# INTRODUCTION TO HUMAN GEOGRAPHY: A DISCIPLINARY APPROACH



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# Introduction to Human Geography: A Disciplinary Approach

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# TABLE OF CONTENTS


**Licensing**

**1: What is Geography?**

1.1: A Short History of Geography

1.2: Geography as Discipline –Key Aspects of the “Jedi Way”

1.3: Geography is a Way to See the World- Jedi Goggles

1.4: Geography is a Way to Ask Questions – Jedi MindTricks

1.5: Geography is a Way to Solve Problems – Jedi Weapons

1.6: Geography is a Way to Communicate – Cartography the Jedi Language

1.7: Core Concepts

1.8: Cause and Effect

**2: Culture and Cultural Practices**

2.1: Folk Culture

2.2: Folk Regions

2.3: Folk Housing

2.4: Folk Music to Popular Music

2.5: The Geography of Sports

**3: Agriculture and Foodways**

3.1: Why do we eat this stuff?

3.2: The Geography of Barbecue (BBQ)

3.3: Agricultural Regions

3.4: Von Thünen’s Model

3.5: Agriculture around the World

3.6: Agricultural Landscapes

**4: Health and Disease**

4.1: Health Metrics

4.2: Geography of Disease

4.3: Geography of Care

4.4: Regional Variations in Health Care

**5: Language and Dialect**

5.1: Introduction

5.2: World Languages

5.3: American Languages

5.4: Language on the Landscape

5.5: Toponyms –Place Name Geography

5.6: Language and the Environment

## 6: Religion

6.1: Religious Realms

6.2: Diffusion of Religion

6.3: The Landscapes of Religion

6.4: Shrines and other Sacred Spaces

6.5: Religious Holiday Space

6.6: Cemeteries

6.7: Cultural Ecology of Religion

## 7: Politics and Power

7.1: Federalism vs. the Unitary State

7.2: Separatist Movements

7.3: Political Cultures

7.4: Electoral Politics -Boundary Drawing

7.5: Electoral Cartography

7.6: Political Landscapes

## 8: Crime and Punishment

8.1: Spatial Patterns of Crime

8.2: Geography of Punishment

8.3: Illegal Substances

8.4: CrimeMapping and Analysis

## 9: Ethnicity

9.1: Race

9.2: Language

9.3: Religion

9.4: National Heritage

9.5: Region

9.6: American-American?

9.7: Space Makes Race

9.8: Ethnic Regions

9.9: Processes

9.10: Enforced Ethnic Regions

9.11: Black Ghetto Typology

9.12: Environmental Racism

9.13: Ethnicity and the Economy

9.14: Ethnic Landscapes

## 10: Gender and Sexual Identity

10.1: Gender and Identity in San Francisco, California

10.2: Evolution of Gender Roles

10.3: Demographic Transition Model

10.4: Sex Ratio
10.5: Gendered Landscapes

**11: Urban Geography**

11.1: Defining Cities
11.2: Birth of Cities
11.3: Urban Morphology
11.4: City Life
11.5: Cityas Place
11.6: Sound of the City

**12: Economic Geography**

12.1: Economic Sectors
12.2: Primary Sector
12.3: Secondary Sector
12.4: Free Trade and Protectionism
12.5: Business Geography
12.6: Site LocationAnalysis

**Index**

**Glossary**

**Detailed Licensing**

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# 1: WHAT IS GEOGRAPHY?

**Geography is a discipline capable of helping those who know how to use it to better understand a variety of subjects and topics. Geography is a set of tools that help you ask questions, see patterns in data, solve problems and communicate solutions.**

The popular afternoon television show Jeopardy is probably the most common way Americans are exposed to geography. This is a huge problem for the discipline of geography because although Jeopardy does more than any other medium to advance geographic knowledge among Americans, it advances our understanding of Geography down a dead-end street. A typical geography question on Jeopardy might ask contestants to identify the capital of Nebraska or a mountain range in Switzerland. Professional geographers rarely ask questions of that sort. Jeopardy, because it constantly puts a spotlight on "**geography as subject**", effectively reinforces old-fashioned notions about geography as trivia, and in the process leads many Americans to believe that geographers mainly memorize maps, weather patterns, and capital cities. Of course, some amount of memorization of facts is necessary, but to think it's the focus of Geography is like thinking Historians only memorize dates, and English majors spend all their time preparing for spelling bees.




Figure 1-1: Far too many people equate Geography with trivia, undermining a real understanding of what geography is as a discipline. Source: Wikimedia.

For generations, in America, K-12 curricula and the accompanying textbooks have echoed the unfortunate focus upon geography-as-trivia promoted by TV game shows. As a result, the much more accurate notion of "**geography as a discipline**" has been all but eliminated from the American imagination.

Subsequently, college students rarely consider geography as a major. Many, including high school guidance counselors, do not even realize that one can major in geography at most universities. Students, parents and even faculty outside of your Geography Department often are unaware that geography provides students and scholars with a robust set of analytical tools that can be applied to many topics of interest, and lead to lucrative career paths in a stunning array of private industries, non-profits and with many public agencies.

One of the primary goals of this text is to introduce readers to an updated, viable version of geography. Hopefully, students will come to think of geography primarily as a discipline that permits those who have mastered it to study virtually any topic that takes place. By the end of the semester, students using this text should begin to be able to: 1) see the world like a geographer, 2) ask questions like a geographer, 3) solve problems like a geographer and 4) communicate like a geographer....and maybe you'll learn some old-school geography trivia to defeat friends at Jeopardy!

## 1.1: A Short History of Geography

1.2: Geography as Discipline –Key Aspects of the “Jedi Way”
1.3: Geography is a Way to See the World- Jedi Goggles
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
1.5: Geography is a Way to Solve Problems – Jedi Weapons
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
1.7: Core Concepts
1.8: Cause and Effect

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# 1.1: A Short History of Geography

Geography is sometimes called the “mother of all disciplines” because it has been around for so long. Although the discipline has undergone major changes in the last few decades, most people still have very old-fashioned ideas about geography. Those old-fashioned ideas still dominate much K-12 instruction in Geography and are partly a result of the tumultuous history of Geography.

Ancient Greek and Chinese scholars wrote massive “geographies” that defined the discipline for centuries. Until the 1800s, most “geographers” spent much of their time writing highly descriptive or **idiographic** narratives about various regions of the world. Descriptive geographies are interesting for those who have a healthy intellectual curiosity about the people, places, and cultures of the world, and descriptive geographies proved immeasurably valuable to imperialists, colonizers, and military planners. Unfortunately, in the context of schooling, descriptive geographies often tend to degenerate into an encyclopedic list of facts about a region or location.

## Environmental Determinism

As the methodologies of science, and indeed social science, evolved during the 19th century, the production of mere descriptions of regions and locations fell short of what geographers (and others) thought worthy of true scholarship. Some geographers tried to make the discipline more scientific by seeking to identify and describe causal connections between group behaviors and local environmental conditions. In other words, they sought to understand the cause-and-effect relationship between culture and the physical environment. This type of geography became known as **environmental determinism**. Environmental determinists sought to demonstrate how local conditions like climate, topography and soil characteristics were key determinants, or causes, behind the evolution of local or regional cultural practices. Perhaps not surprisingly, many environmental determinist scholars found that their culture group (i.e. Europeans) were products of ideal environmental conditions. Environmental determinists argued that the most advanced societies developed where favorable environmental conditions existed, i.e. North America, Europe. According to their logic, locations that were too hot, too cold, too rainy, too dry, etc., produced inferior societies and inferior people. For example, Ellen Churchill Semple wrote in 1911, "among mountain as among desert peoples, robbery tends to become a virtue; environment dictates their ethical code". The bigotry implicit and explicit in environmental determinism is clearer today than it was 100 years ago. Despite an inability to prove scientifically their theories, a few geographers, like Semple and Ellsworth Huntington commanded large audiences in the early 20$^{th}$ century.

