koons**,” *The New York Review of Books*, September 25, 2014

Additional resources:

New York Times topic page: Jeff Koons

Jeff Koons (from art21)

“The Cult of Jeff Koons” from the NY Review of Books (2014)

Krzysztof Wodiczko: Projections (documentary video)

Jaune Quick-to-See Smith, *Trade (Gifts for Trading Land with White People)*

by DR. SUZANNE NEWMAN FRICKE



Figure 4.10.1.4.5: Jaune Quick-to-See Smith, *Trade (Gifts for Trading Land with White People)*, 1992, oil paint and mixed media, collage, objects, canvas, 152.4 x 431.8 cm (Chrysler Museum of Art, Norfolk, Virginia) © Jaune Quick-to-See Smith

A Non-Celebration

As a response to the 500th anniversary of Christopher Columbus’ arrival in North America in 1992, the artist Jaune Quick-to-See Smith, from the Confederated Salish and Kootenai Tribes of the Flathead Indian Nation, created a large mixed-media canvas called *Trade (Gifts for Trading Land with White People)*. *Trade*, part of the series “The Quincentenary Non-Celebration,” illustrates historical and contemporary inequities between Native Americans and the United States government.

Trade references the role of trade goods in allegorical stories like the acquisition of the island of Manhattan by Dutch colonists in 1626 from unnamed Native Americans in exchange for goods worth 60 guilders or $24.00. Though more apocryphal than true, this story has become part of American lore, suggesting that Native Americans had been lured off their lands by inexpensive trade

goods. The fundamental misunderstanding between the Native and non-Native worlds—especially the notion of private ownership of land—underlies *Trade*. Smith stated that if *Trade* could speak, it might say: "Why won't you consider trading the land we handed over to you for these silly trinkets that so honor us? Sound like a bad deal? Well, that's the deal you gave us."[1]



Figure 4.10.1.4.6: Jaune Quick-to-See Smith, canoe (detail), *Trade (Gifts for Trading Land with White People)*, 1992, oil paint and mixed media, collage, objects, canvas, 152.4 x 431.8 cm (Chrysler Museum of Art, Norfolk, Virginia) © Jaune Quick-to-See Smith

For *Trade*, Smith layered images, paint, and objects on the surface of the canvas, suggesting layers of history and complexity. Divided into three large panels, the triptych (three part) arrangement is reminiscent of a medieval altarpiece. Smith covered the canvas in collage, with newspaper articles about Native life cut out from her tribal paper *Char-Koosta,* photos, comics, tobacco and gum wrappers, fruit carton labels, ads, and pages from comic books, all of which feature stereotypical images of Native Americans. She mixed the collaged text with photos of deer, buffalo, and Native men in historic dress holding pipes with feathers in their hair, and an image of Ken Plenty Horses—a character from one of Smith's earlier pieces, the *Paper Dolls for a Post Columbian World with Ensembles Contributed by US Government* from 1991-92.



Figure 4.10.1.4.7: Jaune Quick-to-See Smith, toys and souvenirs (detail), *Trade (Gifts for Trading Land with White People)*, 1992, oil paint and mixed media, collage, objects, canvas, 152.4 x 431.8 cm (Chrysler Museum of Art, Norfolk, Virginia) © Jaune Quick-to-See Smith

She applied blocks of white, yellow, green, and especially red paint over the layer of collaged materials. The color red had multiple meanings for Smith, referring to her Native heritage as well as to blood, warfare, anger, and sacrifice. With the emphasis on prominent brushstrokes and the dripping blocks of paint, Smith cited the Abstract Expressionist movement from the 1940s and 50s with raw brushstrokes describing deep emotions and social chaos. For a final layer, she painted the outline of an almost life-

sized canoe. Canoes were used by Native Americans as well as non-Native explorers and traders in the eighteenth, nineteenth and early twentieth century to travel along the waterways of North America. The canoe suggests the possibility of trade and cultural connections—though this empty canoe is stuck, unable to move.



Figure 4.10.1.4.8: Jaune Quick-to-See Smith, toys and souvenirs (detail), *Trade (Gifts for Trading Land with White People)*, 1992, oil paint and mixed media, collage, objects, canvas, 152.4 x 431.8 cm (Chrysler Museum of Art, Norfolk, Virginia) © Jaune Quick-to-See Smith

Above the canvas, Smith strung a clothesline from which she dangled a variety of Native-themed toys and souvenirs, especially from sports teams with Native American mascots. The items include toy tomahawks, a child's headdress with brightly dyed feathers, Red Man chewing tobacco, a Washington Redskins cap and license plate, a Florida State Seminoles bumper sticker, a Cleveland Indian pennant and cap, an Atlanta Braves license plate, a beaded belt, a toy quiver with an arrow, and a plastic Indian doll. Smith offers these cheap goods in exchange for the lands that were lost, reversing the historic sale of land for trinkets. These items also serve as reminders of how Native life has been commodified, turning Native cultural objects into cheap items sold without a true understanding of what the original meanings were.

The Artist

The artist was born on January 15, 1940, at the St. Ignatius Jesuit Missionary on the Reservation of the Flathead Nation. Raised by her father, a rodeo rider and horse trader, Smith was one of eleven children. Her first name comes from the French word for "yellow" (jaune), a reminder of her French-Cree ancestors. Her middle name "Quick-to-See" was not a reference to her eyesight but was given by her Shoshone grandmother as a sign of her ability to grasp things readily. From an early age Smith wanted to be an artist; as a child, she had herself photographed while dressed as Henri de Toulouse-Lautrec. Though her father was not literate, education was important to Smith.



Figure 4.10.1.4.9: National Bison Range (near St. Ignatius, Flathead Reservation) (photo: **Jaix Chaix**, Check All Home Inspection Corp., CC BY-SA 2.0)

She received a bachelor of arts from Framingham State College in Massachusetts in 1976 in art education rather than in studio art because her instructors told her that no woman could have a career as an artist, though they acknowledged that she was more skilled than the men in her class. In 1980 she received a master of fine arts from the University of New Mexico. She was inspired by both Native and non-Native sources, including petroglyphs, Plains leger art, Diné saddle blankets, early Charles Russell prints of western landscapes, and paintings by twentieth-century artists such as Paul Klee, Joan Miró, Willem DeKooning, Jasper Johns, and especially Kurt Schwitters and Robert Rauschenberg (see image below). Both Schwitters and Rauschenberg brought objects from the quotidian world into their work, such as tickets, cigarette wrappers, and string.



Figure 4.10.1.4.10: Robert Rauschenberg, *Canyon,* 1959, oil, pencil, paper, metal, photograph, fabric, wood, canvas, buttons, mirror, taxidermied eagle, cardboard, pillow, paint tube and other materials, 207.6 x 177.8 x 61 cm (The Museum of Modern Art, New York) © 2014 Robert Rauschenberg Foundation

In addition to her work as an artist, Smith has curated over thirty exhibitions to promote and highlight the art of other Native artists. She has also lectured extensively, been an artist-in-residence at numerous universities, and has taught art at the Institute of American Indian Arts in Santa Fe, New Mexico the only four-year university dedicated to teaching Native youth across North America. In her years as an artist, Smith has received many honors, including an Eitelijorg Fellowship in 2007, a grant from the Joan Mitchell Foundation to create a comprehensive archive of her work, a Lifetime Achievement Award from the Women's Caucus for the Arts, the College Art Association's Committee on Women in the Arts award, the 2005 New Mexico Governor's

award for excellence in the arts, as well as four honorary doctorate degrees.

Smith's art shares her view of the world, offering her personal perspective as an artist, a Native American, and a woman. Her work creates a dialogue between the art and its viewers and explores issues of Native identity as it is seen by both Native Americans and non-Natives. *Trade (Gifts for Trading Land with White People)* restates the standard narratives of the history of the United States, specifically the desire to expand beyond "sea to shining sea," as encompassed in the ideology of Manifest Destiny (the belief in the destiny of Western expansion), and raises the issue of contemporary inequities that are rooted in colonial experience.

1. Arlene Hirschfelder, ***Artists and Craftspeople, American Indian Lives***, New York: Facts On File, 1994, page 115.

Additional resources:

Jaune Quick-to-See Smith at the Smithsonian American Art Museum

"Smith, Jaune Quick-to-See" in American Indian History Online

Lawrence Abbot, *I Stand in the Center of the Good: Interviews with Contemporary Native American Artists,* University of Nebraska Press: Lincoln, 1994.

Carolyn Kastner, *Jaune Quick-to-See Smith: An American Modernist,* University of New Mexico Press: Albuquerque, 2013.

Melanie Herzog, "Building Bridges Across Canada: Jaune Quick-to-See Smith." *School Arts* (October 1992): 31–34.

Tricia Hurst, "Crossing Bridges: Jaune Quick-to-See Smith, Helen Hardin, Jean Bales." *Southwest Art*, April 1981, 82–91.

Tricia Hurst, "Jaune Quick-to-See Smith," January 17–March 14, 1993. Norfolk, Virginia: Chrysler Museum, 1993.

Joni L. Murphy, "Beyond Sweetgrass: The Life and Art of Jaune Quick-To-See Smith." Ph.D. dissertation. University of Kansas, 2008.

Michel Tuffery, *Pisupo Lua Afe (Corned Beef 2000)*

by DR. BILLIE LYTHBERG



Figure 4.10.1.4.11: Michel Tuffery, *Pisupo Lua Afe (Corned Beef 2000)*, 1994, flattened cans of corned beef (Museum of New Zealand Te Papa Tongarewa Collection) ©Michael Tuffery

What can a tin can bull teach us about ecological and population health issues in the Pacific? Michel Tuffery is one of New Zealand's best-known artists of Pacific descent, with links to Samoa, Rarotonga and Tahiti. He majored in printmaking at

Dunedin's School of Fine Arts, and describes art quite literally as his first language because he didn't read, write or speak until he was 6 years old. Encouraged instead to express himself through drawing, he now aims artworks like *Pisupo Lua Afe* primarily at children, hoping to engage their curiosity and inspire them to care for both their own health and that of the environment.

Pisupo Lua Afe is one of Tuffery's most iconic works, made from hundreds of flattened corned beef tins, riveted together to form a series of life-sized bulls. Despite evident connections to Pop Art, especially Andy Warhol's celebrations of the humble *Campbell's Soup Cans* (1962), it's impossible to read this work solely in the terms of Western art history. So what is Tuffery trying to tell us?

Pisupo—canned food in the Pacific

Pisupo is the Samoan language version of "pea soup," which was the first canned food introduced into the Pacific Islands. *Pisupo* is now a generic term used to describe the many types of canned food that are eaten in the Islands—including corned beef. Not only is corned beef a favorite food source in the Islands, it has also become a ubiquitous part of the ceremonial gift economy. At weddings and birthdays, and other important life events both in the Islands and in Islander communities in New Zealand, gifts of treasured textiles like fine mats and decorated barkcloths are made alongside food items and cash money. But unlike the Island feast foods gifted at these events—such as pigs and large quantities of root vegetables—canned corned beef is a processed food high in saturated fat, salt and cholesterol (a type of fat that clogs arteries). These are all things that contribute to disproportionately high incidences of diabetes and heart disease in Pacific Island populations as diets formerly high in locally grown fruits and vegetables, seafood, coconut milk and flesh, give way to cheap, imported foodstuffs.

So Tuffery's sculpture is impossible to separate from the ceremonies at which brightly colored tins of corned beef now figure in large quantities. But these links to traditional economic exchanges and population health only tell part of the story. *Pisupo Lua Afe* also critiques serious issues of ecological health and food sovereignty. Tuffery is interested in the introduction of cattle to New Zealand and the Pacific Islands and how they impact negatively on the plants, landscapes and waterways of these countries, as well as how industrialized approaches to farming disrupt traditional food production.



Figure 4.10.1.4.12: Michel Tuffery, *Pisupo Lua Afe (Corned Beef 2000)*, 1994, flattened cans of corned beef (Museum of New Zealand Te Papa Tongarewa Collection) ©Michael Tuffery

Look at *Pisupo Lua Afe*. It's literally a "tinned bull"—solid, hard-edged and weighty. Whereas a real cow has a visual softness suggested by its movements, eyes and coat, Tuffery's tin cans and rivets—overlapping like large metal scales— better convey the capacity of beef and dairy cattle to destroy fragile island eco-systems. Look closer—single out just one flattened can. Think about all the cans that were emptied to make *Pisupo Lua Afe*. Then think about all the cans that are emptied and discarded in the Pacific Islands each year. Tuffery is gesturing rather obviously towards the challenge of rubbish disposal in Island economies where creative "upcycling" of materials into new objects is often more common than the civic recycling regimes of larger cities and countries (upcycling refers to reusing discarded objects to create a product of a higher value). What use is there for thousands of empty tin cans? And what use are foods that cause ill health, damage the environment, and take up large swathes of land formerly used to grow healthier, indigenous foods? Especially when the Pacific Island nations under Tuffery's scrutiny are recipients of some of the worst products of such agricultural farming: fatty lamb flaps and turkey tails, and tinned corned beef.

Food sovereignty

Food sovereignty (sometimes called food security) is a great lens through which to view the various threads of traditional economic exchanges, population health, environmental degradation and industrialized food production introduced so far. Food sovereignty is the right of a nation and its peoples to decide who controls how, where and by whom their food is to be produced, and what that food will be. For Indigenous peoples in the Pacific, food and the environment are sacred gifts. There cannot be food sovereignty without control over food production and ownership, and without appropriate care of the environment.

Alongside *Pisupo Lua Afe* and his other tin can bulls, Tuffery has produced many artworks that address challenges to food sovereignty and the continued exploitation of Pacific Island resources, including the **taro leaf blight epidemic** in Samoa in 1993, and **drift net fishing** that is depleting fish stocks. For example, he's made fish tin sculptures, like his "tinned bull," which upcycle cans that hold another "staple" food in the Pacific: tinned mackerel. Tuffery made two of these for an exhibition called **Le Folauga**, shown in Auckland, New Zealand in 2007, which are now in the collection of the Auckland War Memorial Museum.

Michael Tuffery, <em
Asiasi [Yellowfin] II (2000), fish cans, copper, aluminium and polyurethane, 60 x 250 x 100 cm (Museum of New Zealand Te Papa Tongarewa Collection) ©Michael Tuffery" aria-describedby="caption-attachment-12491" height="336" sizes="(max-width: 629px) 100vw, 629px" src="
https://smarthistory.org/wp-content/...hel_tuna_L.jpg
" srcset="
https://smarthistory.org/wp-content/...hel_tuna_L.jpg
629w,
https://smarthistory.org/wp-content/..._L-300x160.jpg
300w" width="629">

Figure 4.10.1.4.13: Michael Tuffery, *Asiasi [Yellowfin] II (2000)*, fish cans, copper, aluminium and polyurethane, 60 x 250 x 100 cm (Museum of New Zealand Te Papa Tongarewa Collection) ©Michael Tuffery

In the exhibition's catalogue he explained:

> ***O le Saosao Lapo'a* and *Asiasi I* reflect on the ironic and irreversible impact that over-fishing and exploitation of the Pacific's natural resources has wrought on the traditional Pacific lifestyle. This includes changing virtually overnight the dietary habits of generations.**
>
> **Is it co-incidental that significantly increasing health and dietary problems amongst Pacific Islanders has occurred during the same period that their premium fisheries catches are exported? And at the same time locals have experienced explosive growth of canned & other imported products flooding into the Pacific?**

Tuffery states the aims of his works very clearly. His fish tin sculptures are perhaps even more interesting and evocative because they are also functional fish-smokers used to cure and preserve fish. They have been used in this way at his exhibition openings, bringing a smoky, wood- and fish-scented haze to the gallery experience.

Firebreathing bulls?

Tuffery has also brought his "tinned beef" bulls to smoky life in various performative installations throughout the world, by installing fireworks inside their heads to give them the appearance of breathing fire. Mounted on castors with their necks articulated so their heads can be turned, he has staged bullfights with his fire breathing monsters, accompanied by drummers and groups of human performers issuing fierce challenges. But these performances have not been restricted to the sanctuary of the white walled gallery—these were performed outdoors, on city streets, to reach a community that might not otherwise come into the gallery to encounter his work.

Additional resources:

This work at the Museum of New Zealand

Waking up the Objects—Michel Tuffery talks about his practice (video)

Tales from Te Papa: *Pisupo Lua Afe* Michel Tuffery's fish tin sculptures (*Le Folauga*) (video)

Michel Tuffery and Patrice Kaikilekofe's artist performance *Povi tau vaga (The challenge)* 1999

Issue-based Assemblage Sculpture: *Pisupo lua afe (Corned Beef 2000)*, 1994 from the New Zealand Ministry of Education

Jennifer Hay, "*Povi Christlike (Christchurch Bull)* by Michael Tuffery"

Biography of the artist

More on Michael Tuffery from Tautai

Thiebaud, *Ponds and Streams*

by DR. LAUREN PALMOR, FINE ARTS MUSEUMS OF SAN FRANCISCO and DR. STEVEN ZUCKER

Can the commonplace working farmland of California's Sacramento River Valley be a place of of breathtaking beauty?

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.4.2: Wayne Thiebaud, *Ponds and Streams*, 2001, acrylic on canvas, 182.9 x 152.4 cm (Fine Arts Museums of San Francisco, ©Wayne Thiebaud), a Seeing America video

Jeff Wall, *A View from an Apartment*

by DR. VIRGINIA B. SPIVEY



Figure 4.10.1.4.14: Jeff Wall, *A View from an Apartment*, 2004-05, transparency on lightbox, 1670 x 2440 mm © Jeff Wall, used by permission of the artist, special thanks to Sandy Heller, The Heller Group, LLC (Tate, London)

Jeff Wall's *A View from an Apartment* is a large photographic transparency displayed on an electric light-box. Characteristic of Wall's work, this format offers sharp figures in rich saturated colors, made even more intense by the lights that illuminate the

image from behind. At almost 5 ½' x 8', the photograph approaches human scale. It's as though the viewer could simply walk into the scene—or that the women in the image might walk out.

At first glance, this appears to be an ordinary genre scene. The large scale and striking detail draw the viewer closer to examine the image—the modern decor, the half-finished laundry, a cluttered coffee table. One woman walks forward while folding a cloth napkin; another pauses at a magazine page that's momentarily caught her eye. And, in the background, framed by the large picture window, is a panoramic view of Vancouver's harbor just outside.

Photography as Painting

Wall was trained as a painter and art historian and became known in the 1970s alongside artists like Cindy Sherman and Sherrie Levine. Influenced by conceptual art practices, as well as the pervasiveness of film and the mass media, this generation of artists turned to photography as a way to challenge our expectations about images and their meaning, and our assumption that the camera never lies.

A View from an Apartment initially evokes the larger-than-life feel of a film or an advertising billboard; but, in many ways, Wall's photograph has more in common with painting. Its monumental presentation and implicit narrative recall the academic tradition of history painting, where artists idealized their imagery in order to glorify individuals and important events of the past. Moreover, like a painter, Wall carefully composed the photograph to direct our gaze and frame key elements in the scene. The repeated diagonal lines of the television, the shelves above, and the basket below pull our eye to the standing woman. Her forward motion leads us to the sitting area, which, in turn, draws our attention up to the window and the view outside.



Figure 4.10.1.4.15: Édouard Manet, *A Bar at the Folies-Bergère*, oil on canvas, 1882, 96 x 130 cm (Courtauld Gallery, London)

Wall's work might also be compared to Realism of the 19th century. Like Édouard Manet, Wall depicts common scenes of modern life, thus elevating contemporary experience to the fine art status of the classical past. Realists like Manet challenged established artistic values by rejecting illusionistic painting techniques of the past. Wall issues a similar critique through his practice to deliberately stage his photographs. In *A View from an Apartment*, the artist gave his model a budget to furnish and live in the apartment, which he then photographed over several months. He used digital editing to combine multiple shots to achieve the final image. This creative process forces us to question the photograph's value as an accurate record of the scene, and effectively demonstrates the artifice inherent to established traditions of art.

The Transparent Window

For all of Wall's careful planning of the interior, the titular view of the harbor most distinguishes *A View from an Apartment*. Framed by the window, the harbor scene contrasts dramatically to the mundanity of life inside. This picture within a picture forces us to examine fundamental questions about art, its ability to represent the world around us, and our own relationship to those surroundings.

Illusionism in traditional art teaches that a painting is like a window on the world. The picture plane dissolves to reveal a distant expanse before us. But, in Wall's work, the photographic image denies such illusionism by presenting an actual landscape,

mechanically captured by the artist's camera. It also heightens spatial ambiguity in the work. Here the photograph's planar surface does not dissolve; rather the window is clearly real, evidenced by light reflected from lamps inside the apartment. The transparent window paradoxically calls attention to the solid apartment wall that separates the figures from the outside world, a barrier underscored by the women's obliviousness to the vista the viewer enjoys while standing before the photograph.



Figure 4.10.1.4.16: Richard Estes, *Telephone Booths*, 1967, acrylic on masonite, 122 x 175.3 cm (Museo Thyssen-Bornemisza, Madrid)

Wall's use of the apartment view to create a discourse on art's illusionism finds a place within this important recurring theme in art history. Painters, from Diego Velasquez in the 17th century and Henri Matisse in the 20th century raised similar questions by revealing the distance between reality and their representations of the real. In the 1970s, photorealists like Richard Estes drew on photographic images to highlight the ambiguity and formal play found in representational painting. Wall contributes to this on-going tradition through his references to modern cinema, mass advertising, and the role of photography in popular culture. His work reminds us to think twice about the images we see everyday. In the age of Photoshop, Instagram, and digital proliferation, what is real, and what is not, seems always to be in play.

Additional Resources:

This photograph at the Tate

Photographer Jeff Wall's best shot, the Guardian Newspaper

Roberta Smith review of "Jeff Wall: In His Own Words" exhibition at The Museum of Modern Art, The New York Times

Site for "Jeff Wall: In His Own Words" exhibition at The Museum of Modern Art

Stéphane Couturier, *Fenetre, Eastlake Greens, San Diego*

by ELIZABETH GERBER, LACMA and DR. STEVEN ZUCKER

Building the American dream in the California desert.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.4.3: Stéphane Couturier, *Fenetre, Eastlake Greens, San Diego*, edition 4/8, 2001, dye coupler print, 130.81 x 107.95 x 2.54 cm (Los Angeles County Museum of Art, © Stéphane Couturier)

This painting at the Los Angeles County Museum of Art

The artist's website

Nari Ward, We the People (black version)

by DR. MINDY BESAW, CRYSTAL BRIDGES MUSEUM OF AMERICAN ART and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.4.4: Nari Ward, We the People (black version), 2015, shoelaces, 8 × 27 feet (Crystal Bridges Museum of American Art), a Seeing America video

This page titled 4.10.1.4: Banality and Kitsch is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12.4: Banality and Kitsch by Smarthistory is licensed CC BY-NC-SA 4.0.