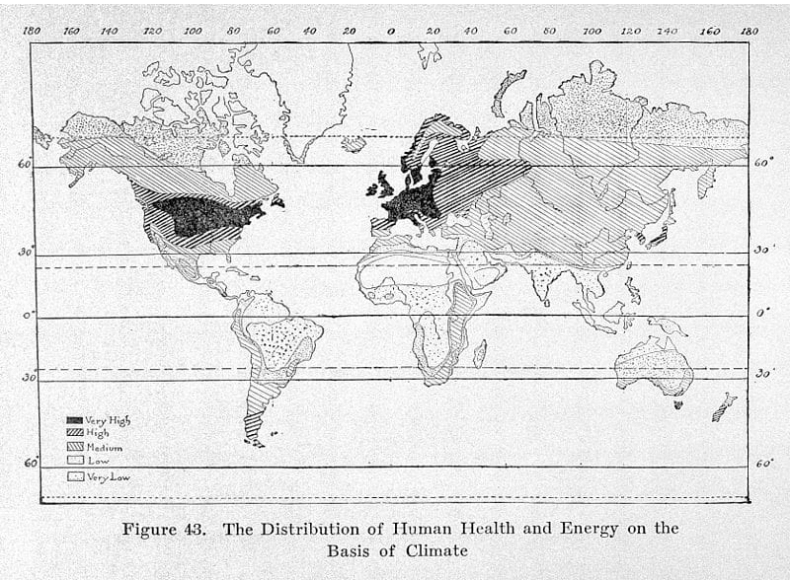


Figure 43. The Distribution of Human Health and Energy on the Basis of Climate

Figure 1-2: Map - An environmental determinist's map of "health and human energy" based on climatic predictors. Very high scores were assigned to mid-latitude climates (Europe, US) low scores to tropical and equatorial climates.

Source:
Wellcome Images
via
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.

Although many academic geographers forcefully rejected the ideas and concepts advanced by environmental determinists, it wasn't really until World War II that a solid majority of people understood the horrifying implications that this brand of pseudo-scientific scholarship had upon the **eugenics** movement and the evolution of Fascism. Geography's deep involvement with Environmental Determinism tainted the reputation of the discipline for decades.

## Paradigm Wars – 1950-1990

The reaction to Environmental Determinism by a significant number of geographers was to turn away from scientific methods so ill-used by the Environmental Determinists. Some called for a return to the descriptive or ideographic geography of the past. Today, this type of geography is largely represented by an approach known as **regional geography**, and it remains the dominant version of geography taught at the K-12 level. Done well, regional geography can be an exciting and intellectually stimulating exercise capable of providing a pathway to understanding the unique dynamics within regions, why various locations on earth differ from other places, and why many places have similarities. Unfortunately, regional geography in classroom settings often degrades into a "forced march" of endless memorization of facts about far-off locations. Most K-12 school curricula and many introductory college courses fall into this trap. Students in regional style courses often learn little about why places have become unique because poorly designed curricula fail to focus student attention on the processes driving the creation or evolution of regions. The dominance of the regional approach has generated the false, but the popular perception of geography as trivia, especially in America. In Europe, geography did not fall into that trap.

By the 1960s, Geography Departments were facing elimination from many college campuses. As a result, many geographers began adopting legitimate scientific methodologies via spatial statistics during a period known today as the **quantitative revolution**, a major paradigm shift that continues to accelerate today, especially among users of Geographic Information Systems (GIS –see below). Today, most geographers seek to discover generalizable patterns, or even laws, that describe or govern society. This is the nomothetic approach. Coupled with accompanying revolutions in our ability to collect, store, manipulate and analyze spatial data, geographers today are engaged in complex, high-tech research on a wide array of pressing issues often using so-called "big data".

Beginning in the 1970s and accelerating rapidly in the 1990s, geographers also occupied leading rolesin a thrilling expansion of spatially informed theoretical approaches attempting to explain how the world works. Important, economic, political and cultural

theorists emerged from among the ranks of geography departments in the UK and the US, playing important roles in an overall flowering of **critical geography**, during a period known as **the cultural turn** within geography. Many geographers today focus squarely on the complex, often subtle, mechanics that regulate the production and maintenance of knowledge itself, which is in some ways the final frontier of social science. Critical geographers work to uncover how and why societies and individuals believe what they do, and how those beliefs are manufactured, manipulated, distorted, maintained, subverted, appropriated or eliminated.

Today, geography is a very vibrant discipline offering to the uninitiated, a surprising number of avenues to understand the world, as well as multiple pathways to high-paying jobs in the public and private sectors. Geographers make a difference in the world.

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# 1.2: Geography as Discipline –Key Aspects of the “Jedi Way”

If you go to the library at your college or university and head to the section housing books about geography, you may be disappointed to find there’s almost nothing there. You might mistakenly believe that geographers don’t write books, or that geography is exceptionally limited in its scope. Both assumptions would be wrong. Libraries have lots of books written by geographers, but because geographers can study almost any subject, books written by geographers are found scattered throughout the library, because libraries are organized by the subject of study, not the method by which subjects are studied and analyzed.

Geographers write books and publish scholarly articles about an astounding array of subjects – far too many to consider here. The main point is for you to remember is that geographers can study almost anything that takes place. What are you interested in? If it exists someplace, you can bet some geographer has studied it. The author of this text wrote a dissertation on innovation waves in pop music (rock, rap, country), but has since researched subprime lending, crime, health problems, gentrification, homelessness and other topics of interest.

The section that follows provides a unique, but basic, guide to help you better understand geography as a discipline. The entire text is designed around a set of guiding principles that characterize the way geographers tend to observe, query and analyze the world around them – and how we communicate findings and theories. To better help you learn to observe, question and analyze the world around you, this text leverages a variety of similes and metaphors from Star Wars movies. The text may refer to geographers as “Jedi” because geographers, like the Jedi in the Star Wars movies, have a special and powerful way of doing things (observing, questioning, analyzing, and communicating) that, at least in the academic and professional worlds, gives geographers unique abilities to gain insights often overlooked by others.

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# 1.3: Geography is a Way to See the World- Jedi Goggles

The ability to "read" the landscape is the first skill of the Jedi-Geographer. It sounds simple enough, but advanced ability in **landscape interpretation** takes many years to develop. Generally, people are not aware that all landscapes, including both the human-built and the natural, physical environment, can be read, somewhat like you read text in a book. With some practice, you can develop a measure of **landscape literacy**, which is the ability to "read" and understand a significant number of messages inscribed into the environment. All landscapes tell a story. Throughout this text, there are opportunities for you to learn to read them. This skill is referred to as using your "Jedi Goggles." Noted scholar Aldo Leopold also thought this an important skill, noting, "The objective is to teach the student(s) to see the land, to understand what [they see], and enjoy what [they] understand..."



Figure 1-3: Las Vegas, NV. Casino landscapes often evoke exotic locations to heighten the excitement of gamblers, who then are more likely to spend more prolifically once the landscape conditions their mood properly.

Certainly, you already have some skill reading the landscape, but most non-geographers do not read the landscape well because they do not think to do it consciously or regularly. Like a Jedi without training, you have occasionally put on "Jedi Goggles" but maybe didn't think about what you were doing. For example, you have probably at some point found yourself driving in a dangerous neighborhood. Of course, there are no road signs at the borders of a high crime neighborhood warning, "Caution – Now Entering Dangerous Neighborhood". Still, you know to be cautious. Why? Because- you have developed some skill reading the landscape over the years. Rubbish on the street, graffiti, bars on windows and unkempt lawns are common landscape markers(visual cues) of a neighborhood that suffersfrom crime; your sense of self-preservation has prompted you to learn to interpret landscape symbols associated with danger. Many police and people who are "street smart" have well-developed "Jedi Goggles".