4.10.1.5: Ritual, spirituality, and transcendence

Ritual, spirituality, and transcendence

Spirituality remains important, but it takes on new forms in the global contemporary era.

1980 - present

Roger Minick, *Woman with Scarf at Inspiration Point, Yosemite National Park*

by ELIZABETH GERBER, LACMA and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.5.1: Roger Minick, *Woman with Scarf at Inspiration Point, Yosemite National Park* (Sightseer series), 1980, dye coupler print, 38.1 x 43.18 cm, ©Roger Minick (Los Angeles County Museum of Art), a *Seeing America* video

Additional resources:

This photograph at LACMA

The artist's website

Mariko Mori, *Pure Land*

by KATRINA KLAASMEYER

Floating on a lotus blossom

Set within a golden landscape, a female figure serenely floats above a lotus blossom while six alien musicians whirl by on bubbly clouds. Her pink robes mirror the predominantly pale orange, yellow and pink of the water, land and sky—firmly embedding her within the tranquil scene. *Pure Land,* a photograph set within glass, is the counterpart of Mori's three-dimensional video installation, *Nirvana*, 1997. *Nirvana* animates the imagery we see in *Pure Land*. Viewed within a darkened room with the aid of three-dimensional glasses, *Nirvana*'s audience was limited to a group of 20 people at a time. During the seven minute video, the central female figure would hum and whisper echoed rhythms as if meditating, while the little musicians floated around her. At the conclusion, a fan came on and blew cool, scented air into the audience's faces. Through the integration of sensory elements such as three-dimensional imagery, sound, scent, and the gentle touch of a breeze, combined with the limited viewing audience, *Nirvana* created an immersive, intimate experience. As its photographic counterpart, *Pure Land* captures a moment of this experience, enabling the viewer a longer, perhaps more meditative, relationship with the work.



Figure 4.10.1.5.1: Mariko Mori, *Pure Land*, 1996-98, glass with photo interlayer, 305 x 610 x 2.2 cm



Figure 4.10.1.5.2: Mariko Mori, *Enlightenment Capsule*, 1996-1998, plastic, solar transmitting device, fiber optic cables, 108 x 83 x 83 inches

Symbolism and spiritual allusions

Every element we see here has significance that may not be apparent at first glance—the serene landscape, with its golden sky, smooth pink land masses, and perfectly still water, is rich with symbolism. *Pure Land* is set during sunrise in the landscape of the Dead Sea, the lowest point on earth, called "dead" because the high salinity of its water does not support fish or plant life. In Shinto tradition, salt is used as an agent of purification. Floating in the water is a lotus blossom—symbol of purity and rebirth into paradise. This blossom resembles one in Mori's 1998 sculptural installation, *Enlightenment Capsule* (left), which featured a rainbow-colored acrylic lotus blossom set within a space-age capsule illuminated by sunlight. In both *Enlightenment Capsule* and *Pure Land* Mori blends traditional symbolism with futuristic elements. On the right hand side of the background of *Pure Land*is a fantastical object which resembles a playful futuristic spacecraft with arms. This may be a variation of a **Tibetan stupa**—a sacred Buddhist monument originally used as a burial mound. Through her imaginative reinterpretation of symbols steeped in tradition, the artist creates a timeless setting appropriate for meditation on death, purification, and rebirth.

Immersion

The distant horizon line, combined with the larger island in the foreground that seems to continue into the viewer's space, create a sense of immersion, as if one were present with these fantastical figures. Perhaps this feeling of personal involvement ties in with the title itself, *Pure Land,* which is the paradise of Amida (or Amitabha) Buddha who descends to greet devotees at the moment of their death and takes them back to his "Pure Land of Perfect Bliss."



Figure 4.10.1.5.3: Descent of Amitabha and the Heavenly Multitude, Heian period, 12th century, National Treasure (Yushi Hachiman Ko)

Beginning with the eleventh century in Japan, several paintings and sculptures were made on this theme, such as the *Descent of Amida and the Heavenly Multitude* (above). In this type of imagery, Amida Buddha, resting on a lotus blossom and holding his hands in a symbolic gesture known as a mudra, is typically surrounded by celestial attendants in a sea of swirling clouds. These attendants are boddhisattvas, enlightened beings who act out of great compassion to help others achieve enlightenment. In a sculptural example from Byodo-in Temple, 52 boddhisattvas fly on clouds on either side of Amida Buddha (below); some are seated quietly with their hands joined in prayer, some hold a lotus blossom to receive the soul of the deceased, while others are playing musical instruments.



Figure 4.10.1.5.4: Jōchō, Amida Buddha, Heian Period, c. 1053, wood covered with wood leaf, 295 cm (Phoenix Hall, Byodo-in, Kyoto)

Oneness and universality



Figure 4.10.1.5.5: Mark Mori, *Oneness* , on exhibit in 2007 at the Grand Duke Jean Museum of Modern Art, Luxembourg (MUDAM) (**photo: Mark Weston** , CC BY-NC-ND 2.0)

In Mori's version, these celestial attendants are pastel-colored alien figures with large pointy heads and delicate bodies. Each figure plays a different instrument as they float on their light blue bubbly clouds. The two musicians in the foreground are blurred, as if they are flying quickly toward the viewer. These muscians appear again in a later sculptural installation by Mori, *Oneness* , 2003 (left). In this work, the six aliens are given three-dimensional form, complete with soft, flesh-like material. They stand in a circle facing outward as they hold each other's hands. The viewer becomes an active participant in the work — when a person hugs one of the figures, its eyes light up and you feel its heartbeat. As in the Nirvana video installation upon which *Pure Land* is based, Mori seems to want to engage more than just the viewer's sense of sight and for each participant to have a direct experience with the artwork. Perhaps more significantly, *Oneness* is a metaphor for bringing in the outsider, achieved through revealing commonalities of experience. The binding together of seemingly disparate realities is a central theme throughout Mori's work.

Artist as object

Another element typical in Mori's work is for the artist to cast herself in the principle role, and *Pure Land* is no exception. The central female figure is the artist herself, wearing an elaborate costume and headdress, both of her own design. Born in Tokyo in 1967, Mori studied design at Tokyo's Bunka Fashion College and worked part-time as a fashion model, which she originally considered a form of personal creativity. However, she found modeling an inadequate medium in which to express herself fully, so she began to stage elaborate tableaux, taking full creative control of the process, acting as director, producer, set and costume designer, and model. This recalls the practices of other photographers, most notably **Cindy Sherman** , as well as **Yasumasa Morimura**, the Japanese photographer notorious for substituting himself for figures in famous paintings throughout art history.

In the *Pure Land* photograph, Mori's light blue, pupil-less eyes, gauze serenely somewhere beyond our vision. Like the Amida Buddha, she rests above a lotus blossom and holds her right hand in a mudra of blessing and teaching; the circle formed by the index finger and thumb is the sign of the Wheel of Law. In her left hand she holds a *hojyu*, or magical wishing jewel, in the shape of a lotus bud. This figure is inspired by Kichijoten, originally the Indian goddess, Shri Lakshmi, who was eventually incorporated into Buddhism, and typically represents fertility, fortune, and beauty. Here Mori bars comparison with a well-known eighth-century painting of Kichijoten from Yukushi-ji Temple in Nara. Similarities include the serene elegance, softly fluttering gown, and wish-granting jewel. The eighth-century painting depicts the clothing and appearance of an elegant lady of the Chinese Tang Dynasty, and it may have been an object of veneration during the annual New Year event when devotees prayed for happiness and fertility. In this manner, a beautiful, elegant woman was seen to embody the ideas of good fortune and prosperity and became an object of worship.



Figure 4.10.1.5.6: Left: Kichijoten from Yukushi-ji Temple in Nara, 8th century, color on hemp, 53 x 31.7 cm; right: Mariko Mori, Pure Land, 1996-98, glass with photo interlayer, 305 x 610 x 2.2 cm

By taking on this ancient persona, Mori dissolves her own identity and is transformed into the elegant Tang lady and goddess of fortune, while simultaneously performing the welcoming role of Amida Buddha. Mori's enlightened self-representation descends to guide the viewer into a "Pure Land of Perfect Bliss" of her own creation. Perhaps more significantly, the artist seeks to lead the viewer into her immersive paradise. In both formats, the multi-sensory video *Nirvana* and purely visual *Pure Land* photograph, the message is clear: enlightenment is for all.

Additional resources:

Mariko Mori at the Tokyo Museum of Contemporary Art

Video — The Artist Project: Mariko Mori (from The Metropolitan Museum of Art)

Scott Indriskek, "Mariko Mori wants to bring her nature-loving art to six continents," *Modern Painters* (May 2011)

Visualizing an Endless Universe: Mariko Mori Makes the Cosmos Life-Size

Emily Kame Kngwarreye, *Earth's Creation*

by DR. ALLISON YOUNG



Figure 4.10.1.5.7: Emily Kame Kngwarreye, *Earth's Creation*, 1994, synthetic polymer paint on linen mounted on canvas, four panels (private collection)

At nearly twenty feet wide and nine feet high, Emily Kwame Kngwarreye's painting *Earth's Creation* is monumental in its scale and impact, rivaling Abstract Expressionist masterpieces by Willem de Kooning and Jackson Pollock not only in size but also in its painterly virtuosity (see a photo of it **in a gallery here**, to get a sense of its scale). Patches of bold yellows, greens, reds and blues seem to bloom like lush vegetation over the large canvas. Comprised of gestural, viscous marks, each swath of color traces the movement of the artist's hands and body over the canvas, which would have been laid horizontally as she painted, seated on (or beside) and intimately connected to her art.



Figure 4.10.1.5.8: Still from a short video produced by The National Museum of Australia **source**

The work made records at auction when it was sold in 2007 for over $1,000,000—the highest price ever fetched for a work by a female artist in Australia. Yet, just decades earlier, Kngwarreye was virtually unknown to the world outside her small desert community in the Australian country of Alhakere. A self-taught artist who was trained in ceremonial painting, she rose to international prominence only in her eighties, and enjoyed a flourishing career at the end of her life.

Rooted in tradition

Kngwarreye was born around 1910, and spent most of her life in an isolated Anmatyerr community in Central Australia. The area, however, was forcibly occupied by European pastoralist settlers in the 1920s, and the artist, alongside other members of her community, worked on the pastoral property (pastoral refers to the tending of cattle and sheep). In 1976, Aboriginal land rights were legally granted, and she was able, finally, to live independently.

Aboriginal culture has long been intimately connected to the landscape of Australia; inhabited by humans for over 40,000 years, the region is characterized by deserts, grasslands and dramatic arched rock formations. Kngwarreye was an established elder of her community and was trained to create ceremonial sand paintings inspired by her ritual "dreamings,'" as well as to paint decorative motifs on women's bodies as part of a ceremony called *Awelye*. These visual forms were connected to cultural expressions in song, storytelling and dance. While her paintings have never been figural, they remain influenced by the culture in which she grew up as well as the natural environment.

Artistic intervention

In the late 1970s, Kngwayere began to work in the medium of batiks, making works that were purely artistic endeavors for the first time. In 1977, she was a founding participant of the Utopia Women's Batik Group. Her compositions were abstract and featured the motif of repeated dots, acting sometimes as a linear stroke, or elsewhere used to fill large patches of space. A decade later, in 1988, the S.H. Ervin Gallery in Sydney initiated a "Summer Project" that sought to facilitate the creation of Aboriginal art, as well as to establish a market for the genre. Sponsored by the collector Robert Holmes à Court, curators traveled to the Aboriginal homeland of Utopia and delivered acrylic paints and materials. After two weeks they returned to find "abstract and richly expressive" compositions created by many of the artists, and held a group exhibition in Sydney.



Figure 4.10.1.5.9: Emily Kame Kngwarreye, *Emu Woman,* 1988–89, synthetic polymer paint on canvas, 92.0 x 61.0 cm (The Holmes à Court Collection, Heytesbury)

Kngwarreye's painting *Emu Woman* (above) was selected for the cover of the exhibition catalogue as a gesture of respect for her seniority, as she was the oldest artist from the community. Dominated by rich, earthy tones, the painting—her first ever on canvas–contained references to plants and seeds that featured in her "dreaming" ritual. Against a dark field of charcoal, violet and black, the piece is punctuated with bright marks in tangerine and white hues, which lend the work an electric sense of energy and rhythm. Her decades-long experience in painting directly on the human body informs the curving swells of dotted marks that comprise the composition.

Critics lauded the piece, and virtually overnight, the artist received international exposure and unprecedented acclaim. The following year, Kngwarreye held her first solo exhibition at Utopia Art Sydney, after which she would be invited to participate in several renowned international exhibitions and biennales.

The "global" turn

The arc of Kngwarreye's career runs alongside a period of tremendous change in Australia, moving from the end of a phase of colonial settlement through to a more ethical embrace of Aboriginal culture by the nation's Western population. Yet the period in which she came to prominence also reflects changes taking place in the contemporary art world internationally, as the 1980s and 1990s saw a notable expansion within the mainstream to include non-Western or minority artists.

"Green time"

Earth's Creation belongs to the "high colorist" phase in Kngwarreye's work, which is characterized by a loosening of her compositions—which were no longer reliant on pseudo-geometric patterns—and the expansion of her color palette to include a range of tones beyond the familiar clay and ochre hues that dominated her prior works. Still connected to the natural environment, however, these works reference the changing atmospheric character of seasonal cycles. *Earth's Creation* documents the lushness of the "green time" that follows periods of heavy rain, and makes use of tropical blues, yellows and greens. The piece has often been likened to Claude Monet's studies of seasonal and temporal change, and given its formidable, room-filling scale, a comparison to the artist's *Water Lilies* of 1914-26 (MoMA) might be remarkably apt.

Earth's Creation was created as part of the larger Alhalkere Suite which contains twenty-two panels, and is still considered one of the most virtuosic of Kngwarreye's immense and prolific artistic output. In the last two weeks of her life, Kngwarreye completed a suite of twenty-four small paintings. These were characterized by extremely broad, milky strokes of jewel-toned hues of blue and rose, and communicate the artist's long-standing fascination with color and her sophisticated grasp of abstract composition.

Additional resources:

“Utopia: The Genius of Emily Kame Kngwarreye” at the National Museum Australia

Earth’s Creation at the Venice Biennale, Universes-in-Universe

The artist at the National Gallery of Australia

Emily Kame Kngwarreye, The Alhalkere suite from the National Gallery of Australia

Utopia: The Genius of Emily Kame Kngwarreye, review by Chrischona Schmidt

Teacher notes for Emily Kame Kngwarreye: Alhalkere — Paintings from Utopia

Australia 1900-present on the Metropolitan Museum of Art’s Heilbrunn Timeline of Art History

Bruce Nauman, *The True Artist Helps the World by Revealing Mystic Truths*

by JP MCMAHON



Figure 4.10.1.5.10: Bruce Nauman, *The True Artist Helps the World by Revealing Mystic Truths*, 1967, neon and clear glass tubing suspension supports; 149.86 x 139.7 x 5.08 cm (Philadelphia Museum of Art)

Bruce Nauman’s neon sign asks a multitude of questions with regard to the ways in which the 20th century conceived both avant-garde art and the role of the artist in society. If earlier European modernists, such as Mondrian, Malevich, and Kandinsky, sought to use art to reveal deep-seated truths about the human condition and the role of the artist in general, then Bruce Nauman’s *The True Artist Helps the World by Revealing Mystic Truths* questions such transhistorical and universal statements. With regard to this work, Nauman said:

> **The most difficult thing about the whole piece for me was the statement. It was a kind of test—like when you say something out loud to see if you believe it. Once written down, I could see that the statement [...] was on the one hand a totally silly idea and yet, on the other hand, I believed it. It’s true and not true at the same time. It depends on how you interpret it and how seriously you take yourself. For me it’s still a very strong thought.**

The medium and the message

By using the mediums of mass culture (neon signs) and of display (he originally hung the sign in his storefront studio), Nauman sought to bring questions normally considered only by the high culture elite, such as the role and function of art and the artist in society, to a wider audience. While early European modernists, such as Picasso, had borrowed widely from popular culture, they rarely displayed their work in the sites of popular culture. For Nauman, both the medium and the message were equally important; thus, by using a form of communication readily understood by all (neon signs had been widespread in modern industrial society) and by placing this message in the public view, Nauman let everyone ask and answer the question.

While it is perhaps the words that stand out most, the symbolism of the spiral (think of Robert Smithson's *Spiral Jetty,* 1969), also deserves attention having been used for centuries in European and other civilizations, such as megalithic and Chinese art, both as a symbol of time and of nature itself.

Transcendence?

Theosophy is interesting in this regard and was an important aspect of the early European Avant-garde. In particular, Theosophists believed that all religions are attempts to help humanity to evolve to greater perfection, and that each religion therefore holds a portion of the truth. Through their materials, artists had sought to transform the physical into the spiritual. In this sense, Malevich, Mondrian, and Kandinsky sought to use the material of their art to transcend it: Nauman, and other of his generation, did not.

Process over product

Instead, Nauman's work transgresses many genres of art making in that his work explores the implications of minimalism, conceptual, performance, and process art. In this sense we could call Nauman's art "Postminimalism," a term coined by the art critic Robert Pincus-Witten, in his article "Eva Hesse: Post-Minimalism into Sublime" (*Artforum* 10, number 3, November 1971). Artists such as Nauman, Acconci, and Hesse, favored process instead of product, or rather the investigation over the end result. However, this is not to say they did not produce objects, such as the neon-sign by Nauman, only that within the presentation of the object, they also retained an examination of the processes that made that specific object.

In this sense, Nauman's neon sign isn't only an object, it's a process, something that continues to make us think about art, artist, and the role that language plays in our conception of both. The words continue to ask this of each beholder who encounters them. Does the artist, the "true artist" really "reveal mystical truths"? Or confined to the specific culture that it was made in? If we are to believe the statement (remember, it is not necessarily Nauman's, he merely borrows it from our shared culture), then we might, for example, recognize Leonardo da Vinci as a Neo-Platonic artist who showed us ultimate and essential truths through painting. On the other hand, if we reject the statement, then we would probably recognize the artist as just another producer of a specific set of objects, that we call "art."

This type of logic and analytical thinking was influenced by Nauman's reading of the philosopher Ludwig Wittgenstein's *Philosophical Investigations* (1953). From Wittgenstein, Nauman took the idea that you put forth a proposition/idea in the form of language and then examine its findings, irrespective of its proof or conclusion. Nauman's "language games," his neon-words, his proposition about the nature of art and the artist continue to resonant in today's art world, in particular with regard to the value we place on the artist's actions and findings.

Additional resources:

This work of art at the Philadelphia Museum of Art

Art:21 page about Nauman's *The True Artist Helps the World by Revealing Mystic Truth*

Philadelphia Museum of Art biography of the artist

Smarthistory images for teaching and learning:

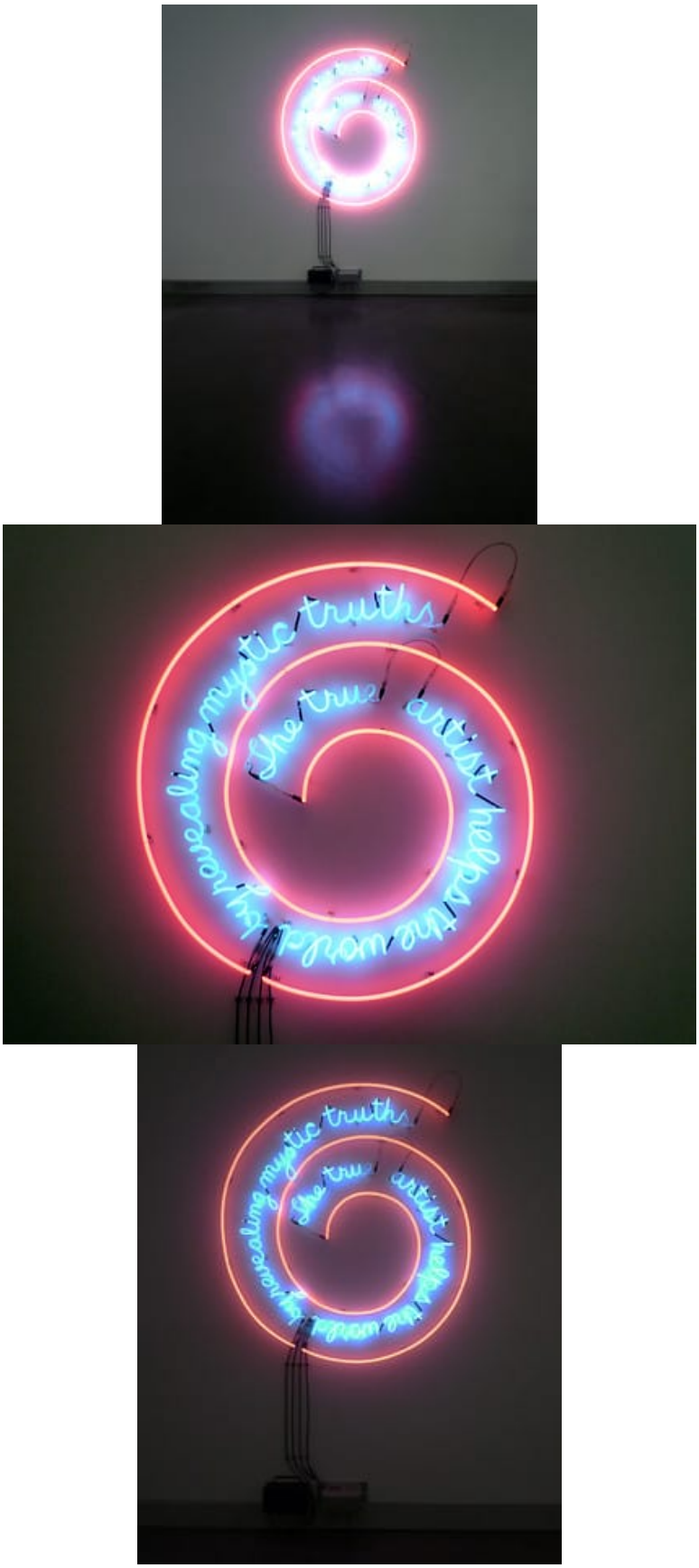


Figure 4.10.1.5.11: More Smarthistory images...