The first step you must take as you develop landscape literacy skills is to begin actively looking more closely at stores, rivers, houses, parking lots, road signs, empty lots, farm fields, hillsides and anything else that passes your windshield. As you look, think to yourself, "What is this landscape telling me?" There's no need to focus on "pretty" landscapes because beautiful, scenic, impressive or extraordinary landscapes are no more important than those that are boring, ugly or commonplace. The ordinary, everyday landscapes, called **vernacular landscapes** are, as Peirce Lewis noted, our "unwitting autobiography, reflecting our tastes, our values, our aspirations and even our fears in tangible visible form." There is a reassuring honesty one gets reading vernacular landscapes. The lack of intentionality makes landscapes a source of unvarnished truth about a place's history, unlike purposefully written histories that are often prone to biases and outright lies.

This text will help you learn to read the cultural histories of various places and regions as they have been written on the landscape. Hopefully, by the end of the semester, you'll find yourself asking "What does this scene tell me about this place?" Hopefully, you'll begin to see patterns you never noticed before and you'll be trying to guess what forces created that which you see. With luck, you may find yourself asking "Why is this here, and not elsewhere?" Each chapter in this book features multiple images of landscapes. Most images are captioned with a quick "reading" of the images. A large photographic database, available online at The American Landscape Project, has many thousands of the images used in this text and many feature robust captions to help you learn to

confidently read landscapes.

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# 1.4: Geography is a Way to Ask Questions – Jedi MindTricks

Geographers also have a unique way of knowing what we know. **Epistemology** is the study of knowledge and because geographers have a unique way of thinking about questions and arriving at answers, we have a unique epistemology. Most of the time, people don't think about how they know what they know. We don't think about our epistemological processes, biases, and tendencies. Therefore, we don't often know how we know, what we know."I just know it!" is how you might respond if someone challenged you on your epistemology. For scientists, social scientists and other serious thinkers, "I just know it" is an unacceptable response. It's important to understand one's epistemological tendencies. You must know **how** you know, **what** you know.




Figure 1-4: Painting - The story of the blind men and the elephant illustrates how knowledge is dependent upon the perspective of the individual and the imperfect ability of anyone to understand the entire truth of any subject or circumstance. Source: Library of Congress via Wikimedia.

Geographers have a favored epistemology–it doesn't have a name, but it does begin with a simple strategy that leads us to learn and/or understand things differently than non-geographers. When geographers seek to understand the world around them better, we have a strong tendency to frame questions and answers spatially. In other words, when geographers want to know "Why?" or "How?", we first typically ask the question "Where?". Privileging spatial questions in a quest to understand the world is like "Using the Force" among Jedi warriors. When geographers "Use the Force," they ask "Where?" to understand "Why". By doing so, geographers often come to different conclusions than non-geographers. By asking "Where?" when you want to know "Why" or "How" is the most basic of all "Jedi Mind Tricks". Historians have a similar trick - they ask "When?" (rather than "Where?") while seeking understanding. Still, learning to ask questions about how the world works consistently is crucial to developing a "habit of mind"; itself a crucial element in developing a disciplinary epistemology – something all college students should work to develop. Faculty in many majors do not teach students to develop disciplinary habits-of-mind. The main goal of this course is to help you develop this habit-of-mind.

Most people don't use "The Force" and there are consequences for understanding our world. Consider for instance a conversation overhead by the author of this text some years ago on a large college campus in Illinois. I overheard two people discussing why most African-American students on that campus rode the elevator in a campus building while most white students used stairs instead. It was evident and obvious that this was occurring, but the causal reasons for this difference in behavior eluded those discussing the behaviors. One person in the conversation was quick to assign ethnicity as the primary causal factor motivating students to use or avoid elevators. A geographer using "The Force" would not have made this mistake because the geographer would have thought about the spatial aspects of the phenomenon first, and would have realized that ethnicity was probably not an important factor explaining why black and white students used elevators differently. Instead, a geographer would have asked, "where are the students who use elevators from?" Had the people discussing the question asked "Where?", it may have occurred to them that many of the black students on that campus grew up in Chicago, where using elevators to reach the upper floors of tall residential apartment buildings was a daily ritual. The behavioral habits developed by students living in high-rise apartments

lingered with students after they moved to campus, prompting them to select the elevator to navigate to upper stories on campus out of habit, even when the building was only two or three stories. Students from rural and suburban locations, on the other hand, typically lived in single-story or two-story houses, and were, therefore, more accustomed to reaching an upper floor by climbing stairs out of force of habit. To a geographer, those behavioral differences were not black and white – but spatial. Thinking that way, at least in this course, is called “Using the Force”.

By privileging matters of place and space in their quest for knowledge, geographers may bias their conclusions – arguing that location, space or place is a significant causal variable in the outcome of various phenomena. Favoring one epistemology over others is nearly unavoidable, and it is acceptable if one recognizes the biases an epistemology creates. Historians, sociologists, political scientists, economists, etc. each have their own epistemological biases. If these competing means to comprehend reality can be given a fair audience, a robust, multi-perspectival or interdisciplinary understanding of our world is possible. There is danger in discounting epistemologies unfamiliar to you – and because the US school system does a poor job of developing students’ spatial epistemology, taking a geography course and developing some measure of this unique habit of mind is a critical element in a quality, robust liberal arts education.

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# 1.5: Geography is a Way to Solve Problems – Jedi Weapons

Geographers have a very powerful toolbox of problem-solving tactics and strategies. The tools in the geographer's toolbox are our methods and most of our methods are dependent upon our spatial epistemology, or way of knowing. There are dozens of methods used by geographers today. This is partly because geographers have adopted many methods used by scholars in the sciences, social sciences, and the humanities. The scientific method is widely used by geographers, but humanistic methods, like those employed by historians or even art critics, are also used by geographers. Generally, geographers alter these borrowed methods so we can use them effectively alongside our discipline's spatial epistemology. Taken together, the methods and the epistemology provide geographers with a series of **methodologies**; or set of rules that govern the collection and analysis of a wide variety of data.

For example, if a geographer were to survey students about a new campus policy, many of the questions included in the survey would be the same as those used by a political scientist, historian or sociologist. However, a geographer would insist that the survey include a spatial question among the demographic questions. Instead of simply asking about each survey respondent's age, gender, and ethnicity; the geographer would likely insist on asking about each respondent's address, ZIP code, or at least "hometown".

Like many other disciplines, geographers use statistics. Often, we use statistics in a manner indistinguishable from the way they are used in other disciplines. Other times we have found a need to develop separate geography-friendly statistical tools more suited to answering spatial questions. For example, social scientists from other disciplines might start a statistical inquiry by calculating the mean, median and standard deviation of some data points. Geographers, on the other hand, might first plot the data on a map, and then calculate a spatial mean, spatial median and the standard distance of the same data. That's because geographers want to know where and why. There are a vast number of spatial statistics. Some are exceptionally complex and some quite simple. Spatial Analysis is the name of a subfield of geography which applies advanced mathematical analyses to spatial data. There are a lot of good jobs for people who can do spatial analyses of data.

For the past few decades, the primary tool in the geographer's toolbox has been a suite of software products known as **Geographic Information Systems** or GIS. GIS is the "lightsaber" of the modern geographer. Like the lightsaber used by Jedi in Star Wars movies, GIS is used by a select few (Jedis), and in the hands of a "master", GIS is both amazingly powerful and versatile. GIS software allows geographers to analyze data in a unique fashion, permitting geographers to ask spatial questions and solve problems using our special methods and while engaging our peculiar spatial epistemology. GIS allows geographers to sometimes solve problems that have proven intractable to those without GIS. People from other fields begun to embrace GIS, but the techniques for using GIS have begun to emerge as foundational tools for modern geographers.

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# 1.6: Geography is a Way to Communicate – Cartography the Jedi Language

Because you are reading this, you have some command of the rules that govern the English language. You no doubt can write in this language as well, another indication of your textual literacy: i.e. you can communicate with a written language. You probably are reasonably adept at communicating with numbers as well – so you are numerate or you have numeracy skills. Without these two key skillsets, you would not be in college. Geographers must be literate and numerate, but we also work to heighten our ability to communicate with non-textual, visual imagery, and/or graphics as well. Geographers who can both "read" graphics and create "readable" graphics have graphicacy skills and are considered graphicate. Persons who can read and create legible, communicative maps, are considered **cartographicate** and possess **cartographicacy** skills. Mapmakers are called cartographers.