Chris Ofili, *The Holy Virgin Mary*

by DR. ALLISON YOUNG



Figure 4.10.1.5.12: Chris Ofili, *The Holy Virgin Mary*, 1996, paper collage, oil paint, glitter, polyester resin, map pins & elephant dung on linen, 243.8 x 182.9 cm © Chris Ofili

Sensation

When the personal collection of British advertising executive and art collector Charles Saatchi went on tour in an exhibition called S*ensation* in 1997, viewers should have known to brace themselves for controversy. The show presented a cross-section of shocking work by a brash new generation of "Young British Artists," including, for example, Marcus Harvey's portrait of convicted child-murderer Myra Handley, and pornographic sculptural tableaux by Jake and Dinos Chapman. In London, the museum was picketed from day one, but the media attention eventually ushered in record turnouts.

In October of 1999, S*ensation* opened at the Brooklyn Museum of Art, where it was Chris Ofili's iconic painting, *The Holy Virgin Mary* that incited the most heated debate. Mayor Rudy Giuliani threatened to close the city-funded institution on the grounds that this artwork was offensive to religious viewers. Two months later, the painting, which rests upon two large balls of elephant dung, was desecrated by an elderly visitor who smeared white paint over its surface, claiming that the image was "blasphemous."

At first glance it seems easy to discern why the painting raised a few eyebrows: the inclusion of real shit and collaged pornography might be enough to offend conservative viewers. However, Ofili's work is more nuanced than it appeared to his detractors; the piece reflects on art historical precedents while addressing identity politics, religion and pop culture. To grasp its complexity, one must look beneath the surface—as dazzling and shocking as it may be.

Iconic or iconoclastic?

Set against a shimmering gold background comprised of carefully placed dots of paint and glitter, the central figure in Ofili's painting stares directly at her beholder, with wide eyes and parted lips. Her blue gown flows from the top of her head down to the amorphous base of her body, falling open to reveal a lacquered ball of elephant dung where her breast would be. Collaged images of women's buttocks surround the Virgin; cut from pornographic magazines, they become abstract, almost decorative forms that refuse to signify until confronted up-close. The two balls of dung beneath the canvas are adorned with glittering letters spelling out the work's title.

Formally, the use of gold and the front-facing Virgin link the work to Medieval icons, making the vulgarity of the pornographic images all the more stark. Yet, the artist claims that the sacred and the profane are not always opposed, even in traditional religious art:

As an altar boy, I was confused by the idea of a holy Virgin Mary giving birth to a young boy. Now when I go to the National Gallery and see paintings of the Virgin Mary, I see how sexually charged they are. Mine is simply a hip hop version.

Race, religion, and representation

It is perhaps Ofili's final statement above that indicates the source of his critics' anxieties. As Carol Becker has explained, Ofili is "transforming the Holy Virgin into an exuberant, folkloric image. (...) probably most controversial of all, he made his own representation of the Virgin, defiant of tradition."[2] The "parody-like African mouth" and exaggerated facial features call attention to racial stereotypes, as well as to the assumed whiteness of biblical figures in Western representations. Ofili's icon asks us to confront the possibility of a black Virgin Mary. Other works express Ofili's interest in black culture more explicitly: paintings like the *Afrodizzia* series and *No Woman No Cry* make references not only to hip-hop and reggae but also to contemporary racial politics.

The triumph of painting

While his works pay homage to iconic black celebrities such as James Brown, Miles Davis, and Muhammad Ali, they are also just as much about the act of painting. With their psychedelic patterning, bright colors and textured surfaces, the images express Ofili's desire to "get as deeply lost as possible in both the process of painting and the painting itself."[3]

From his beginnings, the artist was passionate about the medium, even as painting grew out of favor in the wake of postmodernism. He enrolled at the Chelsea School of Art where he developed an expressionistic style, but his work really started to mature after an oft-mythologized trip to Africa.

Ofili was born in Manchester, England to Nigerian parents. When he was awarded a British Council grant in 1992, however, he ventured not to their home country but to Zimbabwe, in southern Africa. There, he was inspired by the abstract motifs found in San rock painting; these graphic marks found their way into the swirling backgrounds of his later compositions.

In Zimbabwe he also discovered elephant dung, and experimented with using it as an aesthetic medium, sticking it onto the surfaces of his canvases. As he later recalled, "it was a crass way of bringing the landscape into the painting," as well as a nod to modernist art history through the dung's status as a found object.[4]

The following year, back in Europe, Ofili was already at work with his new material. He staged a performance in Berlin and London entitled *Shit Sale*, a nod to the American artist David Hammons' *Bliz-aard Ball Sale* of 1983, and later produced a work on canvas simply titled *Painting with Shit on It*, from which his mature style eventually emerged.

Combining visual pleasure with a conceptual practice

Ofili's work is as formally-motivated as it is political. The artist did not only return to painting, he returned to decoration and visual pleasure, at a time when art was expected to comply with the more cerebral aesthetics of postmodernism. Perhaps his attraction to gaudy bright colors, earthy materials and glittering surfaces, paired with the highly conceptual stakes of his project, reflects another blending of sacred and profane, regarding the conservatism of the art world. By incorporating high and low art forms, historical narratives, religion and pop culture, *The Holy Virgin Mary* represents a deeper inquiry than the spectacle of Sensation would imply.

1. Quoted in Jonathan Jones, "Paradise Reclaimed," *Guardian*, magazine section, 15 June 2002.

2. Carol Becker, "Brooklyn Museum: Messing with the Sacred" in *Chris Ofili*, Rizzoli, 2009, p. 84.

3. Chris Ofili, quoted in Judith Nesbitt "Beginnings" in *Chris Ofili*, London: Tate Publishing, 2010, p. 15.

4. Chris Ofili, "Decorative Beauty was a Taboo Thing", interview with Mario Spinello, *Brilliant! New Art from London*, exh. cat., Walker Art Center, Minneapolis, 1995, p. 67.

Additional resources:

Sensation: Young British Artists from the Saatchi Collection (Brooklyn Museum)

Ofili at the Saatchi Gallery

Biography of the artist from Grove Art/Tate Modern

San rock art

No Woman, No Cry on the Google Art Project

Clarissa Rizal, *Resilience Robe*

by LILY HOPE AT PORTLAND ART MUSEUM and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.5.2: Clarissa Rizal, Resilience Robe, 2014, merino wool, 64 x 53 inches (Portland Art Museum)

Bill Viola, *The Crossing*

by DR. ALLISON YOUNG

We have to reclaim time itself, wrenching it from the "time is money" maximum efficiency, and make room for it to flow the other way – towards us. We must take time back into ourselves to let our consciousness breathe and our cluttered minds be still and silent. This is what art can do and what museums can be in today's world.
—Bill Viola [1]



Figure 4.10.1.5.13: Bill Viola, *The Crossing*, 1996, video/sound © Bill Viola (photo: **stunned**, CC BY-NC-SA 2.0)

Taking time back

Bill Viola's *The Crossing* is a room-sized video installation that comprises a large two-sided screen onto which a pair of video sequences is simultaneously projected. They each open in the same fashion: a male figure walks slowly towards the camera, his body dramatically lit from above so that it appears to glow against the video's stark-black background. After several minutes he pauses near the foreground and stands still. He faces forward, staring directly into the lens, motionless.

At this point the two scenes diverge; in one, a small fire alights below the figure's feet. It spreads over his legs and torso and eventually engulfs his whole body in flames; yet, he stands calm and completely still as his body is immolated, only moving to raise his arms slightly before his body disappears in an inferno of roaring flames. On the opposite screen, the event transpires not with fire but with water. Beginning as a light rainfall, the sporadic drops that shower the figure build up to a surging cascade of water until it subsumes him entirely. After the flames and the torrent of water eventually retreat, the figure has vanished entirely from each scene, and the camera witnesses a silent and empty denouement.

Expanded temporal experience



Figure 4.10.1.5.14: Bill Viola, *The Crossing,* 1996, video/sound © Bill Viola (image: **SFMOMA**)

The Crossing makes use of Viola's signature manipulation of filmic time. Like many of the artist's recent works, it was shot using high-speed film capable of registering 300 frames per second, thus attaining a much greater level of detail than would be discerned by the naked eye. In postproduction, Viola reduces the speed of playback to an extreme slow motion—further enhancing the level of definition to a dramatic and scrutinizing effect.

However, it is not only an interest in technological experimentation that drives the artist's technical and aesthetic decisions. Viola's use of slow-motion is meant to invite a meditative and contemplative response, one that requires the viewer to concentrate for a longer duration of time and simultaneously to increase his or her own awareness of detail, movement and change. This is consistent with the artist's intent to reignite the longstanding relationship between artistic and spiritual experience. A devoted practitioner of Zen Buddhist meditation, Viola has explained that after "fifty minutes of quiet stillness in a room of solitary individuals"—a description that could, just as easily, reflect a museum-goer's experience of his installations—"time opens up in an unbelievable way." [2]

Religious symbolism



Figure 4.10.1.5.15: Shiva as Lord of Dance (Nataraja), Chola period, Indian (Tamil Nadu), c. 11th century, copper alloy, 68.3 cm high (The Metropolitan Museum of Art, New York)

The Crossing might be interpreted through the lens of mythology or religious thought, even though the work does not make iconographic or stylistic reference to a particular narrative. Viola has been inspired by a rich variety of spiritual traditions, including Catholicism, Hinduism, Buddhism, and Sufism. Viewers may recall, for instance, the ring of flames that surrounds images of Shiva Nataraja (left) in which he sets in motion the continuous cycles of creation and destruction through his cosmic dance, or the biblical tales of fire and brimstone, rapture and the Great Floods. Throughout such narratives, the elemental forces of fire and water often symbolize change, redemption, transformation and renewal— common themes in Viola's oeuvre. The artist has similarly made reference to transitions and passages in works such as *The Passing*, a 1991 video made shortly after his mother's death, or *Two Women*, a 2008 piece in which figures slowly move through a translucent and symbolic barrier of water.

Viola's education and artistic practice have long been guided by questions of "how we see, how we hear, and how we come to know the world." [3] The artist grew up in Queens, New York and attended Syracuse University in the late 1960s where he enrolled not only in fine arts classes, but also in a variety of academic subjects ranging from the humanities to the hard sciences. In particular, he was captivated by religious studies, psychology and electrical engineering, interests that are clearly assimilated throughout his oeuvre.

Technological experimentation

As early as the 1970s, Viola was one of the first visual artists to make use of new video technologies. As a student he experimented enthusiastically with new portable recording devices, with which he created short video performances that explored a variety of gestures, sounds and expressions. During the 1970s and 1980s, he was artist-in-residence at a number of media laboratories and television stations, while also serving as an assistant curator at Everson Museum of Art where he was exposed to the

work of Nam June Paik and Peter Campus, artists who were early innovators in the emerging field of video art. Eventually, Viola conceived of multi-channel and immersive installations where viewers are surrounded by carefully arranged screens and projections, sometimes displayed within an otherwise pitch-black room.

Sacred space

Between 1974 and 1976, Viola lived in Italy, where religious paintings and sculptures are often displayed in-situ, in the cathedrals for which they were commissioned. The continuing integration of historical art into contemporary public and religious life inspired Viola to design installations that mimicked the forms of devotional paintings, diptychs, predellas and altarpieces—formats that encourage intimate contemplation of religious icons. Later traveling throughout Japan and other parts of East Asia, Viola observed the same active level of engagement with art. In Tokyo, for instance, he witnessed museum visitors placing offerings at the feet of sculptural bodhisattvas or other religious statuary.

For viewers, the experience of viewing Viola's works need not be spiritually inscribed. In many cases, his works appeal to or reflect raw human emotions (the theme of his acclaimed exhibition *The Passions*) or universal life experiences. While *The Crossing* can be interpreted in light of a host of religious associations, the act of "self-annihilation" represented in the figure's disappearance at each conclusion also serves as a metaphor for the destruction of the ego. In the artist's words, this action "becomes a necessary means to transcendence and liberation," [4] especially in the face of life's inevitable unpredictability.

[1] Bill Viola, as quoted in *Buddha Mind in Contemporary Art,* Jacquelynn Baas and Mary Jane Jacob, eds. (Berkeley: University of California Press, 2004), p. 254
[2] Bill Viola, *Buddha Mind*, p. 254.
[3] "Bill Viola Interviewed by John Hanhardt, *Going Forth By Day* (Berlin: Deutsche Guggenheim and New York: Harry N Abrams, Inc, 2005), p. 87.
[4] Bill Viola, as quoted in "Emotions in Extreme Time: Bill Viola's Passions Project," in *The Passions*, John Walsh, ed. (Los Angeles: Getty Publications, 2003), p. 53.

Additional resources:

Bill Viola at SFMOMA

Bill Viola – James Cohan Gallery

Bill Viola – the artist's website

Bill Viola, The Passions from the J. Paul Getty Museum

Xu Bing, *Book from the Sky*

by DR. ALLISON YOUNG and DR. STEVEN ZUCKER

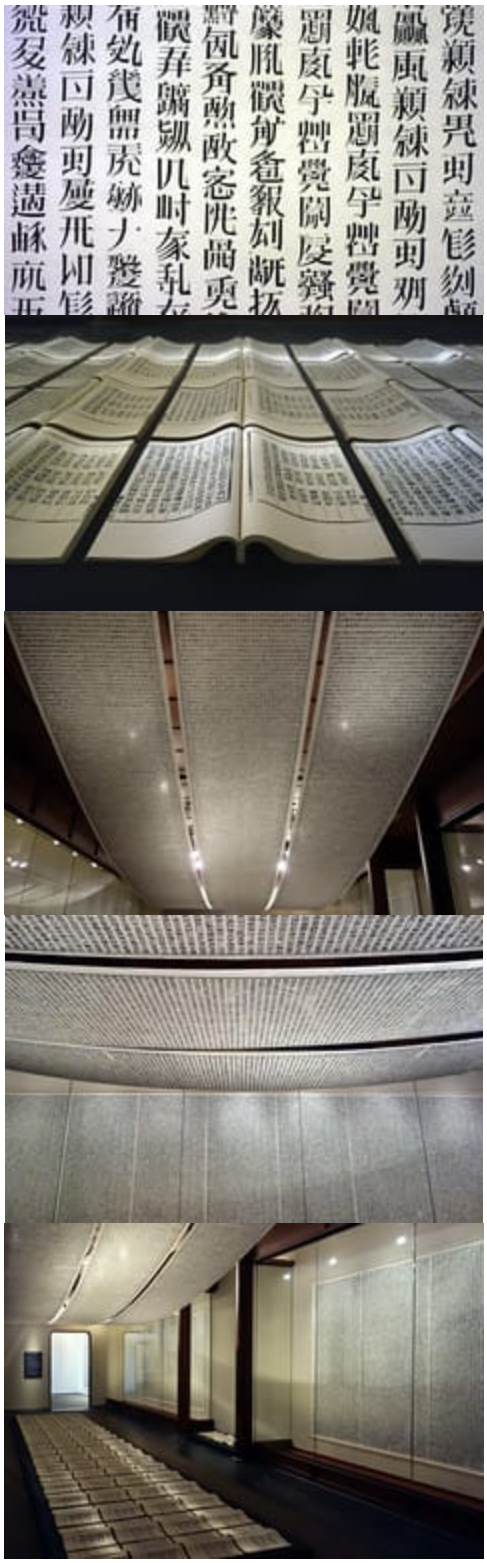
YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.5.3: Xu Bing, *Book from the Sky*, c. 1987-91, hand-printed books and ceiling and wall scrolls printed from wood letterpress type, ink on paper; each book, open: 18 1/8″ × 20″ / 46 × 51 cm; each of three ceiling scrolls: 38″ × c. 114′ 9-7/8″ / 96.5 × 3500 cm; each wall scroll: 9′ 2-1/4″ × 39 3/8″ / 280 × 100 cm (installation at the Metropolitan Museum of Art, 2014, collection of the artist) © Xu Bing

Smarthistory images for teaching and learning:



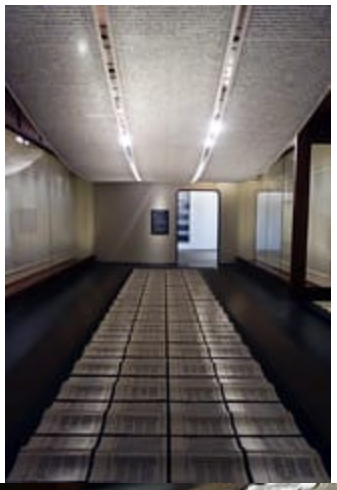










Figure 4.10.1.5.16: More Smarthistory images...

James Turrell, *Skyspace, the way of color*

by DR. BETH HARRIS and DR. STEVEN ZUCKER

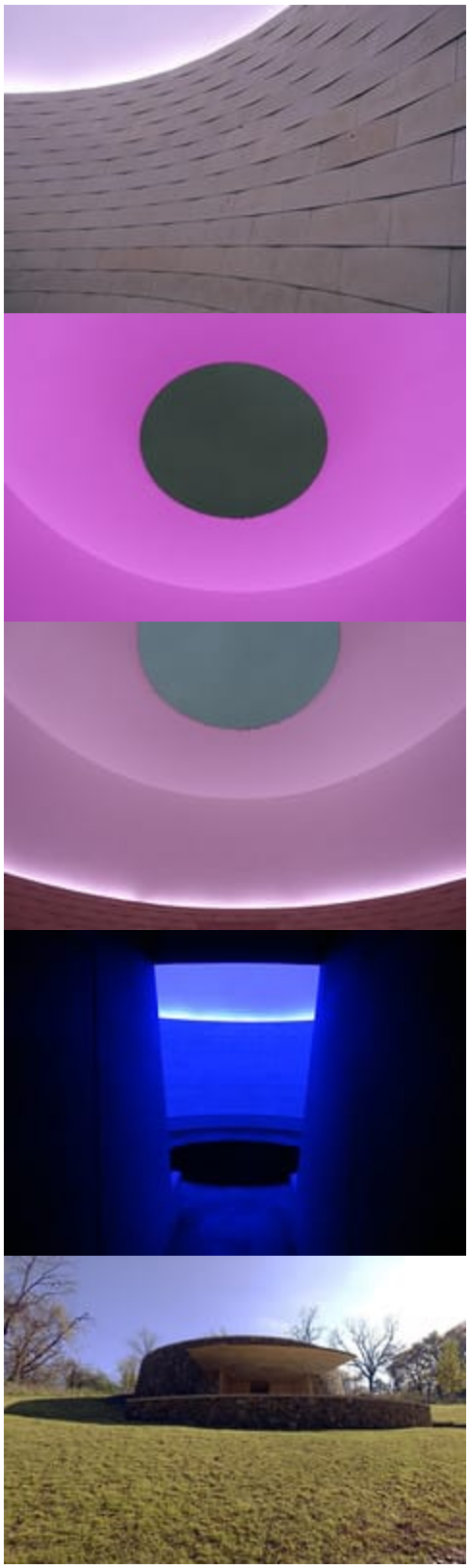
YouTube Video

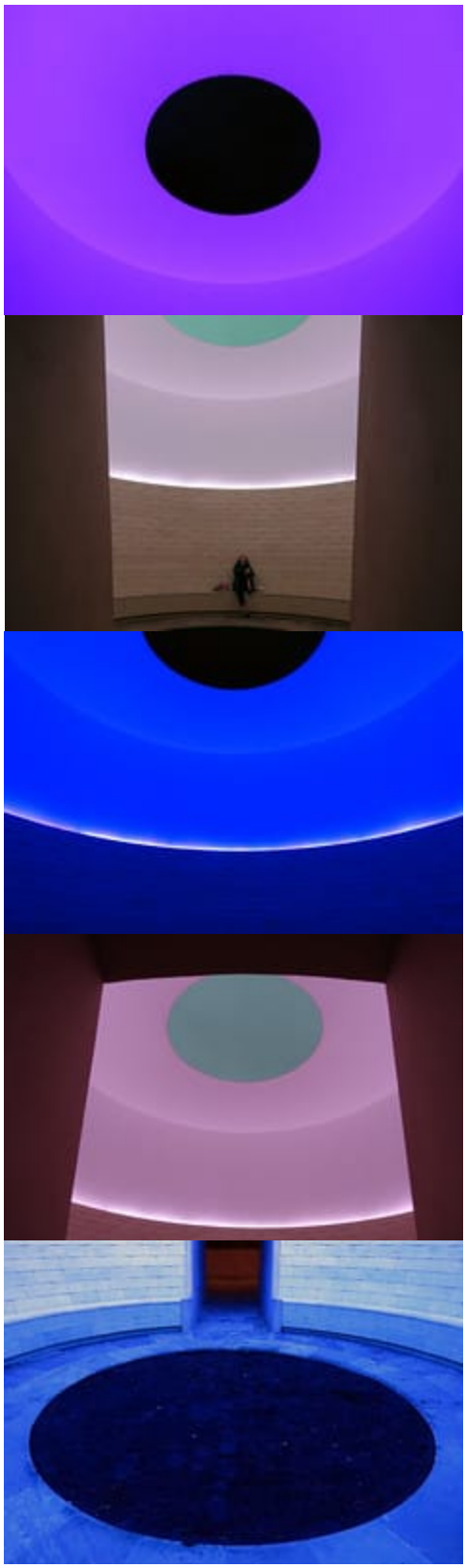
This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

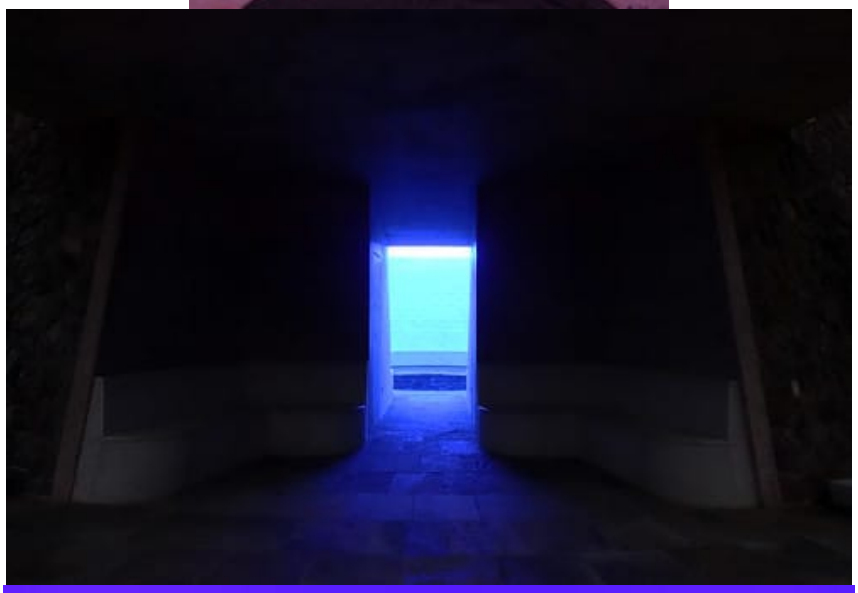
Video 4.10.1.5.4: James Turrell, *Skyspace, The Way of Color*, 2009, stone, concrete, stainless steel, and LED lighting 228 x 652 inches © James Turrell (Crystal Bridges Museum of American Art, Bentonville, Arkansas). Speakers: Dr. Beth Harris and Dr. Steven Zucker

Smarthistory images for teaching and learning:









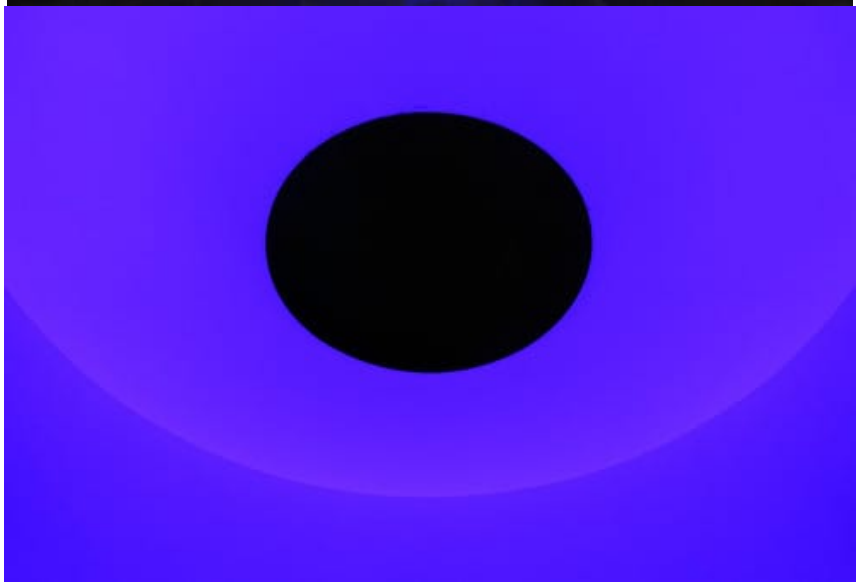


Figure 4.10.1.5.17: More Smarthistory images...