**Cartography** is the science and art of map-making and it is the specialized language of the geographer. The ability to communicate vast amounts of information, and/orideas using maps is an excellent skill to develop. In the last decade, thanks to Google Maps/Earth, GPS and a massive increase in the value placed on spatial data by the government, military and private enterprise, cartographicacy has blossomed as a valuable type of literacy.

It makes sense that maps have re-entered the public's consciousness in recent years. Besides the explosion in spatial data available with which cartographers can create fun or informative maps, changes in the pace of our lives as well the tendency for us to be overwhelmed by data in the digital age have made well-constructed maps and graphics a welcome coping mechanism. Maps allow our brains to rapidly process far greater amounts of data than we could if we encountered the same data as text or in a massive spreadsheet. Maps allow us to see patterns and processes that would be difficult to discern otherwise.

Although some folks find maps innately easy to read, maps confuse others. Moreover, it can be very challenging to author a legible map. Good cartography is harder than it looks. Some colleges feature full programs in Cartography. Professional cartography is a great career path for the talented few who master this Jedi art. All geographers, even those whose specialty is not cartography, should endeavor to become reasonably adept at making maps. Thanks to GIS, most people who know GIS can create a tolerably good map using the software's built-in cartography templates.

## Good Cartography?

Throughout this text, you should notice there are varying styles of cartography, with varying degrees of quality. This is purposeful. It affords students and instructors opportunities to discuss the communicative power of cartography. Look for maps that communicate effectively, and for those that do not. Hopefully, the author has indicated examples of poor cartography. Consider elements of color, scale, projection, and text that work to enhance or degrade the power of maps in this volume to communicate clearly and effectively.

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# 1.7: Core Concepts

In addition to the core elements of the discipline of geography (observation, epistemology, methodology, and cartography) several basic concepts are useful to know to develop basic proficiency as a spatial thinker. These concepts appear throughout the text, so you should try to learn them well early in the semester.

## Location

Location is the most basic concept in geography. Each physical object has an **absolute location**. There are a variety of strategies for expressing or communicating your absolute location. If you order a pizza, you will provide the delivery person your address. The property address system as we know it here in the United States was created by the government to help the postal service deliver letters and packages many years ago. It is a generally logical system, and most Americans have learned the logic behind it well enough to navigate their city, even without help from a GPS. If you were to travel to other countries, you may be surprised to find that some, like Japan, have very different address systems than the one used in the United States.



Figure 1-5: Greenwich, England – The author – an admitted geo-geek-stands happily astride the Greenwich Meridian marking zero degrees longitude. GPS measurements indicate this stripe should be a few yards to the east

Another common system for expressing absolute location uses a grid **geographic coordinate system**. The most commonly used grid system is based on lines of latitude to express distance from the equator, and longitude to express distance from the Prime Meridian, an imaginary line running through a suburb of London England. Grid coordinate systems were devised thousands of years ago to aid in navigation and map-making. There are many dozens of coordinate systems, but the most popular system used today was invented by Eratosthenes, vastly improved by Ptolemy and formalized into a modern functional system by an Englishman, Sir George Airy in 1851. Many people own smartphones capable of calculating the phone's location (latitude and longitude) much like a **global positioning system** (GPS). Smartphones, and GPS devices (that use satellite data rather than cell towers or Wi-Fi) use the basic logic of the ancient coordinate system to help us find our way.

## Region

Another common concept used to express location is **cultural region**. Each absolute location, like your address, can be mapped as a point. Points are almost always situated within one or more containing locations known as regions. Your address is on a street/road – which is a **linear region** expressed as a line on a map. Your address is also (at least in the US) within a ZIP code, a county, a state, a country, etc. These locations are two-dimensional regions, so geographers map these regions using **polygons** on paper or in a GIS.

The location and boundaries of polygonal regions can be mapped using several different strategies. One strategy for designating an area as a "region" is to identify a characteristic that is common among multiple adjacent locations. So, for example, there's a part of the United States where most of the people are members of the Church of Jesus Christ of Latter-Day Saints. So, you could call that group of locations a region – perhaps the "Mormon Region". It is a region because locations within the region generally share a common trait or a characteristic. The general uniformity of this characteristic among these locations is perhaps why this kind of region is called a formal region. Sometimes the formal region is homogenous (same) across the region, and sometimes a formal region will feature a core where the trait is more pronounced and a **periphery** where the trait is less common. That would be the case with the "Mormon Region".

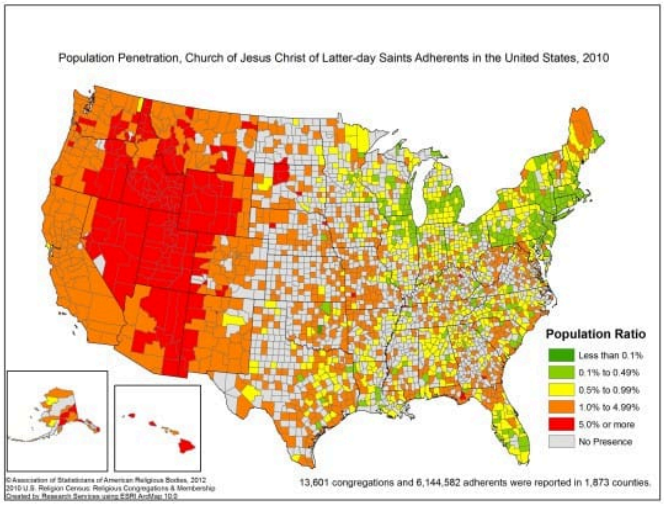



Figure 1-6: Map. US counties by percent Mormon. Red areas on the map, because they have a higher percentage of Mormons could be delineated as a formal region. Source: ASARB

Another way of grouping locations together as a region is by identifying a shared relationship among multiple locations that are near one another. These kinds of regions are called **functional regions** because they function together in some fashion. For example, a network of radio stations that all feature broadcasts of Cincinnati Reds baseball games would form a functional region of Reds baseball broadcasts. You could map that region. If there was a headquarters, or a "flagship station" for Cincinnati Reds radio broadcast stations, then some geographers would call that a nodal region. The node is the point that functions to connect, and often control, the other points in the network are subsidiary to the node.

These concepts are not mutually exclusive. Some regions are both a functional and formal region simultaneously. For example, Texas is a formal region because people who call themselves "Texans" largely live within the borders of Texas. They share a common trait. At the same time, all people living within the borders of Texas pay taxes that wind up in Austin – the **node** of a functional region that constitutes the State of Texas.

Even less well defined are **vernacular regions** because these regions exist mostly in the imagination of groups or even individuals. It is much more difficult to identify the boundaries of vernacular region on a map because opinions about boundaries often vary wildly for vernacular regions, but such regions remain important because people believe they exist. A good example of a vernacular region is "Dixie", the name frequently applied to the American South. However, exactly which states, towns and counties are in "Dixie" is impossible to measure because there is no single variable capable of defining "southern". Is Kentucky part of Dixie? What about Missouri? New Orleans? Miami? That depends on what variable one chooses to use as the defining characteristic of "southern". Still, "Dixie" exists in the minds of millions of Americans, so it's important to recognize it even if we can't say for sure where it is."So Cal", "The Midwest", "Cascadia" and even "New England" are other vernacular regions in the United States.