Tenzing Rigdol, *Pin drop silence: Eleven-headed Avalokiteshvara*

by DR. SARAH MAGNATTA

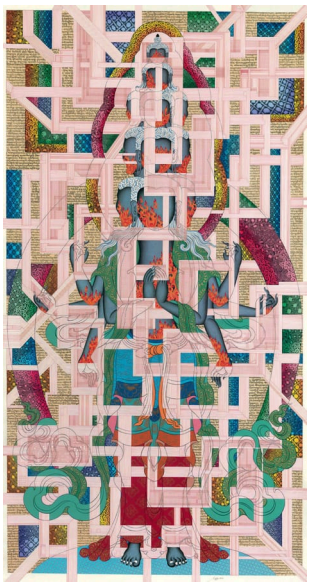


Figure 4.10.1.5.18: Tenzing Rigdol, *Pin drop silence: Eleven-headed Avalokiteshvara*, 2013, ink, pencil, acrylic, and pastel on paper, 232.7 x 124.8 cm (**The Metropolitan Museum of Art**, Gift of Andrew Cohen, in honor of Tenzing Rigdol and Fabio Rossi, 2013) © Tenzing Rigdol

In Tenzing Rigdol's monumental painting, *Pin drop silence: Eleven-headed Avalokiteshvara,* we encounter a traditional **Buddhist** deity—though the artwork itself is anything but conventional in form, material, or meaning. Rigdol uses a combination of acrylic paint, pastel, and pieces of manuscript pages assembled on paper to create a complex rendering of a multi-armed, multi-headed deity—over seven feet tall—who emerges between the interlocking edges of a grid-like overlay. Although the main figure is one that is recognizably sacred for **Tibetan** Buddhist practitioners, the work itself constitutes a radical departure from historical precedent, and reflects contemporary questions surrounding exile, activism, and cultural heritage.

Rigdol was born in 1982 in Kathmandu, Nepal. His parents fled Tibet in the late 1960s and worked in Nepal's carpet industry. After training in traditional Tibetan arts, including *thangka* painting (a painting on fabric depicting a Buddhist subject), sand painting, and butter sculpture, the artist turned to contemporary modes of representation. He is one of the first contemporary Tibetan artists to have his work collected by major institutions, including The Metropolitan Museum of Art. By using culturally specific forms in radically new compositions, Rigdol shifts his work's focus away from the spiritual symbolism often associated with Tibetan art, and towards more politically charged content.



Figure 4.10.1.5.19: Avalokiteshvara (Bodhisattva & Buddhist Deity) – Sahasrabhujalokeshvara (11 faces, 1000 Hands), 19th century, Eastern Tibet, ground mineral pigment on cotton (**private collection**)

Who is Avalokiteshvara?

In the center of *Pin drop silence* is the Buddhist deity known as Avalokiteshvara (Tibetan: *Chenrezig*). Avalokiteshvara is a *bodhisattva* (an enlightened being who helps others achieve enlightenment) and is the embodiment of compassion. Avalokiteshvara remains a major figure in Buddhist art throughout Asia (he is known as Guanyin in China). The Dalai Lama is viewed as the earthly incarnation of Avalokiteshvara by practitioners, and as such, plays an important role in Tibetan Buddhism.



Figure 4.10.1.5.20: Tenzing Rigdol, *Pin drop silence: Eleven-headed Avalokiteshvara* (detail), 2013, ink, pencil, acrylic, and pastel on paper, 232.7 x 124.8 cm (**The Metropolitan Museum of Art**, Gift of Andrew Cohen, in honor of Tenzing Rigdol and Fabio Rossi, 2013) © Tenzing Rigdol

In *Pin drop silence*, Avalokiteshvara is shown in his eleven-headed form, a reference to his head splitting into several parts in order to more fully observe the world and disseminate compassion. Unlike traditional imagery of Avalokiteshvara, however, none of Rigdol's Avalokiteshvara's heads are given a face. For orthodox Tibetan Buddhist practitioners, this omission is significant; *buddhas* and *bodhisattvas* are traditionally drawn with very specific guidelines and gridlines in place, including precise renderings of facial features. Here, Rigdol omits these features and seemingly splits the image into pieces with his use of gridlines.

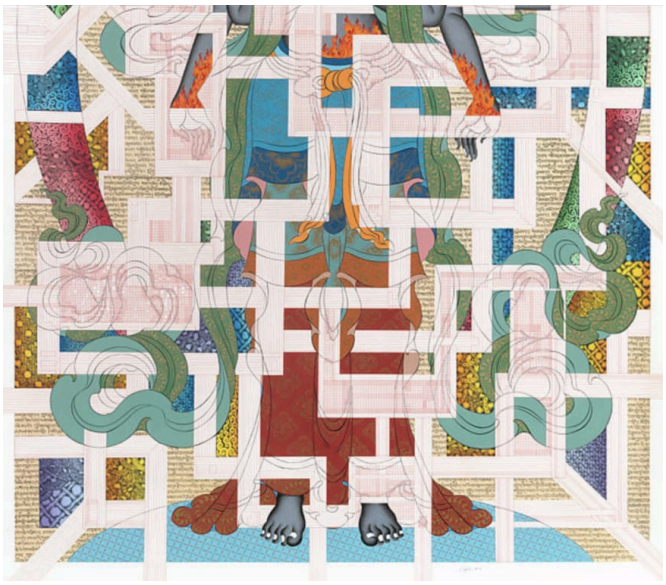


Figure 4.10.1.5.21: Tenzing Rigdol, *Pin drop silence: Eleven-headed Avalokiteshvara* (detail), 2013, ink, pencil, acrylic, and pastel on paper, 232.7 x 124.8 cm (**The Metropolitan Museum of Art**, Gift of Andrew Cohen, in honor of Tenzing Rigdol and Fabio Rossi, 2013) © Tenzing Rigdol

Guidelines and Gridlines

In traditional Tibetan Buddhist painting known as *thangka*, gridlines were (and are) used as guides to ensure the proper placement and depiction of *buddhas* (of which there are many, not just the historical **Buddha Shakyamuni**) and *bodhisattvas*. The lines are the first step of the process, and they are ultimately covered by the paint—they function merely as guidelines for the artist. Yet Rigdol makes gridlines a major component of *Pin drop silence*. They divide the image, deconstructing the form of Avalokiteshvara through their presence.

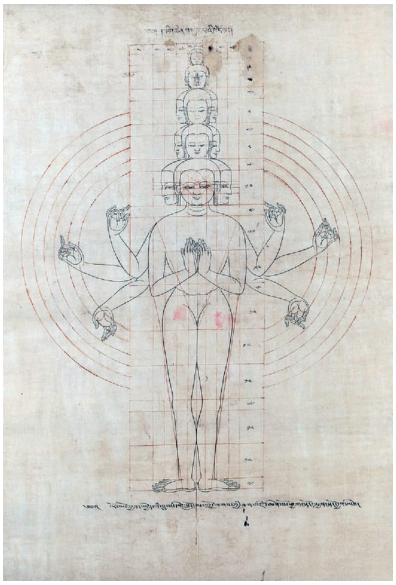


Figure 4.10.1.5.22: Traditional use of gridlines, Buddhist (**private collection**)

Rigdol has referenced his early work as a carpet designer in Nepal as an additional point of reference for these gridlines (the design process for carpets uses a matrix as well). Further, some scholars have noted similarities between Rigdol's affinity for grids and lines and those of the modernist **De Stijl** artist **Piet Mondrian**, for whom geometric abstraction held spiritual or utopian value. [1] Rigdol says this about the lines:

Lines are innocent, direct and uncompromising. There is a sense of contentment within the geometric forms. They exert no pressure on me, but instead pull me towards them to look closer. [2]



Figure 4.10.1.5.23: Tenzing Rigdol, *Pin drop silence: Eleven-headed Avalokiteshvara* (detail), 2013, ink, pencil, acrylic, and pastel on paper, 232.7 x 124.8 cm (**The Metropolitan Museum of Art**, Gift of Andrew Cohen, in honor of Tenzing Rigdol and Fabio Rossi, 2013) © Tenzing Rigdol

Replacing the Background



Figure 4.10.1.5.24: Detail of Avalokiteshvara, 19th century, Eastern Tibet, ground mineral pigment on cotton (**private collection**)

The gridlines in Rigdol's work are constructed from intersecting fragments of manuscript pages, which hold a personal meaning for the artist. Rigdol's family had been in business as ink manufacturers in Tibet prior to their escape to Nepal in the late 1960s. This ink was used by monasteries to print the Buddhist manuscript pages used by monks, nuns, and lay Buddhist practitioners.

The script on these pages is known as *u-chen*, and is utilized across the Tibetan plateau. (Though the dialects differ across the region, this script can be read by many Tibetans). In traditional Tibetan *thangka,* the backgrounds often incorporated influences from Chinese landscape painting. By "replacing" that landscape with the unifying Tibetan script, Rigdol reimagines "tradition," questioning the role of Chinese landscape painting in the history of Tibetan art.

As he notes:

> **Historically, the landscape elements in Tibetan thangka painting—the clouds, the rivers and so on—were influenced by Chinese painting. They later got an upgrade in Tibetan art. I have often said, sometimes jokingly and sometimes seriously, that in adopting Chinese style landscapes in their paintings, Tibetan**

artists of the past were foretelling the colonization of Tibet's land, sky, rivers and mountains by the Chinese. In 1959, when Tibet lost its country, the prophecy was fulfilled. [3]

In this passage, Rigdol refers to a series of events in the 1950s that established Chinese rule over Tibet. There exist two opposing narratives about this period: the Chinese government and Chinese history books refer to it as the "Peaceful Liberation of Tibet," whereas Tibetans view the period as a devastating takeover of their land by colonizing forces, the "Chinese invasion of Tibet." Although many decades have now passed, there is still great strife in the region (now called the Tibet Autonomous Region, or TAR), resulting in ongoing political protests and efforts to silence dissent.



Figure 4.10.1.5.25: Tenzing Rigdol, *Pin drop silence: Eleven-headed Avalokiteshvara* (detail), 2013, ink, pencil, acrylic, and pastel on paper, 232.7 x 124.8 cm (**The Metropolitan Museum of Art**, Gift of Andrew Cohen, in honor of Tenzing Rigdol and Fabio Rossi, 2013) © Tenzing Rigdol

Representing self-sacrifice



Figure 4.10.1.5.26: Tenzing Rigdol, *My World Is in Your Blind Spot* (1 of 5 panels), 2014, silk brocade, scripture, photographs, 72 x 72" (182 x 182 cm each) (image courtesy of Tenzing Rigdol and Rossi & Rossi) © Tenzing Rigdol

Rigdol incorporates flames throughout the body of the deity, a reference to the ongoing self-immolation by Tibetans. Since 2009, 156 Tibetans have publicly protested the rule of the Chinese government by setting themselves on fire, often resulting in death. [4]

Another work by Rigdol, *My World Is in Your Blind Spot*, incorporates these flames. This work is a direct reference to the lack of attention that these devastating protests have had in the international community. *My World Is in Your Blind Spot* is a series of five works that shows *buddhas* in meditative postures, with flames appearing within the contours of their bodies. Rigdol photographed the flames and then cut the images apart before reassembling them, claiming a preference for a "calm" and dignified flame rather than an aggressive flame to honor the sacrifice of so many Tibetans. The casual viewer of Rigdol's work is likely unaware of these protests. While the panels are beautiful to look at, they are devastating to comprehend. This political statement would not be permitted in the Tibet Autonomous Region because of strict censorship imposed by China, instead it was made in exile.

Rigdol is one of many contemporary Tibetan artists who has never set foot in Tibet. In exile communities scattered around the world, artists have established a visible global presence by creating group exhibitions such as *Waves on the Turquoise Lake* (2006), *Traditions Transformed* (2010) and *Anonymous* (2013–2015), all of which showcased work by artists located both in the Tibet Autonomous Region and those working in exile communities. Many of these artists incorporate Buddhist elements in their work, although in some cases this inclusion is more of a nod to a cultural connection than to religious identity (artists may or may not be Buddhist practitioners, and the work in these exhibitions was rarely meant to function in a sacred manner). Yet, the relationship to Tibet is firmly established, as it is in *Pin drop silence: Eleven-headed Avalokiteshvara*.

Notes:

[1] Francesca Gavin, "The Construction of Harmony," *Tenzing Rigdol: Experiment with Forms* exhibition catalog (Rossi & Rossi Ltd., 2009), p. 9.

[2] Gavin, "The Construction of Harmony," p. 9.

[3] Interview of Tenzing Rigdol by Fabio Rossi, 2015 Accessed August, 2018.

[4] The International Campaign for Tibet lists the current number of self-immolations at 156, though the actual number may be higher, "Self-immolation Fact Sheet"

Additional resources:

Kurt Behrendt, "Tibetan Buddhist Art in the Twenty-First Century" (March 12, 2014)

Rossi Rossi

Sarah Magnatta, "Between the Lines," *Tenzing Rigdol: Dialogue,* exhibition catalog (Rossi & Rossi Ltd., 2019).

This page titled 4.10.1.5: Ritual, spirituality, and transcendence is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12.5: Ritual, spirituality, and transcendence by Smarthistory is licensed CC BY-NC-SA 4.0.

4.10.1.6: Histories, real and imagined

Histories, real and imagined

Contemporary artists depict the realities and possibilities of the past, often as a commentary on the present.

1980 - present

El Anatsui

El Anatsui, *Untitled*

by DR. PERI KLEMM and DR. STEVEN ZUCKER

The artist transforms metal from alcohol bottles into textiles that represent libations for ancestors.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.1: El Anatsui, *Untitled*, 2009, repurposed printed aluminum, copper, 256.5 × 284.5 × 27.9 cm as installed (Smithsonian National Museum of African Art, Washington D.C.)

Smarthistory images for teaching and learning:



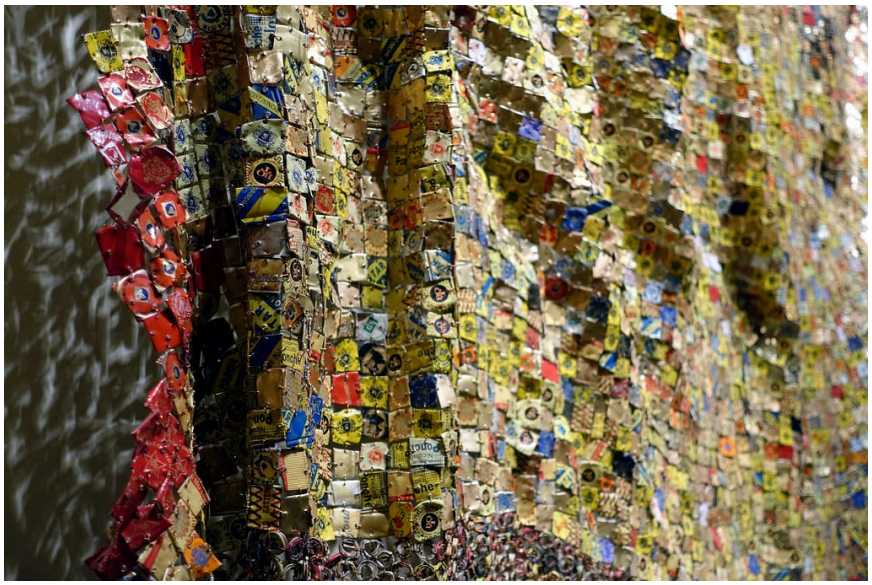


Figure 4.10.1.6.1: More Smarthistory images...

El Anatsui, *Old Man's Cloth*

by DR. ALLISON YOUNG

Old Man's Cloth hangs like a large tapestry, but when we look closer, it's easy to become captivated by the small metal fragments that comprise the work in hundreds. Arranged within a shifting grid of stripes and blocks of color, the components form their own internal maps across the surface, melding into vertical gold bands, interlocking black and silver rows, or a deviant red piece floating in a field of black. While *Old Man's Cloth* would have been laid flat during its construction, it is contorted and manipulated during installation, so that the individual metal pieces can catch the light from every angle. This brilliant visual effect makes its humble origins all the more impressive.



Figure 4.10.1.6.2: El Anatsui, *Old Man's Cloth*, 2003, aluminum and copper wire, 16′ x 17′ 1″ / 487.7 x 520.7 cm (Harn Museum of Art, Gainesville, FL)

The Medium or the Message?

Old Man's Cloth has been constructed from flattened liquor bottle labels that the artist collects near his home in Southern

Nigeria. While critics often write about Anatsui's metal wall hangings using the language of textiles, the labels and bottle caps are typically fastened together with copper wire and attached corner-to-corner. As such, the issue of medium is one of the first to inspire debate amongst viewers—are the wall hangings two-dimensional or three-dimensional? Are they sculptures, even as they hang against the wall like paintings? Are they individual works or immersive installations? Lastly, are they "fine art" or simply an innovative form of "craft"?

Purposefully disregarding the limited categories imposed by Western art history, Anatsui's practice emerges from a more expanded understanding of what art can be that stems from both the radical practices of the late-1960s, and from a vantage point outside of the Western tradition completely. As scholar Susan Vogel has explained, "such categories did not exist in classic African traditions, which made no distinction between art and craft, high art and low."

Anatsui's choice of discarded liquor bottle caps as a medium has as much to do with their formal properties as with their historical associations. As an African artist whose career was forged during the utopia of mid-century African independence movements, his work has always engaged his region's history and culture. The bottle caps, for Anatsui, signify a fraught history of trade between Africa and Europe. As he explained,

Alcohol was one of the commodities brought with [Europeans] to exchange for goods in Africa. Eventually alcohol become one of the items used in the transatlantic slave trade. They made rum in the West Indies, took it to Liverpool, and then it made its way back to Africa. I thought that the bottle caps had a strong reference to the history of Africa.



Figure 4.10.1.6.3

The luminescent gold colors also recall the colonial past of Anatsui's home country—modern Ghana was previously a British colony called The Gold Coast until its independence in 1957. The fluid movements of the work's surface remind us of the waters of the Atlantic Ocean, which carried slave-ships and traders between Africa, Europe and the New World. By bestowing his works with titles such as Man's Cloth and Woman's Cloth, Anatsui also makes reference to the significance of textiles in African societies, and their own historical role in trade networks.

Old Man's Cloth was included in one of Anatsui's first exhibitions of hanging metal sculptures. Held at London's October Gallery in 2004, the show was entitled "Gawu," which means "metal cloak" in Ewe. Old Man's Cloth is unique for its uneven and jagged edges as well as the "rough texture" of the recycled labels that are incorporated into the piece.

Modernism in Africa

El Anatsui was born in Ghana in 1944, and was trained in an academic European curriculum. In 1964, when he began his studies, many parts of Africa were experiencing a cultural renaissance associated with decolonization movements. Anatsui himself joined the unofficial "Sankofa" movement, which was invested in unearthing and reclaiming Africa's rich indigenous traditions and assimilating these with the European-influenced aspects of society. His earliest works, for example, included a series of wooden market trays into which he burned designs inspired by African graphic systems and adinkra motifs (symbols widely used by the

Akan people of Ghana).

In 1975, Anatsui joined the faculty at the University of Nigeria, Nsukka. Nsukka was a vibrant creative capital for African artists and writers in the 1970s, many of whom spearheaded the Zaria Rebellion in the early 1960s and revived the traditional art form of uli wall and body painting in their contemporary works.