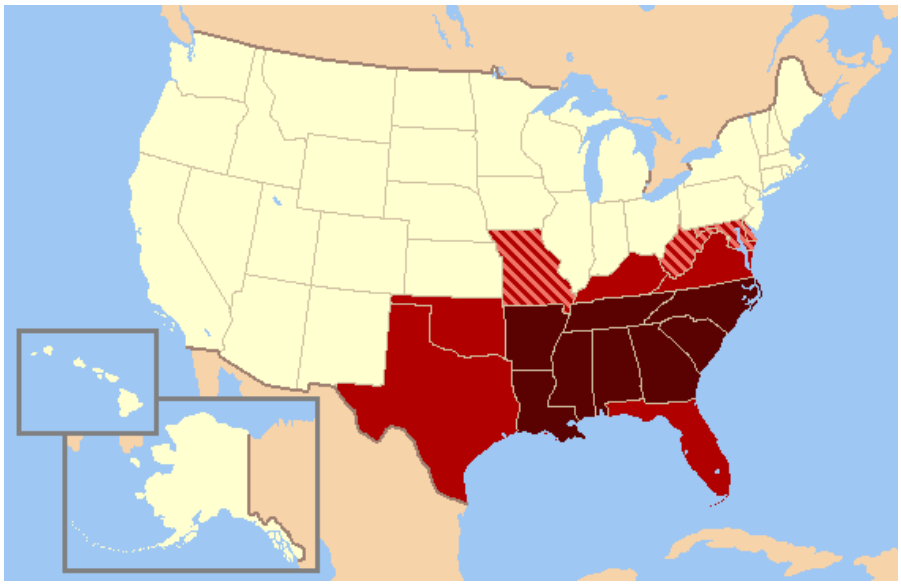


Figure 1-7: US Map – This is one possible version of the classic American vernacular region, Dixie. Source: Wikimedia

## Diffusion

The core-periphery pattern that characterizes some regions is the result of the **friction of distance**, which is perhaps the most fundamental force influencing the spatial behavior of people, their ideas and their institutions. In the simplest terms, there exists what might be best thought of as a force, almost like gravity, that impedes the spread or **diffusion** of ideas, behaviors, people, etc. The friction of distance creates patterns on the landscape which are characterized by **distance decay**, a tendency of objects, ideas and behaviors to decrease in intensity or regularity as they move further from their original source – which is often at a region's core. This process is so pervasive and predictable that geographer Waldo Tobler called the effect of distance decay, The First Law of Geography". Tobler explained the operation of this "law" thus: "Everything is related to everything else, but near things are more related than distant things". Put more simply, things that are near each other are often more similar than things that are far from each other. According to Tobler, the idea was so self-evident to him that he didn't realize that he had captured the essence of a fundamental principle when he wrote it down in 1970.

Though very simplistic, it is a useful notion to keep handy as you learn to think like a geographer. Tobler's first law appears in many guises throughout this text (e.g., "the neighborhood effect"), and it appears in many guises in your daily routine. If you seek a spot in the parking lot at your college nearest your first class of the day, you've experienced the friction of distance. If you notice fewer cars at the back of the parking lot, you're seeing distance decay. The cars parked in the closest spots in the lot are probably all driven by students who arrived early for an 8 AM class, confirming Tobler's First Law of Geography.

The First Law of Geography characterizes the process of diffusion. Think of an idea, invention or behavior of any sort. Then consider its origins. Somebody or some people must have invented or thought it up or acted in an innovative way. The location where the invention or innovation occurred first is known as the hearth-which is a little-used synonym for "home" – especially the fire place.

### CASE STUDY: THE ORIGIN AND DIFFUSION OF HIP HOP

Residents of the South Bronx, a neighborhood in New York City, invented hip hop music, dance, and graffiti in the mid-1970s. Therefore, the Bronx is the source region or **cultural hearth** of hip hop.



Figure 1-8: Bronx, NY. This high-rise apartment building is probably the cultural hearth of hip hop since the first hip hop dances were hosted here. Source: Wikimedia.

It took some years for people living outside the Bronx to discover hip hop, but it has spread or diffused around the globe since the 1970s. The diffusion of hip hop demonstrates several key spatial patterns and processes that characterize other cultural phenomena. First, hip hop music took nearly a decade for it to emerge from the Bronx. There were many **barriers to diffusion** preventing music fans, even those living just a few miles away in Manhattan, from hearing this newly created genre of music. Those barriers were largely social, economic and cultural, but those barriers kept the sound of Black and Latino youths living in the Bronx from reaching the ears of music fans (and music executives) in Manhattan for nearly a decade. It is worth noting that Motown Records, the most successful black-owned recording company of all time eschewed hip hop for many years, which in turn helped doom Motown Records. Ironically, Motown Records was eventually acquired by hip hop specialty company DefJam records.

During the 1970s and early 1980s, hip hop diffused slowly, spreading first to nearby locations, notably the other boroughs of New York City and to northern New Jersey. Only after about 10 years did hip hop artists from more distant cities, like Philadelphia and Boston on the radio or MTV. This pattern of near-first/far-later diffusion is a very common type of **expansion diffusion** known as **contagious diffusion**. It gets its name because the pattern is similar to the manner in which contagious disease spreads from person to person, infecting nearby people first and distant people later. Almost all early rap acts from outside the Bronx were from Greater New York City - Queens, Harlem, Brooklyn, and Long Island. It wasn't until a hip-hop duo known as DJ Jazzy Jeff and the Fresh Prince (Jeffrey Townes and Will Smith) emerged from West Philadelphia around 1988, that an act from beyond greater New York City made it onto the record charts. In 1989, a bunch of hip-hop acts had hit records, and almost all of them were from Los Angeles, America's second-largest city.

Once hip hop leap-frogged across the US, from big cities on the East Coast to big cities on the West Coast, hip hop then exhibited a diffusion pattern known as **hierarchical diffusion**. This is when innovations are adopted in the largestcities first, and smaller cities or rural areas much later. Like many inventions or innovations, hip hop began in a very large city, at the top of the **urban hierarchy** and from there it filtered down through other large cities, like Los Angeles, San Francisco, Atlanta, and Houston. After about 20 years, even small towns or rural areas had accepted hip hop and were producing home-grown hip hop artists. Hip hop has diffused internationally as well, rappers rap in hundreds of languages from rural areas of Asia, the Mideast, and Africa. Occasionally, an idea or practice comes from a small town and diffuses upward through the hierarchy. Geographers call this type of expansion diffusion **reverse hierarchical diffusion**.

The original version of hip hop did not feature musicians playing traditional instruments. Instead, hip hop acts utilized a disc jockey or DJ who manipulated vinyl records on a turntable to create musical accompaniment for the vocalist, known as a rapper or MC (master of ceremonies). In the late 1970s, some young men from New Jersey, copying the rapping style they had learned while visiting friends in the Bronx made a record called "Rapper's Delight". They used trained musicians rather than a DJ for background music and beats. The alteration of an original style created in the Bronx, but modified after it was adopted in New Jersey is a great example of **stimulus diffusion**. This kind of diffusion occurs when the principal element of an idea or behavior spreads but other elements are significantly modified by those who adopt it elsewhere. Rappers and DJs from locations beyond the Bronx have made numerous modifications on the original style of hip hop. For example, many of the early lyrics from hip hop

pioneer Afrika Bambaataa were anti-gang; but when hip hop diffused to Los Angeles in the 1980s, LA-based rappers produced music that appeared to glorify gang membership and gang violence, earning some LA Rap the name “gansta rap”. As ideas or practices spread, they adapt and change to fit local conditions or local preferences, and this is the essence of stimulus diffusion.

Had an MC or DJ from the Bronx moved themselves from the Bronx to take up residence in New Jersey or Los Angeles, they may have spread hip hop themselves personally. This process of spreading hip hop by a person is called **relocation diffusion**. This kind of diffusion happens when an idea or practice moves with a person rather than through media, like records, radio or MTV. Relocation diffusion is not a type of expansion diffusion.

Though hip-hop is an international phenomenon today, there are a few places where you would have trouble buying a hip-hop CD, or hearing it on the radio because of effective **impermeable barriers** to the diffusion of hip hop. Some barriers might be technological (e.g., no electricity), cultural incompatibility, or some measure of bigotry or bias that prevents or slows adoption of new ways. Mostly though, places where hip hop is banned are largely where very serious religious or political costs are attached to the consumption of hip-hop music. For example, record stores have been bombed in Pakistan by conservative Muslims that support the Taliban. More often than not though, music (and other pop culture) “gets through” and becomes a source of resistance to authority.

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# 1.8: Cause and Effect

All scientists look for regularities and patterns while trying to figure out the causal forces behind them. One of the main points of science is that by understanding why things happen the way they do, we may better understand how to prevent what we dislike or maintain what we love. Geographers are no different, but we tend to look for regularities in the processes that create or destroy patterns on the landscape. Sometimes geographers simply observe phenomena, and try to make sense of it. Other times, geographers use maps to plot that which they observe, or are trying to observe. Once the map is constructed, then we begin to try to identify what is causing the pattern on the map.




Figure 1-9: Hollywood, CA - The Whiskey A Go Go is a landmark venue and serves as the cultural hearth for California-based hard rock and heavy metal music.

## Cultural Ecology

One of the oldest strategies geographers use to seek causality is to carefully consider the role of the physical environment in which phenomena occur. Geographers ask, "What is the effect of climate, weather, water, rocks, soils, etc. on politics, religion, language, culture, etc.?" The study of the interaction between various cultural practices and the physical environment is referred to as cultural ecology. Sometimes the relationships between cultural practices and the natural environment are easy to identify, such as the relationship between the sport of ice hockey and cold winters. More often though, relationships between cultural practices and the environment are difficult to fully understand. Recall the discussion about Environmental Determinism from earlier in the chapter.

## Cultural Integration

Often there is no identifiable causal relationship between cultural practices and the environment, so geographers check for interrelationships between various cultural practices within a place or region. An understanding that many ideas, practices, and traditions from one cultural realm (religion, e.g.) may have an effect other cultural practices (politics, e.g.) is the basic principle of the concept **cultural integration**. All cultural practice function like gears in a complex machine where movement by one gear, wheel or spring is likely to turn other gears, wheels and springs elsewhere So, weather, religion, politics, language, health, and crime all affect each other.

### PLANKTON AND OBAM A

An excellent example of the complex nature of a culturally integrated system was uncovered and explained by clever geographer-types during the presidential elections of 2008 and 2012. The stunning finding of this study was that long-dead plankton helped

Barak Obama get elected! Preposterous? Not to geographers. Consider that more than 100 million years ago, the shoreline of the Atlantic Ocean/Gulf of Mexico was far inland from where it is today. In the shallow seas that once covered what are today parts of Alabama, Mississippi, Georgia, and the Carolinas, there floated trillions of tiny plankton that upon dying, created rich, chalky soils along ancient beaches(the red line in the map below). This dirt, thousands of years later became a key element in a narrow region of agriculturally rich soils stretching across the American South, dividing a region where the soils are otherwise poor. Because these rich soils were very dark, farmers labeled the region the Black Belt. During the 1800s, people also called this area the Cotton Belt, because it had become the richest cotton farming region in the United States. Because African-Americans, enslaved on plantations grew most of the cotton, the term, black belt, acquired a new layer of meaning that it maintains today. In those counties, where the descendants of slaves still outnumber white people by a large margin, Barak Obama won more votes than his challengers John McCain and Mitt Romney.



Figure 1-10: In the map on the left, the red line indicates the approximate shoreline of the ancient Gulf of Mexico responsible forthe rich soils in that region today. On the right is an overlay map showing both intense cotton production during the 1800s (dots) and the election results of 2008 by county. Blue counties went for Obama and Red for McCain. Source: Ron Blakely and Alan Gathman.

## Process and Pattern

Geographers, especially in the last 40 years or so, have sought to not only explain why patterns emerge on the landscape but also to make predictions about when and how they will change. Geographers who make predictions based on evidentiary trends in data are, by their actions, scientists. One of the first steps in spatial science projects involves identifying **clustering** within spatial patterns evident either on maps or the landscape. Many phenomena cluster in space because the friction of distance affects everything, as suggested by the First Law of Geography. One way to verify the clustering of some phenomena is to plot data on a map with points, as is done in the accompanying figures below.

In the map below, payday lenders, represented by red triangles, appear to cluster in large numbers near the entrance of McChord Air Force Base/Fort Lewis in Washington. The pattern on the map strongly suggests that the payday lending industry focused on military personnel as an attractive target demographic. Representatives of the payday lending industry denied they were targeting soldiers and sailors before Congress, but the intense clustering of payday loan stores near military bases across the U.S. helped convince legislators in both Washington D.C. and Seattle, Washington that this industry was indeed targeting the military, and that stricter regulation of the payday lending industry was necessary to protect service members from the often-dangerous effects of short-term, high-cost loans.

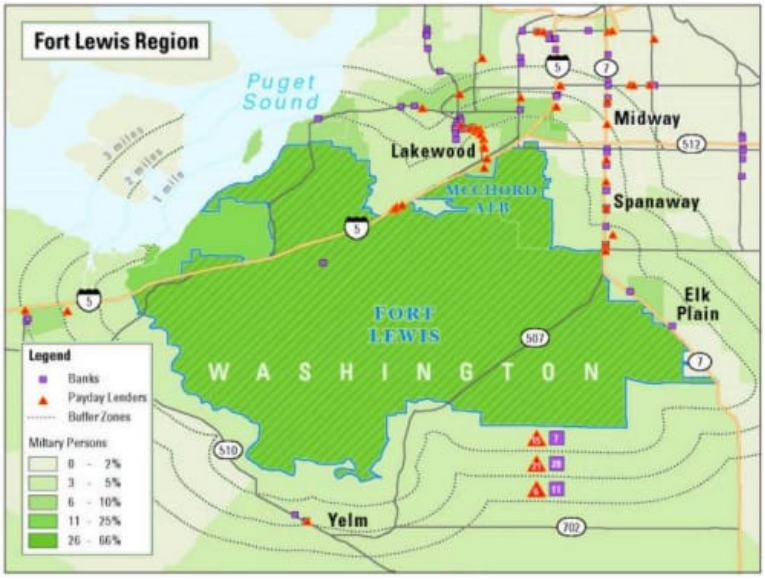



Figure 1-11: Map - Fort Lewis, WA. This map shows significant clustering of payday lenders near the gates of this military facility in 2003. The map helped convince legislators of problems with the payday lending industry.




Figure 1-12: The pattern of phenomena on the landscape may help us understand causality. Clustered, random and dispersed patterns can be measured statistically by GIS software.

Often, it is easy to visually identify the clustering of points on a map with, as is the case in the map above. Sometimes though, it is not so easy to determine if points are clustering beyond what might happen randomly, or if a pattern of points is more clustered than another.

When patterns are difficult to see, geographers turn to spatial statistics to measure the distribution of points in space. One cool technique, known as **nearest neighbor analysis**, compares the average distance between actual points on a map against an equal number of hypothetical points randomly dispersed on the same map. GIS software then compares the two patterns and calculates the likelihood that the distribution of the actual (observed) points is more (or less) clustered than a random distribution of the same points. See figures below.

Random, clustered and dispersed patterns each tell a story about the processes that are acting upon the mapped phenomena. The image in Figure 1:14 is a graphical report from a statistical test of payday lenders in Los Angeles' San Fernando Valley. As you can see, the level of clustering of this type of business is far greater than a randomly distributed set of points in the same space. Therefore, we can be quite certain that the locations of payday loan shops are not due to random processes. Clustered patterns of diseases, crimes, tornados, or any other phenomena, are of great interest because clustering helps us identify causes, and hopefully, solutionsto problems. Highly dispersed point patterns are nearly as interesting. Dispersion suggests that for some reason points are being pushed away from one another. Schools, Fire Stations, and 7-Eleven stores would all likely show spatial dispersion.




Figure 1-13: GIS Software output window indicating a statistically significant clustering of points. Clusters of crime, disease or businesses provide decision makers with important tools.

Regions also may exhibit clustering. You can observe clustering on a **choropleth map** when data values associated with neighboring polygons(e.g. states) are more similar than the data values associated with non-adjacent polygons. Put more simply, clustering is evident when neighboring regions are more similar than non-neighboring regions. A special term, **spatial autocorrelation** is often applied to such patterns. Like the point clustering patterns discussed above, spatial statistics are available to geographers seeking to measure the degree of clustering, dispersion or randomness in a choropleth (polygon) map. Moran's I is a common statistic used to measure spatial autocorrelation, or clustering, on a choropleth map.