Anatsui's work differed slightly from that of his colleagues in his insistence on abstraction. In some of his first mature works, he used an electric chainsaw to slash geometric patterns into wood. Though abstract, these works were metaphorically rich; Anatsui chose woods of different colors to represent the diversity of African cultures, while the violence of the chainsaw enacted the ruptures imposed by European imperialist expansion.



Figure 4.10.1.6.4: El Anatsui, *Hovor II* (detail), 2004 showing tiny bits of scrap tin, woven pieced together with wire (Photo: Amy M. Youngs, CC BY-NC-SA 2.0)

Critical Reception: African or Contemporary?

When two of Anatsui's metal wall hangings appeared in the 2007 Venice Biennale, they were lauded by the public and swiftly cemented his place as a leading international contemporary artist. He had, in fact, already shown in Venice almost two decades earlier in 1990, when he participated in a small exhibition surveying contemporary African art. During the time that lapsed between the two exhibitions, the art world became more receptive to artists outside of its Western centers, and by 2007, Anatsui could exhibit not only as a representative of the continent, but as an individual artist whose work was significant in its own right.

As such, his work provides an excellent opportunity for discussion about the relationships between artists at the center and at the periphery, and between the West and the Global South. The Metropolitan Museum of Art, for instance, has now acquired two of Anatsui's metal wall hangings, but they are owned by two different curatorial departments: the Arts of Africa, Oceania and the Americas, and Modern and Contemporary Art. Both were recently on view at the same time, but in separate galleries. Visitors, students, and art historians should continue to ask themselves which designation seems more appropriate, and for what reasons. Should we understand his art as a product of its place, its time, or both? What do we see in Anatsui's work when it is placed among African masks and ritual objects, and how do our impressions change when this work is placed beside contemporary art from around the world?

There are no correct answers to these questions, but they are indicative of the changes that have taken place both in the art world, and in today's increasingly connected society at large.

Smarthistory images for teaching and learning:



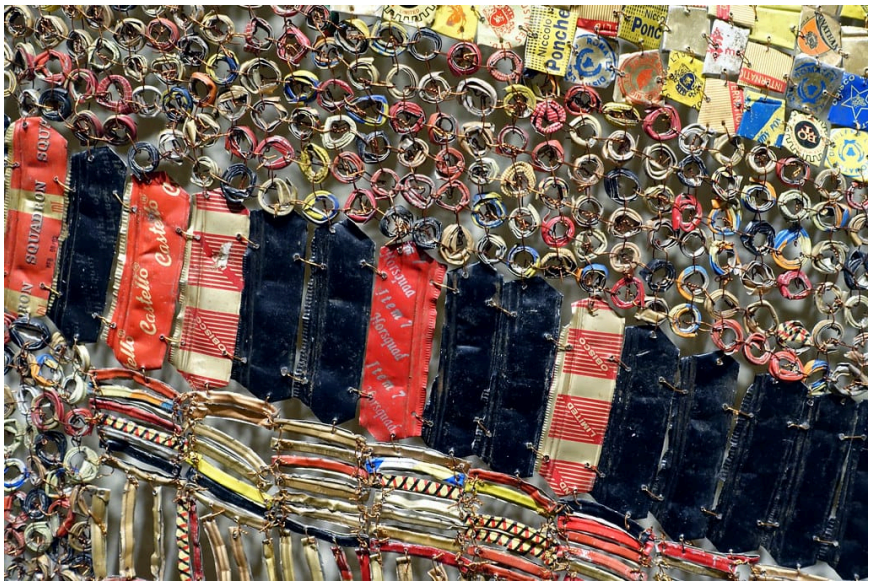


Figure 4.10.1.6.5: More Smarthistory images...

Jean-Michel Basquiat, *Horn Players*

by DR. JORDANA MOORE SAGGESE



Figure 4.10.1.6.6: Jean-Michel Basquiat, *Horn Players*, 1983, acrylic and oilstick on three canvas panels mounted on wood supports, 243.8 x 190.5 cm (The Broad Art Foundation) © The Estate of Jean-Michel Basquiat **(zoomable image here)**

Jean-Michel Basquiat's 1983 painting *Horn Players* shows us all the main stylistic features we have come to expect from this renowned American artist. In addition to half-length portraits on the left and right panels of this triptych (a painting consisting of three joined panels), the artist has included several drawings and words—many of which Basquiat drew and then crossed out. On each panel we also notice large swaths of white paint, which seem to simultaneously highlight the black background and obscure the drawings and/or words beneath. Most notable perhaps is the preponderance of repeated words like "DIZZY," "ORNITHOLOGY," "PREE" and "TEETH" that the artist has scattered across all three panels of this work.

Charlie Parker and Dizzy Gillespie

Despite the seeming disorder of the composition, however, it is clear that the main subjects of *Horn Players* are two famous jazz

musicians—the saxophonist Charlie Parker and the trumpeter Dizzy Gillespie, who Basquiat has depicted in both linguistic and visual portraits. On the left of the canvas, the artist has drawn the figure of Parker, holding his saxophone which emits several hot pink musical notes and distorted waves of sound. We see Dizzy Gillespie in the right panel, who holds a silent instrument alongside his torso. The words "DOH SHOO DE OBEE" that float to the left of the figure's head call to mind the scat (wordless improvisational) singing Gillespie often performed onstage.

Many of the words Basquiat has written on the canvas relate specifically to Charlie Parker, but they make sense only for those viewers with some knowledge of the musician's life. For example, the literal meaning of "ORNITHOLOGY" is "the study of birds," but this is also the title of a famous composition by Parker, who named the tune (first recorded in 1946) in reference to his own nickname "Bird." The words "PREE" and "CHAN" that we see written above and below the saxophonist's portrait refer to Parker's infant daughter and common-law wife, respectively.

Basquiat and wordplay



Figure 4.10.1.6.7: Jean-Michel Basquiat posing next to SAMO graffiti

This kind of wordplay is a characteristic that extends across most of Jean-Michel Basquiat's work. One of the most recognizable features of the artist's more than 2000 paintings and drawings is the overwhelming abundance of written words on the canvas. The art historian Robert Farris Thompson once declared: "It's as if he were dripping letters." Before his success as a painter, Basquiat was famous for writing on the walls of lower Manhattan as a teenager when he and a high school friend, Al Diaz, left cryptic messages in spray paint under the name "SAMO" (an acronym for "Same Old Shit") from 1977 until 1979.

As SAMO, Basquiat and Diaz wrote maxims, jokes, and prophecies in marker and spray paint on subway trains throughout New York City (particularly the "D" train, which ran between downtown Manhattan and Basquiat's home in Brooklyn), as well as on the walls and sidewalks in the SoHo and Tribeca neighborhoods. Many of the locations where SAMO writings were to be found were in close proximity to prominent art galleries. Combined with these strategic positions, phrases like "SAMO AS AN END TO PLAYING ART" or "SAMO FOR THE SO-CALLED AVANT-GARDE" presented the "SAMO" persona as outside the commercial art world and critical of it. In fact, even after relinquishing the SAMO persona and emerging to the art world as Jean-Michel Basquiat, the artist remained an outsider to the mainstream art world, despite his meteoric rise on the art auction block.

"The Black Picasso"

Basquiat went from SAMO"to commercial success at warp speed in the early 1980s. He first exhibited (still under the name SAMO) at the Times Square Show—an exhibition in June 1980 that marked the genesis of the eighties art movement. He was later invited to exhibit in **New York/New Wave**, a group show of sixteen hundred works by 119 artists that opened at P.S. 1 on Valentine's Day. The show was affectionately called "The Armory Show" of the 1980s (the original Armory Show in 1913 was the first large exhibition of international modern art in America).

Almost immediately afterward, the young Basquiat (at this point just 20 years old) was invited to exhibit in his first solo show

in Modena, Italy. The gallerist Annina Nosei, who showed more established artists like David Salle and Richard Prince, agreed to represent Basquiat, who had a one-man show at her gallery the next year. That same year, Basquiat had exhibitions in Los Angeles, Zurich, Rome, and Rotterdam and became the youngest artist invited to participate in Documenta 7 (an international contemporary art exhibition that takes place every five years). By 1983 the average sale price of Basquiat's work had increased by 600 percent, and his popularity (both in the auction house and in popular culture) persists even today. You can buy his images on shirts and hats from popular retail outlets and his large paintings sell at auction for more than $20 million.

Based on his meteoric success, critics referred to Jean-Michel Basquiat as "the black Picasso." The nickname was complicated for Basquiat, who never embraced it, but was nevertheless concerned with his own place within art history. He often relied on textbooks and other sources for his visual material; most biographies of the artist note his reliance on the medical textbook *Gray's Anatomy* (a gift from the artist's mother when Basquiat was hospitalized as a child) for the anatomical drawings and references we see on many of his surfaces. Basquiat also appropriated the work of Leonardo, Edouard Manet, and Pablo Picasso into his own compositions. These appropriations were in part an homage to the great painters Basquiat admired, but they also were a way for Basquiat to rewrite art history and insert himself into the canon.



Figure 4.10.1.6.8: Pablo Picasso, *Three Musicians*, 1921, oil on canvas, 200.7 x 222.9 cm (The Museum of Modern Art)

Looking again at *Horn Players*, for example, reveals several connections to Picasso's *Three Musicians*. Basquiat's use of the triptych format—a popular device for the artist in this period—echoes the triple subjects of the Picasso image. The figure of Parker in Basquiat's composition is also reproduced in the same position as the standing figure (playing the clarinet) in Picasso's work.



Figure 4.10.1.6.9: Right: Jean-Michel Basquiat, *Horn Players* (detail), 1983, acrylic and oilstick on three canvas panels mounted on wood supports, 243.8 x 190.5 cm (The Broad Art Foundation) © The Estate of Jean-Michel Basquiat; left: Pablo Picasso, *Three Musicians* (detail), 1921, oil on canvas, 200.7 x 222.9 cm (The Museum of Modern Art)

The central panel of Basquiat's canvas, which does not show a portrait of an identifiable musician like the other two panels, but instead a distorted head with roughly outlined features, suddenly comes into focus via its comparison with *Three Musicians*. Here Picasso references in paint, his earlier experiments with paper collage especially in rendering the face and head of his central figure, whose jawline dramatically extends beyond what is anatomically possible to create an abstract, bulbous shape. Basquiat's central figure bears a similar protrusion—this time from the top of the head—which he fills in with hatch marks that are suggestive of the patterning of Picasso's "collaged" paper. Once again, Basquiat seems to be speaking in code. This time, we are being asked not only to draw upon our knowledge of music history but of modern painting to fully understand his work.

Basquiat's musicians

Musicians were a popular subject for Basquiat, who himself played briefly in a noise band called Gray—likely a reference to the *Gray's Anatomy* textbook. Jazz musicians began to appear in the artist's paintings around 1982; references to jazz musicians or recordings appear in more than thirty large-format paintings and twenty works on paper. Charlie Parker and Dizzy Gillespie are the two musicians who appear most frequently, both as figures in the paintings and through linguistic references to their work. The artist painted canvases with figures playing the trumpet, the saxophone, and the drums. He also devoted several canvases to replicating the labels of jazz records or the discographies of musicians.

Many scholars have connected Basquiat's interest in jazz to a larger investment in African American popular culture (for example, he also painted famous African American athletes) but an alternative explanation is that the young Basquiat looked to jazz music for inspiration and for instruction, much in the same way that he looked to the modern masters of painting. Parker, Gillespie, and the other musicians of the bebop era infamously appropriated both the harmonic structures of jazz standards, using them as a structure for their own songs, and repeated similar note patterns across several improvisations. Basquiat used similar techniques of appropriation throughout his career as a painter.

Additional resources:

Basquiat from The Art Story

Sue Coe, Aids won't wait, the enemy is here not in Kuwait

by MONICA ZIMMERMAN, PENNSYLVANIA ACADEMY OF THE FINE ARTS and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video: 4.10.1.6.2: Sue Coe, *Aids won't wait, the enemy is here not in Kuwait*, 1990, photo-etching on paper, 23.8 x 32.5 cm (Pennsylvania Academy of the Fine Arts, © Sue Coe)

Additional resources:

This work at PAFA

Andrew Sullivan, "Gay Life, Gay Death: The Siege of a Subculture," *The New Republic* (December 17, 1990) (reposting on June 26, 2013)

Thornton Dial, *Blood and Meat: Survival For The World*

by TIMOTHY ANGLIN BURGARD, FINE ARTS MUSEUMS OF SAN FRANCISCO and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.3: Thornton Dial, *Blood and Meat: Survival For The World*, 1992, rope, carpet, copper Wire, metal, canvas scraps, enamel, and splash zone compound on canvas on wood, 165.1 x 241.3 x 27.9 cm (Fine Arts Museums of San Francisco, ©Thornton Dial), a Seeing America video

Titus Kaphar, *The Cost of Removal*

by LAUREN HAYNES, CRYSTAL BRIDGES MUSEUM OF AMERICAN ART) and DR. BETH HARRIS

Kaphar takes a violent history and renders it visible in this modified portrait of Andrew Jackson.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.4: Titus Kaphar, *The Cost of Removal*, 2017, oil, canvas, and rusted nails on canvas, 274.3 x 213.4 x 3.8 cm, © Titus Kaphar (Crystal Bridges Museum of American Art)

William Kentridge, drawing from *Tide Table (Soho in Deck Chair)*

by JOSH R. ROSE



Figure 4.10.1.6.10: William Kentridge, Drawing from *Tide Table (Soho in Deck Chair)*, 2003, charcoal on paper, 81.28 x 121.92 cm (courtesy Marian Goodman Gallery, NYC, © William Kentridge)

On the beach, but in a suit

It is a humorously discordant image: a man in a pinstriped suit sits on a deck chair at the beach, ignoring the overcast vista by reading a newspaper. The figure's balding head and newspaper are the brightest highlights against the smooth, rippling surf. South African artist William Kentridge has said the inspiration for this scene was a photograph of his grandfather similarly dressed at a beach near Capetown. The contrast of formal dress and beach setting—while whimsical—also suggests class distinctions and the disconnect between experiencing one's environment and codification as control: rather than watch the tide, the figure (as we come to find out) reads the newspaper's tide table (a chart that shows water heights over time for a particular location). The gulf separating understanding and experience in this drawing resonates in much of Kentridge's imagery and process.

"Successful Failures"

Kentridge was raised by two progressive lawyers in Johannesburg who actively helped disenfranchised South Africans navigate the legal system during the systemic inequalities of apartheid. The harsh racial and socioeconomic conditions in South Africa marked the earliest work Kentridge produced after studying visual art at the Johannesburg Art Foundation and theater at the L'École Internationale de Théâtre Jacques Lecoq in Paris.

Kentridge's earliest passions were theater and opera (and he has continued working in these areas throughout his career), yet after realizing he was not cut out as an actor, he was "reduced to being an artist." As he has described it, "Every clear decision I have made was wrong. And the only thing that saved me was what I hadn't decided." This deceptively self-deprecating remark adequately describes the intentional openness and mutability of meaning Kentridge has built into his approach.

Process as Performance

The drawing above is the result of a film, *Tide Table*, the ninth film in the series "Drawings For Projection" begun in 1989. These films utilize a unique stop-motion technique: using a 16mm camera, Kentridge photographs each stage of a drawing on one sheet

of paper as he continually modifies it through additions and erasures, often leaving ghostly remnants of previous marks on the page. He even periodically appears within the frame, such as by placing a new sheet in front of the camera when the previous drawing/scene is finished.



Figure 4.10.1.6.11: William Kentridge, Drawing from *Tide Table*, 2003 © William Kentridge

The resulting work of art is generally comprised of two elements: an animated film and a series of drawings. Unlike traditional animation, which is painstakingly planned and comprised of thousands of single images each denoting a fraction of a second, Kentridge's films develop organically without any preparatory planning like storyboards, relying more on a stream-of-consciousness approach that strives for something between random chance and conscious premeditation. Kentridge associates this with the concept of "fortuna," in which his imagery and narrative are influenced by objects in his environment or ideas and motions that seem intrinsically related to—but independent of—the themes and narrative being tackled at the time. The relationship might be comparable to that of authors noting how their characters do something unexpected in the course of writing a novel. There is a performative quality to Kentridge's process, predicated by the spontaneity he fosters, his own appearances in the frame, and the film itself as a time-based record of his drawing process.

The Traces Always Remain

Kentridge's drawings for his films are often regarded as palimpsests. A palimpset is the word for a manuscript where the original text has been erased and overwritten (a practice common before paper was available and when parchment was expensive). In Kentridge's work, the sheet of paper becomes the locus for layer upon layer of images that evolve and shift, where the earlier states of the drawing exist only through traces intentionally left on the paper. In the film, these traces help intensify the movement of his figures, but also visually remark upon the process as a physical interaction of charcoal and eraser on paper.

The palimpsest quality to Kentridge's approach is one that many critics and historians have associated with his reaction to growing up during a turbulent and shifting period in South African history. Apartheid, legalized racial discrimination, dominated South African governance and society from 1948 until 1994. One way Kentridge has made overt reference to the atrocities of apartheid in his "Drawings for Projection" series is through the one pre-determined facet of these narratives: an established "cast" featuring the wealthy white real-estate developer and industrialist Soho Eckstein. Eckstein represents the authoritative oppressors ruling over black South Africans.



Figure 4.10.1.6.12: William Kentridge, Drawing for the film *Monument*, 1990 © William Kentridge

In the 1990 film *Monument*, for example, Eckstein unveils a heroic monument showing a black worker struggling to carry a load of pristine marble objects. An ostensibly commemorative sculpture to the efforts of South Africans is revealed later to be an actual living person, not a sculpture. Racial discrimination is starkly reduced to the contrast between the "sculpted" worker's body and the white classically-styled load he bears.

In the 1991 film, *Mine*, a similar contrast is presented between Eckstein's white bed coverings and tray as he enjoys coffee, and the grueling, dank conditions of the mines that Eckstein owns. The two are linked visually by the downward action of the French-press coffee maker that becomes the elevator within the mines. Such contrasts seem intentionally provocative, both formally and thematically. Yet Kentridge admits that the decision to have the coffee plunger become the elevator shaft was another example of fortuna, inspired simply from the fact he had that type of coffee maker in his studio that day.



Figure 4.10.1.6.13: William Kentridge, Drawing for the film *Mine,* 1991 © William Kentridge

A critical event linked to the legal dissolution of apartheid in the 1990s was the establishment of the Truth and Reconciliation Commission. Chaired by Archbishop Desmond Tutu, the Commission was a five year investigation into the crimes and human rights abuses committed under apartheid from 1960 until May 10, 1994. The results of the investigation, broadcast on South African television, were intended to bring to light crimes committed and the breadth of the structure of racism and disenfranchisement.

Although Kentridge's process was established several years before the Commission, scholars like Jessica Dubow and Ruth Rosengarten have linked the palimpsest quality of Kentridge's "Drawings for Projection" with the contradictory nature of the Commission: although the broadcasts intended to reveal atrocities, they also established that the harrowing acts revealed were firmly "in the past" and therefore not reflective of the dawn of a post-apartheid South Africa. Dubow and Rosengarten suggest that Kentridge's palimpsest technique is reminiscent of the Commission's attempts to show—but also remove—traces of apartheid and that Kentridge's "finished" drawings similarly do not fully reveal everything that went into making them. The documentation of every stage of the drawing is only seen in the animated film, hence the reason the drawings and the films are intrinsically related and should not be separated.

Tide Table

The disconnect between documentation and direct experience seen in the hearings of the Truth and Reconciliation Commission is also central to the drawing of Soho Eckstein sitting at the beach in a business suit. In the films he created after 1994, Kentridge presents Soho as a man whose life has fallen apart: between inexplicable health issues, violent nightmares, and the loss of his fortune, Kentridge portrays Eckstein's struggles in post-apartheid South Africa. Throughout Tide Table the artist provides a subtext that reflects upon youth, as a choir on the beach sings and a young boy dances and leaps in the surf. Often this occurs around Eckstein, as he sits in the deck chair, seeming to prefer the analytical table of tide flows in the newspaper and, in a later scene, pointedly placing the newspaper over his head to sleep (see above).

These images reinforce Eckstein's character as one who is more comfortable at a remove from human connection and the natural world, a portrayal that is common to many of the films in the series.

Eckstein's actions in *Tide Table* evoke a sense of loss for the comforts and advantages the character had during apartheid. Still, there is a glimmer of hope. Ultimately Eckstein observes those around him; he gets up, and playfully throws a rock into the water.

Additional Resources:

The artist discussing his 2003 film, *Tide Table* (SFMOMA)

The artist discusses his process (SFMOMA)

This film at SFMOMA

Interview with the artist

Kentridge Wikipedia entry

The National Memorial for Peace and Justice

by DR. RENÉE ATER

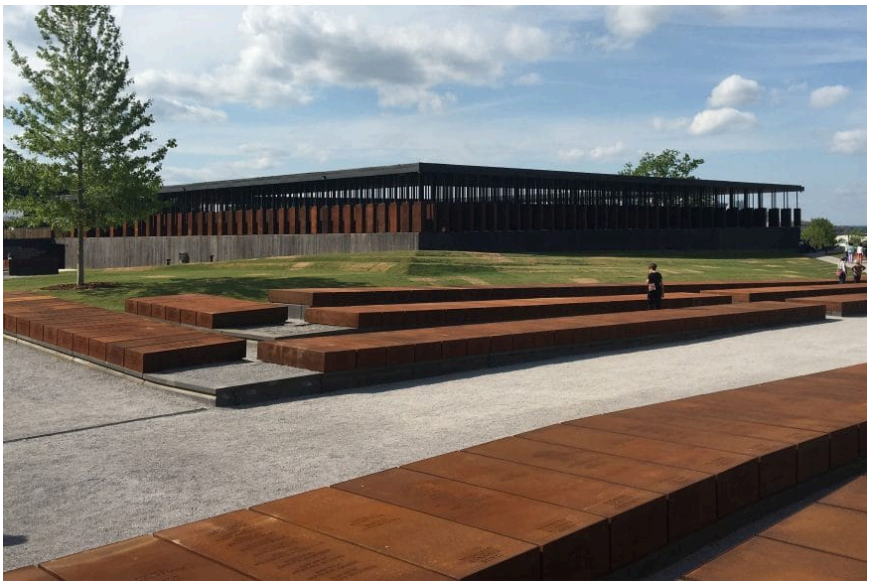


Figure 4.10.1.6.14: The National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: **Shawn Calhoun**, CC BY-NC 2.0)

Located in Montgomery, Alabama, the National Memorial for Peace and Justice is the first monument to commemorate the over 4,000 African Americans who were lynched in the United States between 1877 and 1950. The Equal Justice Initiative (EJI) envisioned and realized the memorial as "a sacred space for truth-telling and reflection about racial terror in America and its legacy."



Figure 4.10.1.6.15: Meta Warrick Fuller, *In Memory of Mary Turner: As a Silent Protest Against Mob Violence,* 1919, painted plaster (Museum of African American History, Boston & Nantucket)

While writing my dissertation on the sculpture of Meta Warrick Fuller, I investigated the history of lynching in the United States. My research was motivated by the fact that Fuller had created a small painted plaster to honor the memory of Mary Turner, a pregnant woman who was lynched in Brooks County, Georgia, in 1918. I was interested to see if Turner was identified in the National Memorial for Peace and Justice, which I discovered she was. I also was deeply curious as to how EJI would handle the visual representation of trauma and violence. At the end of April 2018, I flew to Atlanta, rented a car, and drove through the Georgia and Alabama countryside to Montgomery to participate in the opening ceremonies and the two-day social justice conference.



Figure 4.10.1.6.16: The National Memorial for Peace and Justice, opened 2018, Montgomery, Alabama (photo: **Soniakapadia**, CC BY-SA 4.0)

Sited on six acres of land, the National Memorial for Peace and Justice is an arresting and emotionally powerful memorial to lynching victims. EJI with MASS Design Group conceived the memorial as a sober and sacred site where people can gather and reflect on America's history of slavery, lynching, and racial inequality. EJI believes that such a monument will allow for national reconciliation and redemption.



Figure 4.10.1.6.17: Peace and Justice Memorial Garden, The National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: Dr. Renée Ater)

Peace and Justice Memorial Garden

The memorial includes multiple components: a garden, four sculpture groupings, explanatory texts and quotations, and a temple-like structure with hanging rectangular boxes made of corten steel. Visitors first encounter the Peace and Justice Memorial Garden before entering the long hallway of the main entrance. Within the garden are native plantings of flowers and shrubs and the so-called "Memory Wall: Strength," a brick arched wall from the Montgomery Theater, built in 1860, which enslaved masons constructed. The garden is intended as a contemplative space as well as a place to acknowledge past and present African American laborers in Montgomery. From the garden, a serpentine pathway leads to the entrance of the National Memorial for Peace and Justice.

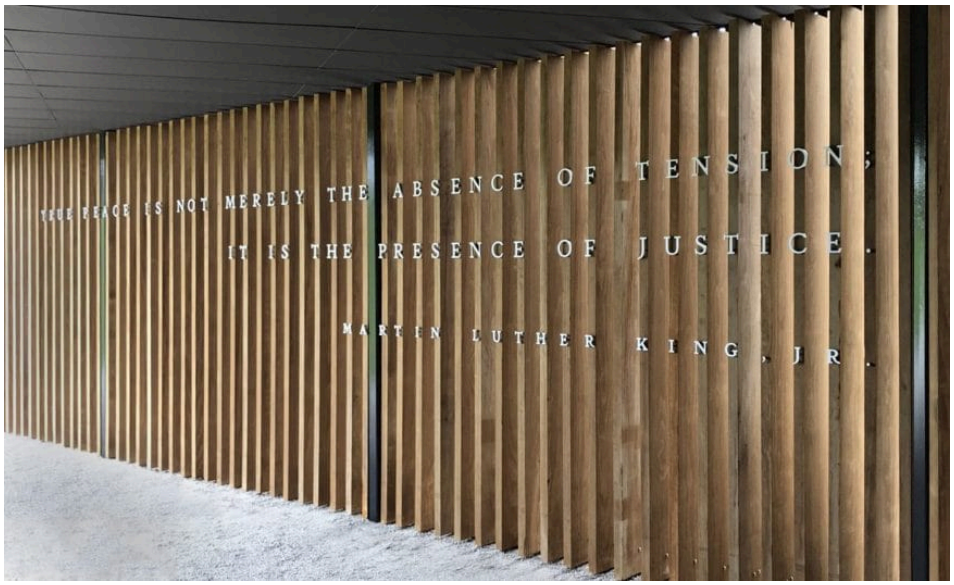


Figure 4.10.1.6.18: Entrance, National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: Dr. Renée Ater)

Telling the story of slavery and lynching

A quotation from Martin Luther King Jr. greets you as you enter the memorial. Placed along a wooden slat wall, it reads: "True peace is not merely the absence of tension, it is the presence of justice." This quotation frames the meaning of the memorial and the overall social activist and reparative justice mission of EJI. EJI is "committed to ending mass incarceration and excessive punishment in the United States, to challenging racial and economic injustice, and to protecting basic human rights for the most vulnerable people in American society." The memorial space flows in one direction, with visitors passing King's remarks to begin a slow climb up the gently sloped landscape to the main building of the memorial.



Figure 4.10.1.6.19: Informational plaque in the National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: **Judson McCranie**, CC BY-SA 3.0)

Four large grey plaques with white lettering are attached to the concrete wall along the pathway. Evenly spaced, these texts outline a history of the transatlantic slave trade and the rise of violence in the post-Civil War period; Reconstruction and the rise of convict leasing in the South; racial terror lynching in the late nineteenth and twentieth centuries; and the justifications that white Americans gave for lynching African American men and women. The texts use direct, concise language to describe the difficult historical facts of slavery and racial terror lynching.



Figure 4.10.1.6.20: Kwame Akoto-Bamfo, *Nkyinkyim Installation*, 2018, National Memorial for Peace and Justice, Montgomery, Alabama (photo: **Michael Delli Carpini**, CC BY-NC 2.0)

Monument to the transatlantic slave trade

In front of the first plaque, the artist Kwame Akoto-Bamfo created a cast concrete, multi-figure, stand-alone monument to the transatlantic slave trade. Entitled *Nkyinkyim Installation*, this work presents seven semi-nude Africans who are enchained for the harrowing journey from the interior to the coast for transportation across the Atlantic. Based on the **slavery memorial in Stone Town, Zanzibar, Tanzania**, Akoto-Bamfo's memorial evokes the horror of slavery through the figures anguished expressions; chained necks and manacled hands and feet; and simulated slashed backs. The most sorrowful of these depictions is of a chained young mother holding a screaming baby as she reaches across to an older standing male figure.



Figure 4.10.1.6.21: Memorial Square, National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: **Michael Delli Carpini**, CC BY-NC 2.0)

Sacred space dedicated to lynching victims

The memorial structure suggests the form of a temple with a large peristyle. At the center of the temple-like memorial is an open space, "Memorial Square," reached by a series of aggregate concrete steps. The grassy knoll represents spaces such as town

squares and courthouse lawns used for the public spectacle of lynching. Inside the memorial, over 800 rectangular corten steel boxes, six feet in height, hang by steel poles from the ceiling at even intervals. Each of these hanging forms represents a county in the United States where a lynching took place. Names of lynching victims and the dates of their murders are laser cut into the surfaces of the boxes.



Figure 4.10.1.6.22: National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: Dr. Renée Ater)

On the interior of the memorial structure, you begin on even ground, your body parallel to the coffin-like forms. If you choose, you can lean into the monument and even trace a finger across the cutout letters or feel the uneven surface quality. As you descend into the memorial, the corten steel boxes rise high above, suspended in the air and no longer within your bodily space. These rusted stele evoke the image of black bodies hanging from trees.

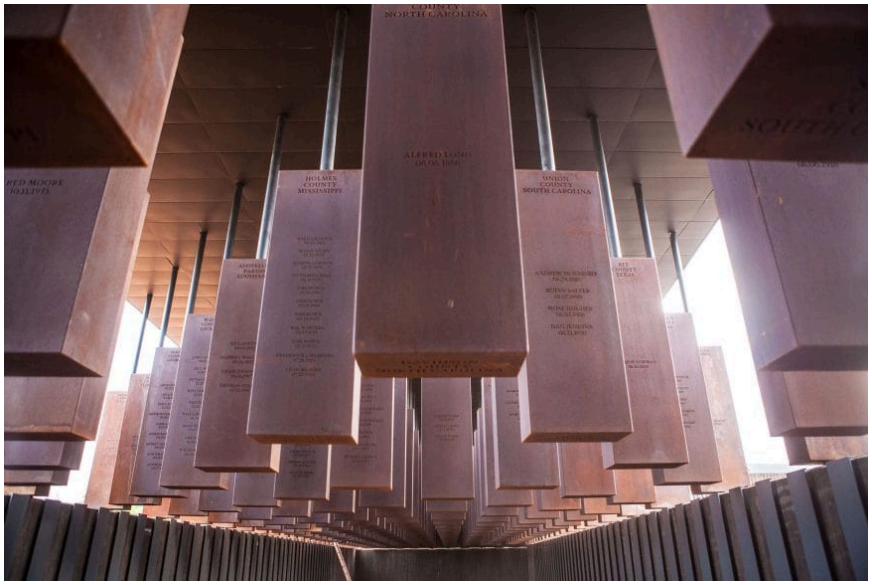


Figure 4.10.1.6.23: Memorial Corridor, National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: **Soniakapadia**, CC BY-SA 4.0)

Along the third section of the memorial, bands of text panels in grey with white lettering identify the awful justifications for racial terror lynching including accusations of inappropriate conduct with white women, speaking out against lynching, and not showing deference to whites. After reading these difficult texts, you encounter a message of reconciliation.

For the hanged and beaten.
For the shot, drowned, and burned.

For the tortured, tormented, and terrorized.
For those abandoned by the Rule of Law.

We will remember.

With hope because hopelessness is the enemy of justice.
With courage because peace requires bravery.
With persistence because justice is a constant struggle.
With faith because we shall overcome.

This text asserts unequivocally the power of this memorial to act as a remembrance device and as a space where the horror and trauma of lynching is framed in the context of peace.

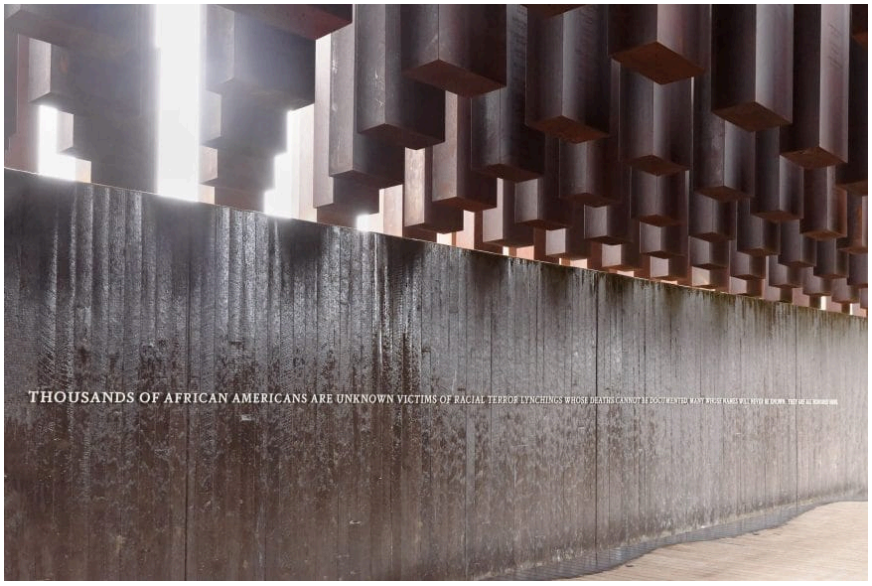


Figure 4.10.1.6.24: Wall with flowing water, National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: **Judson McCranie**, CC BY-SA 3.0)

Nearby, water flows down the final long wall of the memorial. Metal lettering asserts that all victims of lynching now will be remembered. “Thousands of African Americans are unknown victims of racial terror lynchings whose deaths cannot be documented, many whose names will never be known. They are all honored here.” The slow sound of water cascading down the wall allows space for contemplation, as you are able to sit along rough-hewn seating across from the water feature.

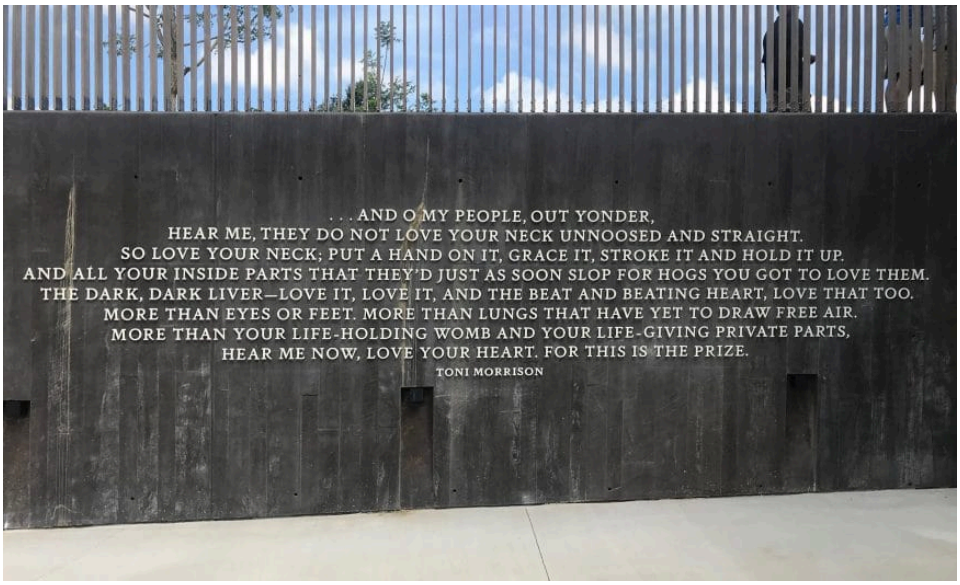


Figure 4.10.1.6.25: National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: **Michael Delli Carpini,** CC BY-NC 2.0)

When you exit the memorial to the surrounding park, you encounter a final quotation from Toni Morrison's novel *Beloved* that stresses the power of love.

And O my people, out yonder, hear me, they do not love your neck unnoosed and straight. So love your neck; put a hand on it, grace it, stroke it and hold it up. And all your inside parts that they'd just as soon slop for hogs, you got to love them. The dark, dark liver—love it, love it, and the beat and beating heart, love that too. More than eyes or feet. More than lungs that have yet to draw free air. More than your life-holding womb and your life-giving private parts, hear me now, love your heart. For this is the prize.



Figure 4.10.1.6.26: Duplicate monuments, National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: Dr. Renée Ater)

Duplicate monuments

In the park, MASS and EJI included a field of duplicate monuments. Rather than hang from a roof, the corten steel boxes now serve as cenotaphs lying flat on the ground in long rows. They are waiting to be claimed and installed in the counties they represent. For EJI, the duplicate monuments serve as "a report" as to which counties have confronted the difficult history of lynching and which have chosen to not deal with such a painful legacy. EJI believes this process of claiming the duplicate monuments will "change the built environment of the Deep South and beyond to more honestly reflect our history."



Figure 4.10.1.6.27: Left: Ida B. Wells Memorial Grove; right: Dana King, *Guided by Justice*, 2018. National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photos: Dr. Renée Ater)

Sculpture in the park

Three additional groups of sculpture are integrated into the park. The Ida B. Wells Memorial Grove honors the early twentieth-century anti-lynching activist and writer. It contains over forty black granite cylinders of various heights that visitors can sit on and reflect. In *Guided by Justice*, Dana King created three life-size bronze statues of black women dressed in coats as they "walk" on the pathway. These three statues of women at various stages of life symbolize the women arrested in 1955 for challenging racial segregation on Montgomery's public buses.



Figure 4.10.1.6.28: Hank Willis Thomas, *Raise Up*, 2016, National Memorial for Peace and Justice, 2018, Montgomery, Alabama (photo: Dr. Renée Ater)

The final sculpture is by Hank Willis Thomas and represents systemized police violence directed towards African American men. *Raise Up* is a long horizontal, free-standing concrete wall with ten bronze portraits of black men shown from the neck up with their hands raised above their bald heads. These monuments with Akoto-Bamfo's multi-figure statue of enslaved persons underscore the main themes of the memorial and of EJI's work: slavery, lynching, segregation/resistance, and mass incarceration.

Elizabeth Alexander's "Invocation"

As visitors exit the National Memorial to Peace and Justice, they encounter the haunting lines of the poet Elizabeth Alexander's "Invocation." In the lines of her poem, Alexander asserts that the African American victims of racial terror lynching will not be forgotten, nor lost in the telling of U.S. history. Each name—"a holy word"— is forever etched on this memorial and into the nation's collective memory.

The wind brings your names.
We will never dissever you names
nor your shadows beneath each branch and tree.

The truth comes in on the wind, is carried by water.
There is such a thing as the truth. Tell us
how you got over. Say, *Soul look back in wonder*.

Your names were never lost,
each name a holy word.
The rocks cry out—

call out each name to sanctify this place.
Sounds in human voices, silver and soil,
a moan, a sorrow song,

a keen, a cackle, harmony,
a hymnal, handbook, chart,
a sacred text, a stomp, an exhortation.

Ancestors, you will find us still in cages,
despised and disciplined.
You will find us still mis-named.

Here you will find us despite.
You will not find us extinct.
You will find us here memoried and storied.

You will find us here mighty.
You will find us here divine.
You will find us where you left us, but not as you left us.

Here you endure and are luminous.
You are not lost to us.
The wind carries sorrows, sighs, and shouts.

The wind brings everything. Nothing is not lost.

Additional Resources:

The National Memorial for Peace and Justice on Equal Justice Initiative website

MASS Design group page on their design for the memorial

Renee Ater's public history blog

Julie Buckner Armstrong, *Mary Turner and the Memory of Lynching* (Athens, GA: University of Georgia Press, 2011).

Fritzhugh Brundage, *Under Sentence of Death: Lynching in the South* (Durham, NC: The University of North Carolina Press, 1997.)

Nam June Paik, *Electronic Superhighway: Continental U.S., Alaska, Hawaii*

by TINA RIVERS RYAN



Figure 4.10.1.6.29: Nam June Paik, *Electronic Superhighway: Continental U.S., Alaska, Hawaii,* 1995, fifty-one channel video installation (including one closed-circuit television feed), custom electronics, neon lighting, steel and wood; color, sound, approx. 15 x 40 x 4′ (Smithsonian American Art Museum) (© Nam June Paik Estate)

Getting on the "Electronic Super Highway"

In 1974, artist Nam June Paik submitted a report to the Art Program of the Rockefeller Foundation, one of the first organizations to support artists working with new media, including television and video. Entitled "Media Planning for the Post Industrial Society—The 21st Century is now only 26 years away," the report argued that media technologies would become increasingly prevalent in American society, and should be used to address pressing social problems, such as racial segregation, the modernization of the economy, and environmental pollution. Presciently, Paik's report forecasted the emergence of what he called a "broadband communication network"—or "electronic super highway"—comprising not only television and video, but also "audio cassettes, telex, data pooling, continental satellites, micro-fiches, private microwaves and eventually, fiber optics on laser frequencies." By the 1990s, Paik's concept of an information "superhighway" had become associated with a new "world wide web" of electronic communication then emerging—just as he had predicted.

From Music to Fluxus

Paik was well-positioned to understand how media technologies were evolving: in the 1960s he was one of the very first people to use televisual technologies as an artistic medium, earning him the title of "father" of video art. Born in Seoul in 1932, Paik studied composition while attending college in Tokyo; he eventually travelled to Germany, where he hoped to encounter the leading composers of the day. He met John Cage in 1958, and soon became involved with the avant-garde Fluxus group, led by Cage's student George Maciunas. Explain Fluxus.

Following the example of Cage's oeuvre, many of Paik's Fluxus works undermined accepted notions of musical composition or performance. This same irreverent spirit informed his use of television, to which he turned his attention in 1963 in his first one-man gallery show, "Exposition of Music—Electronic Television," at the Galerie Parnass in Wuppertal, Germany. Here, Paik became the first artist to exhibit what would later become known as "video art" by scattering television sets across the floor of a room, thereby shifting our attention from the content on the screens to the sculptural forms of the sets.

The father of video art



Figure 4.10.1.6.30: Nam June Paik, *Magnet TV*, 1965, modified black-and-white television set and magnet (Smithsonian American Art Museum) (© Nam June Paik Estate)

Paik moved to New York in 1964, where he came into contact with the downtown art scene. In 1965, he began collaborating with cellist Charlotte Moorman, who would wear and perform Paik's TV sculptures for many years; he also had a one-man show at the 57th Street Galeria Bonino, in which he exhibited modified or "prepared" television sets that upset the traditional TV-watching experience. One example is *Magnet TV*, in which an industrial magnet is placed on top of the TV set, distorting the broadcast image into abstract patterns of light.

According to an oft-cited story, on October 4th of that same year, Paik purchased the first commercially-available portable video system in America, the Sony Portapak, and immediately used it to record the arrival of Pope Paul VI at St. Patrick's Cathedral. Later that night, Paik showed the tape at the Café au Go Go in Greenwich Village, ushering in a new mode of video art based not on the subversion or distortion of television broadcasts, but on the possibilities of videotape. The evolution of these tendencies into a new movement was announced by a 1969 group show, "TV as a Creative Medium." Held at the Howard Wise Gallery in New York, the show included one of Paik's interactive TVs, and also premiered another one of his collaborations with Moorman.

TV as a Creative Medium

For Paik and other early adopters of video, this new artistic medium was well-suited to the speed of our increasingly electronic modern lives. It allowed artists to create moving images more quickly than recording on film (which required time for negatives to be developed), and unlike film, video could be edited in "real-time," using devices that altered the video's electronic signals. (Ever the pioneer, Paik created his own video synthesizer with engineer Shuya Abe in 1969.) Furthermore, because the image recorded by the video camera could be transmitted to and viewed almost instantaneously on a monitor, people could see themselves "live" on a TV screen, and even interact with their own TV image, in a process known as "feedback." In the years to come, the participatory nature of TV would be redefined by two-way cable networks, while the advent of global satellite broadcasts made TV a medium of instant global communication.