Figure 1-14: Electoral maps like the one above show clustering of like states. The Moran's I value would indicate signficiant clustering of like values.

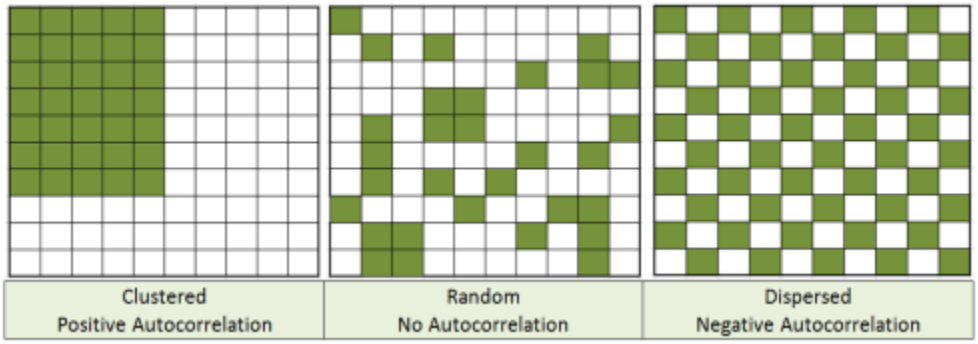



Figure 1-15: Graphic - This series of checkboard images represents various levels of spatial autocorrelation for polygonal features (regions). The Moran's I statistic could be used to determine the degree of clustering or spatial autocorrelation.

The well-known election map of 2000 shows a clear pattern of clustering that does not need statistical analysis to notice. However, if you wanted to compare the degree of clustering evident in that map against another election map, or against a map of something unrelated, like cancer rates, you would need a statistical tool. Using Moran's I, you could determine which pattern was more clustered; or if you were comparing voting patterns over many years, trends could be analyzed, perhaps allowing you to make predictions about future elections.

# Co-location

Clustering is a type of co-location. When things, behaviors or ideas (e.g. factories, payday lenders, auto dealerships) cluster that's a form of co-location called **agglomeration**. Co-location can also characterize the situation in which seemingly different things, behaviors or ideas are found in the same location. For example, Evangelical Christians and Trump Voters are found in the same states. Payday lenders and military personnel cluster in the same towns; and night clubs and college students are often found in the same neighborhoods.

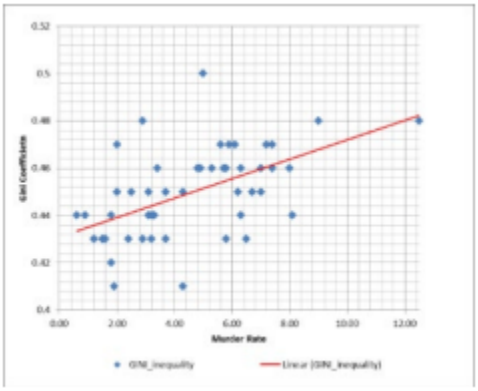



Figure 1-16: Scatterplot diagram - This diagram displays the same data in the maps below. The correlation coefficient is r= .55, indicating a moderately strong relationship.

When co-location among phenomena occurs then there exists a spatial relationship between the phenomena. Occasionally, persistent co-location indicates a causal relationship; where one thing in a location (an increase in air pollution) causes the other thing (an increase in lung cancer) to occur in the same location. Uncovering, measuring and explaining causal relationships is a major goal of geographers.

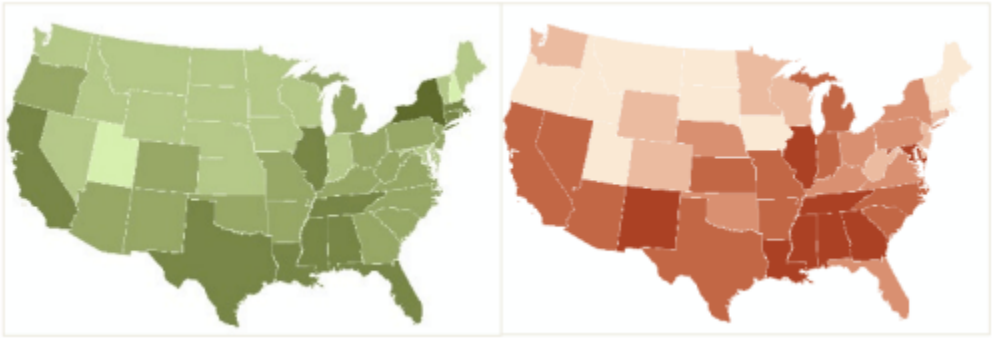


Figure 1-17: These maps represent income inequality (left) and murder rate (right) by states. You can see that about half the time, as one variable increases, so does the other. The correlation coefficient is r=.55.

Hypothetically, you may notice that there seems to be an unusual number of obese people living in neighborhoods where there are also many fast-food restaurants. If you were a geographer, you might hypothesize that living near fast-food restaurants increases residents' chances of gaining weight. You could test this hypothesis by collecting data from the local health department. Next, you could map the obesity rate by neighborhood (census tract or ZIP code perhaps). Then, you could map all the fast-food restaurants in each neighborhood so that a count of fast food outlets per neighborhood was possible. Then you could run statistical tests on the data to test your hypothesis.

Often, geographers begin analyzing relationships by testing for the degree of **correlation** between variables (e.g., fast food vs. obesity rates per ZIP code), using a test statistic like Pearson's Correlation Coefficient. This test, and others like it, measure the amount of covariance, or dependence, between two variables. Put simply, correlation tests report how much one variable (like obesity rates) rises or falls as a second variable (restaurant density) rises and/or falls. You might find that as the density of fast-food restaurants goes up in neighborhoods around town, so do obesity rates in those neighborhoods, indicating a positive correlation. Negative correlations are possible too. You may find that as the miles of bike paths per city increases, the obesity rate goes down. Often you find that there's not much correlation at all. If you find strong negative or positive correlations between two variables in space, then you may have grounds to argue there is a causal relationship.

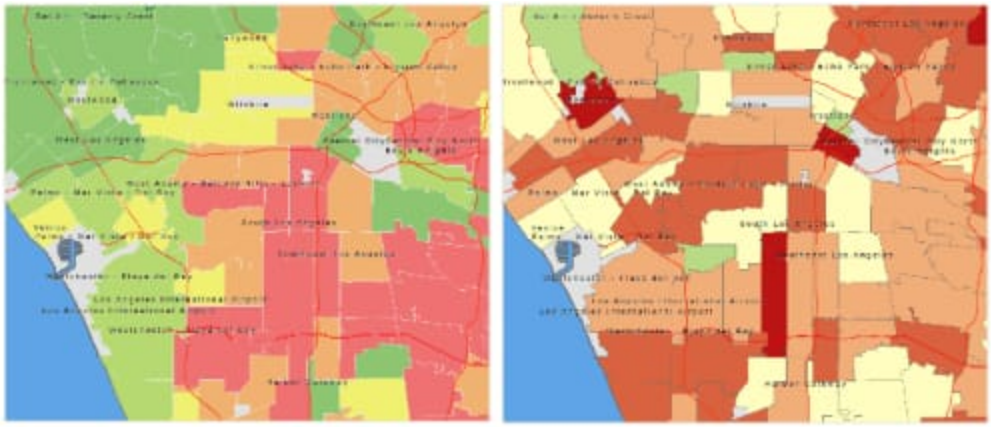


Figure 1-18: Los Angeles - The map on the left displays the density of fast food outlets per business. A regression model was used to analyze the relationship of fast food availability to the percentage of children rating "healthy" on a school fitness test. The map on the right shows the locations where the regression model under-predicted or over-predicted healthy levels among school aged children in each ZIP code. Other variables like, income, ethnicity, etc. were held constant by the regression model.