Figure 4.10.1.6.31: Nam June Paik, *TV Garden*, 1974 (image shows 2000 version), video installation with color television sets and live plants (Solomon R. Guggenheim Museum) (© Nam June Paik Estate)

As television continued to evolve from the late 1960s onward, Paik explored ways to disrupt it from both inside and outside of the institutional frameworks of galleries, museums, and emerging experimental TV labs. His major works from this period include *TV Garden* (1974), a sculptural installation of TV sets scattered among live plants in a museum (image above), and *Good Morning, Mr. Orwell* (1984), a broadcast program that coordinated live feeds from around the world via satellite. In these and other projects, Paik's goal was to reflect upon how we interact with technology, and to imagine new ways of doing so. The many retrospectives of his work in recent decades, including one organized by the Smithsonian American Art Museum in 2012, speak to the increasing relevance of his ideas for contemporary art.

The nation electric



Figure 4.10.1.6.32: Nam June Paik, *V-yramid* (detail), 1982, video installation, color, sound, with forty television sets (Whitney Museum of American Art, New York) (photo: **Mark B. Schlemmer**, CC BY 2.0) (© Nam June Paik Estate)

By the 1980s, Paik was building enormous, free-standing structures comprising dozens or even hundreds of TV screens, often organized into iconic shapes, as in the giant pyramid of *V-yramid* (1982). For the German Pavilion at the 1993 Venice Biennale, Paik produced a series of works about the relationship between Eastern and Western cultures, framed through the lens of Marco Polo; along with Hans Haacke, another artist representing Germany, Paik was awarded the prestigious Golden Lion. One of the works, *Electronic Superhighway*, was a towering bank of TVs that simultaneously screened multiple video clips (including one

of John Cage) from a wide variety of sources. Two years later, Paik revisited this work in *Electronic Superhighway: Continental U.S., Alaska, Hawaii*, placing over 300 TV screens into the overall formation of a map of the United States outlined in colored neon lights (see image at the top of the page and the detail below). Roughly forty feet long and fifteen feet high, the work is a monumental record of the physical and also cultural contours of America: within each state, the screens display video clips that resonate with that state's unique popular mythology. For example, Iowa (where each presidential election cycle begins) plays old news footage of various candidates, while Kansas presents the *Wizard of Oz*.



Figure 4.10.1.6.33: Detail, Nam June Paik, *Electronic Superhighway: Continental U.S., Alaska, Hawaii*, 1995, fifty-one channel video installation (including one closed-circuit television feed), custom electronics, neon lighting, steel and wood; color, sound, approx. 15 x 40 x 4′ (Smithsonian American Art Museum) (© Nam June Paik Estate)

The states are firmly defined, but also linked, by the network of neon lights, which echoes the network of interstate "superhighways" that economically and culturally unified the continental U.S. in the 1950s. However, whereas the highways facilitated the transportation of people and goods from coast to coast, the neon lights suggest that what unifies us now is not so much transportation, but electronic communication. Thanks to the screens of televisions and of the home computers that became popular in the 1990s, as well as the cables of the internet (which transmit information as light), most of us can access the same information at anytime and from any place. *Electronic Superhighway: Continental U.S., Alaska, Hawaii*, which has been housed at the Smithsonian American Art Museum since 2002, has therefore become an icon of America in the information age.

While Paik's work is generally described as celebrating the fact that the "electronic superhighway" allows us to communicate with and understand each other across traditional boundaries, this particular work also can be read as posing some difficult questions about how that technology is impacting culture. For example, the physical scale of the work and number of simultaneous clips makes it difficult to absorb any details, resulting in what we now call "information overload," and the visual tension between the static brightness of the neons and the dynamic brightness of the screens points to a similar tension between national and local frames of reference.

Additional resources:

Nam June Paik, *Electronic Superhighway: Continental U.S., Alaska, Hawaii* at the Smithsonian American Art Museum

Nam June Paik, bio and collection of the Smithsonian American Art Museum

Nam June Paik, *TV Garden* at the Guggenheim

Nam June Paik from the National Endowment for the Arts

Nam June Paik archive at the Smithsonian American Art Museum

Nam June Paik from the Asia Society

Melissa Chiu and Michelle Yun, eds., *Nam June Paik: Becoming Robot* (New York: Asia Society Museum, 2014).

John G. Hanhardt and Ken Hakuta, *Nam June Paik: Global Visionary* (Washington, D.C.: Smithsonian American Art Museum, 2012).

John G. Hanhardt and Jon Ippolito, *The Worlds of Nam June Paik* (New York: Guggenheim Museum, 2000).

Sigmar Polke, *Watchtower* series

by KATRINA KLAASMEYER

In the early 1980s, Sigmar Polke returned to painting. The ever-evolving artist had spent the previous decade experimenting with photography, inspired perhaps by his extensive travels through Asia and Australia. His interest in photography centered on the chemical processes of the darkroom and their potential for unpredictable results. Like his earlier *rasterbilder* (works that exposed the raster-dot technique of printing, such as *Bunnies*), Polke continued to delight in exposing the artistic process. As he began to use unconventional materials and chemicals across various media, viewers could see the artwork literally developing and changing in front of their eyes. These experiments have earned him the designation of alchemist—the ancient practitioner of magic, altering substances at the most fundamental levels.

Alchemy in painting



Figure 4.10.1.6.34: Sigmar Polke, *Watchtower,* 1984, synthetic polymer paints and dry pigment on patterned fabric, 9′ 10″ x 7′ 4 1/2″ (The Museum of Modern Art) © 2015 Estate of Sigmar Polke

We can see Polke's play with alchemy in the series of five works centered on the watchtower theme completed from 1984-1988. Taken as a whole, the watchtower series consistently presents a tenuous balance between imagery that evokes both the ominous and the everyday.

In *Watchtower* (1984), we see the watchtower clearly with its distinctive white outline against the darker background fabrics. Gestural swirls of yellow paint add to the dreamlike haziness of the image. Two styles of textile have been used: on the left, a repetitive geometric pattern similar to a basketweave; on the right, large stylized flowers of yellow, red, and purple. These fabrics are nothing special—in fact, their very banality is what appealed to the artist. Rather than use the sanctified canvas of high art, Polke has instead chosen "bargain-bin" consumer textiles. Polke's use of these textiles alludes to a subtle type of alchemy: the transformation of a simple material widely available into the foundation for the genius of artistic expression. Through his manipulation, the fabric previously worth only dollars upon the yard has now transmuted into an artwork worth millions.

Polke's alchemical practices are most apparent in *Watchtower II* (1984-85, **Carnegie Museum of Art**) where he used silver oxide to create a ghost-like, hazy outline, resulting in a muted image. From certain angles, the watchtower is barely visible. We see another variant on this theme in *Watchtower with Geese* (1987-88, **Art Institute of Chicago**). Polke has prominently placed a gaggle of geese atop a fabric printed with beach umbrellas and sunglasses. In this context, the function of the watchtower

becomes ambiguous. The fabric alludes to the beach, thereby suggesting this symbol could be a lifeguard tower, whereas the geese allude to hunting, providing yet another possibility for the tower—a hunter's blind. Indeed, the original German title *Hochsitz* translates literally to "perch" (as in a high vantage point) and typically refers to the hunter's blind, an elevated seat used in the German countryside as a lookout for hunting fowl. Ambiguity, banality, alchemical transformations—with these recurrent themes present in this series, Polke is consistent in his inconsistency.

Art after Auschwitz

Without question, the central symbol in this series evokes the horrific realities of concentration camps, the Nazi past, and government surveillance in a divided nation. As Germany struggled with reunification in the 1980s, the military watchtowers continued to stand, near the wall separating the communist East from the democratic West. For some Germans, these towers were part of everyday reality. By layering the watchtower symbol within the banal imagery of the preprinted textiles, Polke is symbolizing a layering of consciousness, disparate realities within a divided nation. Many artists have confronted these themes of postwar reality and the healing of wide-spread cultural trauma, most notably Joseph Beuys in his shamanistic workings with felt and fat, and Anselm Kiefer's massive canvases exploring history and myth.

Polke addressed the issues of surveillance and slaughter in this watchtower series, as well as in his ominous painting *Camp* (1982, **Museum of Fine Arts, Boston**), where the viewer is placed within a black mist set between two inwardly curving fences of barbed wire against a dark yellow sky. In these paintings, Polke does not diminish or attempt to hide the horrific realities of these symbols, yet he enshrouds them in dark uncertainties. The ghost-like haziness and mysterious mist are unpredictable and unbounded, forcing a shifting of perspective. Polke does not wish to erase the past, but perhaps something so complex can only be approached through the magic of alchemy, with its transformative powers and limitless potential.

Additional Resources:

Watchtower at the Museum of Modern Art

Watchtower II at the Carnegie Museum of Art

Watchtower with Geese at the Art Institute Chicago

Artist's biography at Tate

Polke on the the Metropolitan Museum of Art's Heilbrunn Timeline of Art History

What's in a map? Jaune Quick-To-See Smith's *State Names*

by DR. ANNE SHOWALTER and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.5: Dr. Anne Showalter and Dr. Beth Harris discuss Jaune Quick-To-See Smith's *State Names* (2000) at the Smithsonian American Art Museum

What's in a map? With *State Names*, the Native American artist Jaune Quick-To-See Smith suggests that thinking about our history in a different way, helps us rethink our present.

Additional resources

State Names at the Smithsonian American Art Museum

Jaune Quick-To-See Smith's artist website

Artist interview with Jaune Quick-To-See Smith (The Smithsonian American Art Museum)

Smarthistory images for teaching and learning:



Figure 4.10.1.6.35: More Smarthistory images...

Wendy Red Star, *1880 Crow Peace Delegation*

by WENDY RED STAR AT PORTLAND ART MUSEUM and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.6: Wendy Red Star, *1880 Crow Peace Delegation: Peelatchiwaaxpáash/Medicine Crow (Raven), Peelatchixaaliash/Old Crow (Raven), Déaxitchish/Pretty Eagle, Bia Eélisaash/Large Stomach Woman (Pregnant Woman) aka Two Belly, Alaxchiiaahush/Many War Achievements or Plenty Coups aka Chíilaphuchissaaleesh/Buffalo Bull Facing The Wind*, 2014, 10 inket prints and red ink on paper, 16 15/16 x 11 15/16 inches (each) © Wendy Red Star (Portland Art Museum)

Gerhard Richter

Gerhard Richter, The Cage Paintings (1-6)

by GERHARD RICHTER STUDIO

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.7: Robert Storr talks about Gerhard Richter's Cage paintings.

Gerhard Richter, *Uncle Rudi*

by DR. STEVEN ZUCKER



Figure 4.10.1.6.36: Gerhard Richter, *Uncle Rudi*, 1965, oil on canvas, 87 x 50 cm (Lidice Gallery, Lidice, Czech Republic) used with permission of the Gerhard Richter studio

"I can't see it...is it me?" I watched a young woman step closer to the canvas titled, *Uncle Rudi*. She was now physically closer and she was looking hard, but the image kept its distance.

Refusing Style

Meaning in Gerhard Richter's art can also keep its distance. The elusiveness of meaning is, in some ways, a central subject of Richter's art. Since the early 1950s, Richter has painted a huge number of subjects in wildly conflicting styles. For most artists, one style emerges and evolves slowly, almost imperceptibly, over the course of their career. This is because artists often continue to work through problems that remain relevant and perhaps, because they achieve a degree of recognition and the market then demands that style. In other words, collectors often want what is known. Artists who abandon their signature style do so at some risk to future sales. Still, some artists do push in startlingly new directions. Willem de Kooning abandoned abstraction for the figure against the advice of his dealer, and Pablo Picasso famously pursued opposing styles simultaneously—think of his volumetric, even bloated Neoclassicism compared to the collages where he pressed flat every volume in sight.

The Impossibility of Meaning

During Richter's long career, he has produced art in an unprecedented number of conflicting styles starting with the propagandistic Social Realist art he made as a student at the Dresden Art Academy in Communist East Germany. After his move in 1961 to Düsseldorf in the West (via Berlin—the wall was begun the same year), he co-founded a German variant of Pop art which he, somewhat jokingly, termed Capitalist Realism. Since then he has painted high-pitched realism (sometimes blurred just enough to soften the image, or sometimes wiped or scraped beyond all recognition) and produced representations of abstraction (as opposed to abstraction itself). He has explored many of the most pressing visual issues of our time, the relationship of photography to painting, memory and the image, art's role in the representation of war and politics, and perhaps most importantly, the impossibility of fixed meaning.

Image and Ideology

Richter was born in Dresden, Germany on the eve of the Second World War. His two uncles were killed in the war and his father served, but survived. His schizophrenic aunt, Marianne, was murdered by the Nazis as part of their drive to euthanize the sick. Less than a week after his thirteenth birthday, Richter heard some 3,600 British and American planes drop more than half-a-million bombs on Dresden (he then lived just outside the city). 25,000 people were killed in these raids and the Soviets would quickly occupy Eastern Germany. Unlike the idealized, classicized nudes that Adolf Hitler had promulgated, the young Richter was taught Social Realism at the Dresden academy, a celebration of the heroism of communist workers. Once in the West, Richter found that the relationship between image and ideology reversed yet again. Here, images in advertising and popular culture celebrated material wealth and the culture of capitalism. Under the Nazis, under the Soviets, and in the West, Richter saw art used to express

political ideology. His art, while deeply concerned with politics and morality, rejects the very possibility of answers, even of the idea that we can know.

Uncle Rudi

Uncle Rudi, the painting the woman had stepped closer to see, is painted in the grays of a black and white photograph. It is small and has the intimacy of a family snapshot. We see a young man smiling proudly and awkwardly. He is clearly self-conscious as he poses in his new uniform. One has the sense that a moment before he was talking to the person behind the camera, likely a friend or family member. Rudi would die fighting soon after the photograph that is the basis for this painting was taken. This is the artist's uncle, the man his grandmother favored and the adult the young Richter was to model himself after. But nothing in this painting is clear. Not the relationship between the artist and his uncle, not the tension between Rudi's innocent awkwardness and his participation in Nazi violence, not even in the relationship between the photograph and Richter's painting. The artist has drawn a dry brush across the wet surface of the nearly finished painting, and by doing this, he obscures the clarity of the photograph, denying us the easy certainty we expect. Richter reminds us that *Uncle Rudi*, like all images, promise and then fail to bring us closer to the people, things or places represented.

Additional Resources:

Uncle Rudi in the artist's website

Uncle Rudi at the Lidice Memorial Museum

Video of Richter painting

Gerhard Richter, *Betty*

by SAL KHAN and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.8: Gerhard Richter, *Betty*, 1988, oil on canvas, 102 x 72cm (Saint Louis Art Museum)

Gerhard Richter, *September*

by GERHARD RICHTER STUDIO

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.9: Robert Storr talks about Gerhard Richter's *September,* 2005, oil on canvas, 52 cm x 72 cm (Museum of Modern Art, New York)

Superman, World War II, and Japanese-American experience

by DR. SARAH NEWMAN, SMITHSONIAN AMERICAN ART MUSEUM and DR. BETH HARRIS

Superman makes an appearance in what looks (at first sight) like a Japanese print.

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.10: Roger Shimomura, *Diary: December 12, 1941*, 1980, acrylic on canvas, 127.6 x 152.4 cm (Smithsonian American Art Museum, gift of the artist, © Roger Shimomura). A conversation with Dr. Sarah Newman, James Dicke Curator of Contemporary Art, Smithsonian American Art Museum, and Dr. Beth Harris.

This Seeing America video was made possible by a generous grant from the Terra Foundation and the Alice L. Walton Foundation.

Go deeper:

This work at The Smithsonian American Art Museum

Shimomura's website

Learn more about the role of Superman and other comic book heroes during World War II

Listen to actor and activist George Takei speak about his experiences as a child in an internment camp during World War II

Explore primary sources on the Japanese internment camps of the 1940s

Explore more primary sources on the Japanese internment camps of the 1940s

Learn more about Japanese culture and *ukiyo-e* prints in this online exhibition

Shimomura's *Diary* – American Experience in the Classroom (The Smithsonian American Art Museum)

An American Diary: Artist talk with Roger Shimomura (The Smithsonian American Art Museum)

Smithsonian Learning Lab collection on Japanese American Internment, Propaganda, and Superheroes

Sebastião Salgado's Kuwait

by EVE SCHILLO, LACMA and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.11: Sebastião Salgado's *Kuwait*, 1991, gelatin silver print, 45.24 × 30.1 cm (Los Angeles County Museum of Art, gift of Gary Sato, AC1998.162.1, ©Sebastião Salgado), a Seeing America video, speakers: Eve Schillo, Assistant Curator, Wallis Annenberg Photography Department, Los Angeles County Museum of Art and Steven Zucker

Kehinde Wiley, *Napoleon Leading the Army over the Alps*

by DR. GAYLE CLEMANS



Figure 4.10.1.6.37: Kehinde Wiley, *Napoleon Leading the Army over the Alps*, 2005, oil paint on canvas, 274.3 x 274.3 cm (108 x 108 in) (Brooklyn Museum of Art, New York) © Kehinde Wiley

Confronting Art History

In this large painting, Kehinde Wiley, an African-American artist, strategically re-creates a French masterpiece from two hundred years before but with key differences. This act of appropriation reveals issues about the tradition of portraiture and all that it implies about power and privilege. Wiley asks us to think about the biases of the art historical canon (the set of works that are regarded as "masterpieces"), representation in pop culture, and issues of race and gender. Here, Wiley replaces the original white subject—the French general-turned-emperor Napoleon Bonaparte (below)—with an anonymous black man whom Wiley approached on the street as part of his "street-casting process." Although Wiley does occasionally create paintings on commission, he typically asks everyday people of color to sit for photographs, which he then transforms into paintings. Along the way, he talks with those sitters, gathering their thoughts about what they should wear, how they might pose, and which historical paintings to reference.

Napoleon Leading the Army is a clear spin-off of Jacques-Louis David's painting of 1800-01 (below), which was commissioned by Charles IV, the King of Spain, to commemorate Napoleon's victorious military campaign against the Austrians. The original portrait smacks of propaganda. Napoleon, in fact, did not pose for the original painting nor did he lead his troops over the mountains into Austria. He sent his soldiers ahead on foot and followed a few days later, riding on a mule.

Choosing Symbolic Details



Figure 4.10.1.6.38: Left: Jacques-Louis David, *Napoleon Crossing the Alps*, 1803 version, oil on canvas 275 × 232 cm (Österreichische Galerie Belvedere); right: Kehinde Wiley, *Napoleon Leading the Army over the Alps*, 2005, oil paint on canvas, 274.3 x 274.3 cm (108 x 108 in) (Brooklyn Museum of Art, New York)

Wiley calls attention to ideas about authority and historical representation, keeping many original elements and making significant alterations. The royal blue coat of the original makes an appearance (peeking out from the young man's camouflage shirt), as does the gold-encased sword (held in place by a red strap). But Wiley's subject wears an outfit that is completely contemporary and reflective of a culture notorious for flashy imagery and larger than life figures: hip hop culture. This young man wears camouflage fatigues, Timberland work boots, and a bandana—conjuring up militaristic associations with the original painting and with the violence of contemporary urban America, particularly as experienced by young black men. The subject of Wiley's painting reveals his tattoos and wears red wristbands from the Starter sportswear company, details that add to the sense that this is a real individual living in the early 21st century.

Instead of the naturalistic setting of David's painting, Wiley has inserted a decorative, unrealistic backdrop reminiscent of luxurious French fabric. This background, along with the high-keyed colors, and ornate frame (complete with faux family shields and the artist's self-portrait at the top) call attention to the artificiality and pompousness of image-making.



Figure 4.10.1.6.39: Sperm (detail), Kehinde Wiley, *Napoleon Leading the Army over the Alps*, 2005, oil paint on canvas, 274.3 x 274.3 cm (108 x 108 in) (Brooklyn Museum of Art, New York) (photo: Gayle Clemans)

The background is also infused with tiny paintings of sperm—Wiley's way of poking fun at the highly charged masculinity and propagation of gendered identity that are involved in the Western tradition of portraiture. This particular subgenre of portraiture—the equestrian portrait—is particularly infused with the lineage of male power. From classical Rome to post-revolutionary France, political and military leaders on horseback have evoked and perpetuated social norms of masculine might and control (for example, this equestrian portrait of the **Roman Emperor Marcus Aurelius**).

Through his demonstration of extraordinary painting skill and his use of famous portraits, Wiley could be seen as wryly placing himself in line with the history of great master painters. Here, for example, he has signed and dated the painting just as David did, painting his name and the date in Roman numerals onto the band around the horse's chest. Wiley makes another reference to lineage in the foreground where he retains the original painting's rocky surface and the carved names of illustrious leaders who led troops over the Alps: NAPOLEON, HANNIBAL, and KAROLUS MAGNUS (Charlemagne). But Wiley also includes the name WILLIAMS—another insistence on including ordinary people of color who are often left out of systems of representation and glorification. Not only is Williams a common African-American surname, it hints at the imposition of Anglo names on black people who were brought by force from Africa and stripped of their own histories.

About the Artist

Kehinde Wiley (American, born 1977) attracted media and art world attention almost immediately after earning his MFA from Yale University in 2001. He was an artist-in-residence at the Studio Museum in Harlem and has been included in many significant group and solo exhibitions. Wiley now employs studio assistants who participate in his "street-casting" process and in the various stages of painting and sculpture fabrication. In addition to large-scale paintings, Wiley has created stained glass, painted altarpieces, and cast bronze sculptures, all of which examine of art history, race, gender, and the power of representation.

Additional Resources:

Gayle Clemans, "The Stunning and Subversive Pageantry of Artist Kehinde Wiley," *The Seattle Times*, February 16, 2016.

Shahrazad A. Shareef, "The Power of Decor: Kehinde Wiley's Interventions into the Construction of Black Masculine Identity" (UMI Dissertations Publishing, 2010).

Roberta Smith, "Kehinde Wiley: A New Republic at the Brooklyn Museum," *New York Times*, February 19, 2015.

Eugenie Tsai, ed., *Kehinde Wiley: A New Republic* (Brooklyn, New York: Brooklyn Museum, 2015).

History and deception: Kenseth Armstead's *Surrender Yorktown 1781*

by KENSETH ARMSTEAD and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.12: Kenseth Armstead and Steven Zucker discuss Kenseth's *Surrender Yorktown 1781* (2013) at the **Newark Museum**

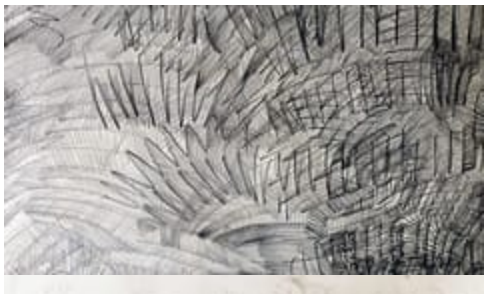
How can we begin to correct the lies of history? Artist Kenseth Armstead suggests a poetic solution.

Additional resources

Kenseth Armstead's artist website

The American Revolution: A World War, National Museum of American History, Smithsonian Institution

Smarthistory images for teaching and learning:





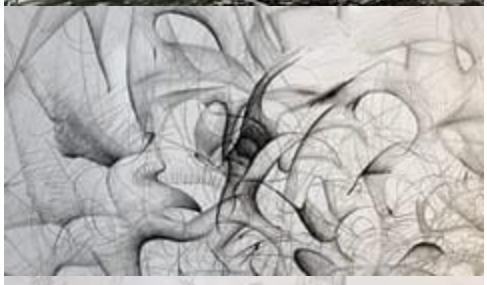










Figure 4.10.1.6.40: More Smarthistory images...

Maya Lin's Silver Upper White River

by ALEJO BENEDETTI, CRYSTAL BRIDGES MUSEUM OF AMERICAN ART and DR. STEVEN ZUCKER

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.13: Maya Lin, *Silver Upper White River*, 2015, recycled silver, 332.7 x 609.6 x 1 cm (Crystal Bridges Museum of American Art, © Maya Lin) Speakers: Alejo Benedetti, Assistant Curator, Crystal Bridges Museum of American Art, and Steven Zucker, a Seeing America video

Additional resources

This sculpture at Crystal Bridges

What Is Missing?

Maya Lin, *Folding the Chesapeake*, at the Smithsonian American Art Museum

Maya Lin, Pin River-Yangtze at the United States Embassy in Beijing

Courtney Leonard, *ARTIFICE Ellipse*, 2016

by COURTNEY M. LEONARD and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.14: A conversation with Courtney M. Leonard and Beth Harris in front of Courtney Leonard's *ARTIFICE Ellipse | Log: 18-3*, coiled micaceous clay with glaze, 5 3/8 x 15 x 7 inches (Newark Museum of Art) © Courtney M. Leonard

Additional resources:

This work of art at the Newark Museum

The artist's website

Hock E Aye Vi Edgar Heap of Birds, *Native Hosts (Arkansas)*

by DR. MINDY BESAW, CRYSTAL BRIDGES MUSEUM OF AMERICAN ART and DR. BETH HARRIS

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.10.1.6.15: Hock E Aye Vi Edgar Heap of Birds, *Native Hosts (Arkansas)*, 2018, aluminum sign, series of seven, 46.7 x 92.5 cm (Crystal Bridges Museum of American Art, ©Hock E Aye VI Edgar Heap of Birds), a Seeing America video Speakers: Dr. Mindy Besaw, Curator of American Art, Crystal Bridges Museum of American Art, and Dr. Beth Harris

Additional resources

This work at Crystal Bridges Museum of American Art

This page titled 4.10.1.6: Histories, real and imagined is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 12.6: Histories, real and imagined by Smarthistory is licensed CC BY-NC-SA 4.0.

4.11: YAYOI KUSAMA

4.11.1: Narcissus Garden
4.11.2: Yayoi Kusama (Tate)

This page titled 4.11: Yayoi Kusama is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Smarthistory.

4.11.1: Narcissus Garden

by DANIELLE SHANG

Narcissism

Today there are few female artists who are more visible to a wide range of international audiences than Yayoi Kusama, who was born in 1929 in Japan. Kusama is a self-taught artist who now chooses to live in a private Tokyo mental health facility, while prolifically producing art in various media in her studio nearby. Her highly constructed persona and self-proclaimed life-long history of insanity have been the subject of scrutiny and critiques for decades. Art historian Jody Cutler places Kusama's oeuvre "in dialogue with the psychological state known as narcissism," as "narcissism is both the subject and the cause of Kusama's art, or in other words, a conscious artistic element related to content."[1] It is within this context that we examine Kusama and her infamous *Narcissus Garden* (narcissism is, in part, the egotistic admiration of one's self).

Mirrors

Kusama arrived in New York City from Japan in 1958 and immediately approached dealers and artists alike to promote her work. Within the first few years she began to exhibit and associate herself with seminal artists and critics, such as Donald Judd, Joseph Cornell, Yves Klein, and Lucio Fontana who later was instrumental in her realizing *Narcissus Garden*.



Figure 4.11.1.1: Installation view, *Infinity Mirror Room–Phalli's Field* (or *Floor Show*), (no longer extant) Castellane Gallery, New York. 1965 (photo ©Eiko Hosoe)

In 1965, she mounted her first mirror installation *Infinity Mirror Room-Phalli's Field* at Castellane Gallery in New York (left). A mirrored room without a ceiling was filled with colorfully dotted, phallus-like stuffed objects on the floor. The repeated reflections in the mirrors conveyed the illusion of a continuous sea of multiplied phalli expanding to its infinity. This playful and erotic exhibition immediately attracted the media's attention.

Narcissus Garden, 1966

The pinnacle of her *succès de scandale* culminated in the 33rd Venice Biennale in 1966. Although Kusama was not officially invited to exhibit, according to her autobiography, she received the moral and financial support from Lucio Fontana and permission from the chairman of the Biennale Committee to stage 1,500 mass-produced plastic silver globes on the lawn outside the Italian Pavilion. The **tightly arranged 1,500 shimmering balls** constructed an infinite reflective field in which the images of the artist, the visitors, the architecture, and the landscape were repeated, distorted, and projected by the convex mirror surfaces

that produced virtual images appearing closer and smaller than reality. The size of each sphere was similar to that of a fortune-teller's crystal ball. When gazing into it, the viewer only saw his/her own reflection staring back, forcing a confrontation with one's own vanity and ego.

During the opening week, Kusama placed two signs at the installation: "NARCISSUS GARDEN, KUSAMA" and "YOUR NARCISSIUM [sic] FOR SALE" on the lawn. Acting like a street peddler, she was selling the mirror balls to passers-by for two dollars each, while distributing flyers with Herbert Read's complimentary remarks about her work on them. She consciously drew attention to the "otherness" of her exotic heritage by wearing a gold kimono with a silver sash. The monetary exchange between Kusama and her customers underscored the economic system embedded in art production, exhibition and circulation. The Biennale officials eventually stepped in and put an end to her "peddling." But the installation remained.[2] Her interactive performance and eye-catching installation garnered international press coverage. This original installation of *Narcissus Garden* from 1966 has been frequently interpreted by many as both Kusama's self-promotion and her protest of the commercialization of art. [3]

The life of Narcissus Garden after 1966



Figure 4.11.1.2: Yayoi Kusama, mirror balls, *Narcissus Garden*, Inhotim (Brazil) installation, original installation and performance 1966 (photo: **emc**, CC BY-NC-ND 2.0)

Since then, Kusama's oeuvre has become integrated into the canon of art history, and popular with art institutions around the world. In 1993, Kusama was officially invited to represent Japan at the 45th Venice Biennale.

Her *Narcissus Garden* continues to live on. It has been commissioned and re-installed at various settings, including the Brazilian business tycoon Bernardo de Mello Paz's Instituto Inhotim (left), Central Park in New York City, as well as retail booths at art fairs.

The re-creation of *Narcissus Garden* has erased the notion of political cynicism and social critique; instead, those shiny balls, now made of stainless steel and carrying hefty price tags, have become a trophy of prestige and self-importance. Originally intended as the media for an interactive performance between the artist and the viewer, the objects are now regarded as valuable commodities for display.



Figure 4.11.1.3: Yayoi Kusama, mirror balls, Narcissus Garden, Inhotim (Brazil) installation, original installation and performance 1966 (photo: **emc**, CC BY-NC-ND 2.0)

The profound narcissistic undertone however has been ironically amplified not only by the artist's pervasive ostentation, but also by the viewership in the age of Internet. Seduced by his/her own reflective images on the convex surfaces, viewers snap photographs with a smart phone and instantly upload them to social media for the rest of the world to see. The urge to capture and disseminate the moment one's own image coalesces onto a privileged object in a privileged institution seems to motivate the obsession with the self. To further accentuate the effect of gazing at one's multiple selves, many installations now take place on the water where the original Narcissus from the Greek mythology fell in love with his own reflection and eventually drowned.

[1] Jody Cutler. 2011. "Narcissus, Narcosis, Neurosis: The Visions of Yayoi Kusama," in *Contemporary Art and Classical Myth*, edited by Isabelle Loring Wallace, Jennie Hirsh, (London: Ashgate Publishing ltd), p. 89.

[2] There are a few discrepancies in the anecdote of this event between Kusama's autobiography and art historians and critics. For example, 1) Kusama claims that the installation was not exactly a guerrilla act, because she received permission from the Biennale official, though she did not have an official invitation as a Biennale participant; 2) according to Kusama, the installation itself was NOT removed after she was asked to stop selling the balls; and 3) in her autobiography, the balls were made of plastic in 1966 not stainless steel.

[3] It is worth noting that the following Venice Biennale, in 1968, was marked by social and economic turmoil around the globe, and was struck by the student movement in Italy and a boycott by international artists. The Biennale was labeled as a fascist, capitalist, and commercial. In contrast to Kusama's action, many artists who were officially invited to participate decided to close exhibition halls, withdraw their works, and join street demonstrations resulting in the closure of the Biennale sales office and the end of Biennale prizes until 1986.

Additional resources:

Kusama and Experimentation (Tate blog)

Kusama and Self-obliteration (Tate blog)

TateShots: Kusama's Obliteration Room

Yayoi Kusama, *Infinity Net: The Autobiography of Yayoi Kusama*, translated by Ralph McCarthy (London: Tate Enterprises Ltd., 2013) (see the section, "On an endless Highway").

This page titled 4.11.1: Narcissus Garden is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by Danielle Shang, "Yayoi Kusama, Narcissus Garden," in Smarthistory, August 9, 2015, accessed August 27, 2020, smarthistory.org/yayoi-kusama-narcissus-garden/..

- 10.14: Conceptual + Performance Art by Smarthistory is licensed CC BY-NC-SA 4.0.

4.11.2: Yayoi Kusama (Tate)

by TATE

YouTube Video

This interactive element is not available in this format. Visit the link or scan the QR code to access it online.

View this YouTube Video online

Video 4.11.2.1: The nine decades of Yayoi Kusama's (草間彌生) life have taken her from rural Japan to the New York art scene to contemporary Tokyo, in a career in which she has continuously innovated and re-invented her style. Video from **Tate**

This page titled 4.11.2: Yayoi Kusama (Tate) is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by "Yayoi Kusama (Tate)," in Smarthistory, January 29, 2016, accessed August 27, 2020, https://smarthistory.org/yayoi-kusama/..

- 10.14: Conceptual + Performance Art by Smarthistory is licensed CC BY-NC-SA 4.0.

5: Digital Technology and Art of the 21st Century

Introduction

Twenty-first-century art is a burgeoning field of practice, research, and publication, making it an incredibly dynamic field of study. Many important topics have been resonating in the new century and inspiring new thinking and scholarly debate, such as the surge of bio art in response to scientific research in the life sciences, and the critical theory known as relational aesthetics that developed in response to an increase in art that invites viewers' participation and interaction. Other topics that were much-discussed in the late twentieth century remain vital for the analysis of twenty-first-century art and visual culture, including semiotics, post-modernism, and feminism.



Visitors at The Museum of Modern Art in front of Julie Mehretu, Empirical Construction, Istanbul, 2003. Ink and synthetic polymer paint on canvas, 10′ x 15′ (304.8 x 457.2 cm). Photo: thatgirl

Art of the twenty-first century emerges from a vast variety of materials and means. These include the latest electronic technologies, such as digital imaging and the Internet; familiar genres with a long history that continue to be practiced with great vigor, such as painting (see, for example, the work of Julie Mehretu and Shahzia Sikander); and materials and processes once associated primarily with handicrafts, re-envisioned to express new concepts. Many artists regularly and freely mix media and forms, making the choices that best serve their concepts and purposes. Activities vary from spectacular projects accomplished with huge budgets and extraordinary production values to modest endeavors that emphasize process, ephemeral experiences, and a do-it-yourself approach. The notion of influences has also shifted with changes in communications and technology; every location around the world has artists who respond to local geographies and histories as well as the sway of global visual culture.



Wangechi Mutu, Complete Prolapsus of the Uterus, 2004, Glitter, ink, collage on found medical illustration paper, 46 x 31cm

Computers and digital technology

Like the camera did more than one hundred and fifty years ago, computers and digital technology have revolutionized the visual art landscape. Some artists now use digital technology to extend the reach of creative possibilities. Sophisticated software allows any computer user the opportunity to create and manipulate images and information. From still images and animation to streaming digital content and digital installations, computers have become high tech creative tools.

In a blending of traditional and new media, artist Chris Finley uses digital templates—software-based composition formats—to create his paintings.

The work of German artist Jochem Hendricks combines digital technology and human sight. His eye drawings rely on a computer interface to translate the process of looking into physical drawings.

Digital technology is a big part of the video and motion picture industries with the capability for high definition images, better editing resources and more areas for exploration to the artist.

The camera arts are relatively new mediums to the world of art but their contributions are perhaps the most significant of all. They are certainly the most complex. Like traditional mediums of drawing, painting and sculpture they allow creative exploration of ideas and the making of objects and images. The difference is in their avenue of expression: by recording images and experiences through light and electronics they, on the one hand, narrow the gap between the worlds of the “real” and the “imagined” and on the other offers us an art form that can invent its own reality with the inclusion of the dimension of time. We watch as a narrative unfolds in front of our eyes. Digital technology has created a whole new kind of spatial dimension: cyberspace.

Globalization

A key feature of the art scene in the twenty-first century (and of many sectors of twenty-first-century life) is the impact of globalization – the accelerating interconnectivity of human activity and information across time and space. Aided by the internet and mass media, awareness of the vitality of contemporary art in localities around the globe has grown exponentially. Anyone with access to the internet can follow developments in Shanghai, Sydney, São Paulo, or Nairobi. Simultaneously the increased movement of artists across borders and oceans has added to the intermixing of influences and artistic vocabularies. For example, Wangechi Mutu, originally from Kenya, pursued further education in South Wales and then in the United States. Her collaged images of women are informed by African tribal arts, 20th-century European and American collage artists, and the latest illustrations from fashion, pornography, and medical sources.

The meaning and consequences of globalization are much debated by scholars. Economically and politically, is globalization a

force for growth and freedom in societies everywhere, or does it contribute to further exploitation of developing regions by the wealthy? Does globalization work in different ways in different localities?

Regarding globalization and art, do practices in Asia, Africa, the Middle East, and elsewhere challenge the traditional assumptions and value judgments that are the basis of the Western canon? Are Western institutions rethinking that canon or simply adding art from other places to their rosters in a token and uncritical gesture of inclusivity? How do curated exhibitions that address themes of globalization represent artists from various parts of the world? The expanding art market and the proliferation of biennials and art fairs helped a select group of artists from every continent to gain an international presence; but have the underlying structure and values of the art market changed otherwise?

Visual Culture

In the twenty-first century visual culture has grown as a recognized interdisciplinary field of study, taking a multifaceted approach to understanding how images of all types communicate and participate in the construction of identity, gender, class, power relationships, and other social and political meanings and values. Medicine, science, politics, consumer culture, and religion and spirituality are some of the arenas that visual culture studies examine along with art. Visual culture scholars analyze film, television, graphic novels, fashion design, and other forms of popular culture in addition to established fine art media such as painting, and they draw upon many methodologies and theories, including semiotics, sociology, psychoanalysis, reception theory, feminism, and the concept of the gaze, to name a few.

Just as visual culture scholars are examining images and media of all types so, too, are twenty-first-century artists drawing inspiration, imagery, materials, and concepts from diverse areas of culture, moving well beyond influences from the history of fine art and design. The world of professional sports and fanatic fans has been a topic for Paul Pfeiffer, while the commercial television industry has informed various video installations by Christian Jankowski.

Most contemporary artists do not draw rigid distinctions between high art and popular culture. For instance, a number of contemporary artists embrace traditional techniques of fiber art but use them to create unorthodox forms or address current social and political issues. Along these lines, Ghada Amer has used thread to embroider on canvas repeated motifs of nude women engaged in sexual acts, then partially obscured the embroidered images with gestural painted brushstrokes. Her themes include the expression and repression of female sexuality and eroticism in both Western and Islamic societies. Another example of intermixing visual cultures is the complex array of interactions between science and contemporary art, with many artists engaging with scientific imagery and ideas in their practice. For example, Wim Delvoye's ongoing series called **Cloaca** imagines humans as cyborgs, representing the human digestive system as a kind of biomechanical contraption. Finally, many twenty-first-century artists are deeply affected by their immersion in global visual culture, which is now made vividly present through online networks. Many artists maintain a personal website, and some create art expressly for dissemination through social media. As always, new technologies provide new opportunities and challenges.

Public and Participatory Art

Public art was a well-established genre by the late twentieth century, attracting both traditional and experimental practitioners. Public art in the twenty-first century has expanded even more as a field of activity in which creative investigation can take place. In addition to continuing familiar forms such as site-specific monuments, murals, graffiti, and collaborations between artists, engineers, and architects, public art encompasses new purposes, forms, and locations, including pop-up art shops, street parades, and online projects. Public artists in the twenty-first century might use established approaches such as installation and performance but introduce new variations. For instance, it is now common for artists to hire other people, sometimes with special skills, to undertake performances on their behalf. In this vein, Vanessa Beecroft hired fashion models for performances, and the collaborative artists Allora & Caldazilla directed professional athletes as performers in some of their installations.

A pronounced tendency in the twenty-first century has been art that is participatory, in which the social interactions prompted by a work become its content. Often called relational art, the work literally engages the public in some way. For instance, Carsten Höller has installed giant slides in museums for visitors to slide down, and Rirkrit Tiravanija has prepared Thai food and served it to gallery goers. Artists attracted by the immediacy and connectivity of globally networked media often create online projects that invite social interaction. Relational aesthetics has developed (and been contested) as a critical theory for analyzing and evaluating such undertakings. Key questions in these debates include: Does it matter if the social interactions prompted by such works promote a better world or are conviviality and entertainment sufficient goals? To what extent should the physical products of relational art (such as Höller's slides) be evaluated aesthetically as well as for their social effects?

The twenty-first century is just beginning – issues and ideas are evolving rapidly and new artists are constantly gaining attention and influence.

*The content was first developed for Oxford Art Online and appears courtesy of Oxford University Press. **Visit to learn more** about contemporary art and see a list of significant twenty-first-century artists.

Contributors and Attributions

CC LICENSED CONTENT, SHARED PREVIOUSLY

- Time Based Media: Film, Video, Digital II. **Authored by**: Christopher Gildow. **Located at**: **https://learn.canvas.net/courses/24/pages/m7-time-based-media-film-video-digital?module_item_id=44456**. **Project**: Open Course Library. **License**: ***CC BY-NC-SA: Attribution-NonCommercial-ShareAlike***
- Art in the Twenty-First Century. **Authored by**: Jean Robertson. **Provided by**: Khan Academy. **Located at**: **https://web.archive.org/web/20140215025509/http://smarthistory.khanacademy.org/art-in-the-21st-century.html**. **License**: ***CC BY-NC-SA: Attribution-NonCommercial-ShareAlike***

This page titled 5: Digital Technology and Art of the 21st Century is shared under a CC BY 4.0 license and was authored, remixed, and/or curated by LibreTexts.

- 5.16: Reading- Digital Technology and Art of the 21st Century by Lumen Learning is licensed CC BY-NC-SA 4.0. Original source: https://courses.lumenlearning.com/masteryart1.

INDEX

A

academic
4.1: Impressionism

agitprop
4.10.1.3: Identity and the body

Arcadian
4.3: Fauvism + Expressionism

B

BlackPlanet
4.10.1.2: Appropriation and ideological critique

C

Cecil John Rhodes
4.10.1.3: Identity and the body

cenotaphs
4.10.1.6: Histories, real and imagined

classicism
4.10.1.3: Identity and the body

Complementary color
4.3: Fauvism + Expressionism

convict leasing
4.10.1.6: Histories, real and imagined

corten steel
4.10.1.6: Histories, real and imagined

E

Equal Justice Initiative (EJI)
4.10.1.6: Histories, real and imagined

equestrian portrait
4.10.1.6: Histories, real and imagined

explain Fluxus
4.10.1.6: Histories, real and imagined

H

Han Dynasty
4.10.1.2: Appropriation and ideological critique

I

immanent
4.3: Fauvism + Expressionism

inchoate
4.3: Fauvism + Expressionism

L

Latin peoples
4.3: Fauvism + Expressionism

local colors
4.3: Fauvism + Expressionism

lynched
4.10.1.6: Histories, real and imagined

M

mammy figurines
4.10.1.2: Appropriation and ideological critique

Margaret Thatcher
4.10.1.1: A beginner's guide

MASS Design Group
4.10.1.6: Histories, real and imagined

Meta Warrick Fuller
4.10.1.6: Histories, real and imagined

N

Nkyinkyim Installation
4.10.1.6: Histories, real and imagined

P

peristyle
4.10.1.6: Histories, real and imagined

problematic
4.10.1.3: Identity and the body

R

Reconstruction
4.10.1.6: Histories, real and imagined

S

Shang dynasty
4.10.1.2: Appropriation and ideological critique

Spectacolor board
4.10.1.2: Appropriation and ideological critique

stele
4.10.1.6: Histories, real and imagined

U

uncanny
4.10.1.3: Identity and the body

W

wet nurse
4.1: Impressionism

This page titled Index is shared under a license and was authored, remixed, and/or curated by LibreTexts.

GLOSSARY

S

Sample Word 1 | Sample Definition 1

This page titled Glossary is shared under a license and was authored, remixed, and/or curated by LibreTexts.

DETAILED LICENSING

Detailed licensing information for this resource is not available at this time.

This page titled Color Theory and Applications is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.

DETAILED LICENSING

Detailed licensing information for this resource is not available at this time.

This page titled Color Theory and Applications is shared under a CC BY-NC-SA 4.0 license and was authored, remixed, and/or curated by Lisa Cianci.