Unfortunately, correlation can be misleading. It's easy to accidentally misinterpret correlation statistics. You can mix up the direction of causality: maybe the fast-food restaurants are in certain neighborhoods because their owners build them where the population is known to love french fries. Maybe the density of fast-food restaurants and obesity rates caused by a third less obvious thing, like poverty. These unknown variables are called confounding factors. Maybe the factors are completely unrelated, exhibiting a relationship that is purely by chance. These random relationships are known as spurious relationships and happen when phenomena rise and fall together but are causally unrelated.

The nature of relationships between cause and effect variables is most often measured using **regression analysis**, a more complex statistical technique used by geographers to determine the strength and direction of causality between a dependent (effect) and one or more independent (causal) variables. So, for example, regression would help you understand not only if having lots of fast food joints in a neighborhood had an effect on obesity, but it would also allow you to better analyze the effect of ethnicity, income, access to parks, etc. on the dependent variable (obesity). Regression analysis, done with GIS software also allows geographers to see quickly where trends are well predicted by the variables used in the analysis, and where there is less or more of the predicted variable.

No doubt, you have seen patterns on the landscape and wondered, "Why is that there?" The chapters that follow should help you answer those questions. Some of the techniques may seem challenging to you, but college students who have been exposed to geography should be able to observe patterns, ask questions about the observed patterns, and do a few basic analyses on data. Geographers have effective techniques for answering questions and solving problems. It is the major goal of this text to expose students to some of these techniques.

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# 2: CULTURE AND CULTURAL PRACTICES

**Culture is hard to define. It's an elusive set of guidelines that govern the way we act and think. Cultures are influenced by location and subject to significant changes across space and time. This chapter explores the idea of culture and how place and space shape the way we think and how we act.**

It's generally a foregone conclusion that **culture** exists. Most introductions to the concept of culture in college textbooks don't bother to problematize the concept. Instead, texts simply define culture as "a collection of socially created rules that govern people's thoughts and actions" or as a "learned way of life". While it is easy to acknowledge that people do follow innumerable, mostly unwritten,rules as they make decisions about virtually everything they do, it is also important to point out that it is intellectually sloppy to reify culture. In other words, it is important to understand that culture should not be treated as something that is real or material. Instead, culture should be treated as an abstract concept that exists only in our minds. Geographer Don Mitchell has argued persuasively that culture doesn't exist, but rather, only the idea of culture exists. It is important to make this distinction to avoid falling into the trap that causes us to treat culture as something separate and above people, like some unknown, mysterious force that controls the wills of groups and individuals. We and the societies we have created are much more complex than that. The idea of culture is helpful when we need to explain behaviors that appear to characterize group tendencies, but it's always dangerous to assume that an individual's ideas and actions are controlled by culture. That belief is called **Cultural Determinism** and it is a logic that shares many of the flaws of Environmental Determinism. Additionally, by treating culture as an idea, we can stay mindful that the rules of society are formed, reformed, contested, tossed out and replaced regularly. We created our culture, we can change it! Once we realize that culture is an idea, we are invited to think carefully about balance between society's "rules", sometimes known as structures, and agency, which can be thought of as the power of individuals and institutions to navigate and change those rules. Agency and structure are always in a contest – and the result of this battle is what we think of as culture. Some people think agency is more powerful than cultural structures. Others think that structures of society are far more powerful than agency.

Though culture is only an idea, this text nevertheless uses the much-abused term "culture" as a shorthand reference to the cognitive and behavioral tendencies of various groups of people.


2.1: Folk Culture

2.2: Folk Regions

2.3: Folk Housing

2.4: Folk Music to Popular Music

2.5: The Geography of Sports



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# 2.1: Folk Culture

Almost nobody living in the United States today belongs to a **folk culture**. Generally, folk culture describes the practices of groups people who have few or no modern conveniences, live according to age-old customs and are economically primitive (cashless economy, little occupational specialization, etc.). Probably only the Amish and maybe some native Alaskan groups approximate a folklife existence today in the United States, but even that is doubtful. Much of American folklife disappeared in the mid-19th century when the telegraph and the railroad began invading spaces once isolated from the rest of the world. Folk cultures require a significant degree of isolation from the rest of world to persevere. Geographers tend to see culture spatially, therefore in this text, only practices and behaviors unique to an isolated population considered part of a folk culture. Folk practices tend to be non-commercial, passed down through word of mouth, etc., but they must be local. After a folk practice is exported to the wider world, then there's a very strong tendency for it to become popularized and commercialized. Once that happens, those practices can no longer be accurately characterized as an element of "folk culture". Instead, those practices should be recognized as elements of **popular culture**. The distinction between folk and popular culture practices can often be difficult to define, but geographers look to the spatial patterns and process when in doubt.

Folk culture represents a long-standing fascination among geographers. Part of the attraction is a certain sentimentality or nostalgia for historical landscapes. Geographers have written hundreds of books about mundane things like folk houses, old barns, or banjo playing styles. Some might find these studies worthless or quaint, but that criticism is largely unwarranted. Not all research need be applied to modern problems. If it were, entire fields of study might not exist on campuses across the globe.



Figure 2-1: Cottondale, AL. This scraped earth cemetery in Alabama reminds us of the durability of folk practices. It is likely these burial traditions origi
Africa, brought by slaves to America where it has been maintained in some regions by Blacks and adopted by Whites.

An understanding of folk practices from earlier days and far off places helps us understand the evolution of contemporary or popular cultural practices and beliefs that find expression in our daily lives. Many of our ideas and daily routine has evolved from the folkways of our ancestors, or the ancestors of others. Investigations into folkways and folk landscapes, also help us better understand the evolution of complex interactions between people and their physical environment. Today, advanced technologies often mask our interactions with the natural environment, isolating people both from the lessons of the past and the messages sent by "Mother Nature". Understanding how people adapted to the constraints and challenges presented by local climate, soils, and topography proves both illuminating and practical as we face significant environmental challenges in our time.

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# 2.2: Folk Regions

Contemporary American society was built from the ideas and practices of at least four majorfolk cultures, and a handful of smaller folk cultures. Though many of the behaviors that once characterized the thoughts and actions of people within these regions are largely extinct, the long-term effects of those folk cultures are still very prominent in the lives of Americans today. Hearth areas and isolated locations within the old folk regions retain more folk traits than urban zones and areas peripheral to the old folk regions. These extinct folk practices are nevertheless evident in contemporary religious practice, political beliefs, musical tastes, and foodways. The following sections delve into some of these practices to help you see the connections between our folk past and our modern lives.

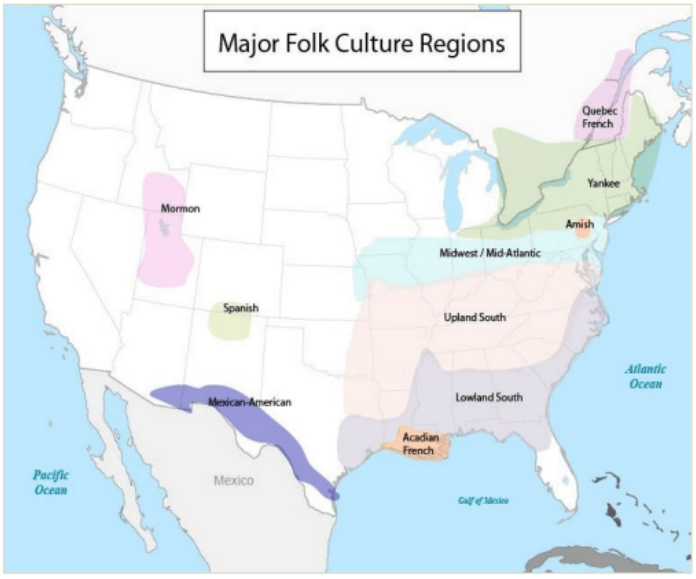



Figure 2-2: US Map - Significant Folk Regions of the United States

Folk regions are defined by the ideas and behaviors of their core or hearth areas. Folk regions are defined by traits (such as foodways) and as such examples of **formal regions**. The core area is often the **cultural hearth**, where cultural practices were invented and remain most undiluted. At the periphery, or near the borders of folk regions, cultural practices are often diluted or modified through a process known as **cultural hybridization** where folk practices of one region mix with cultural practices from an adjacent region.

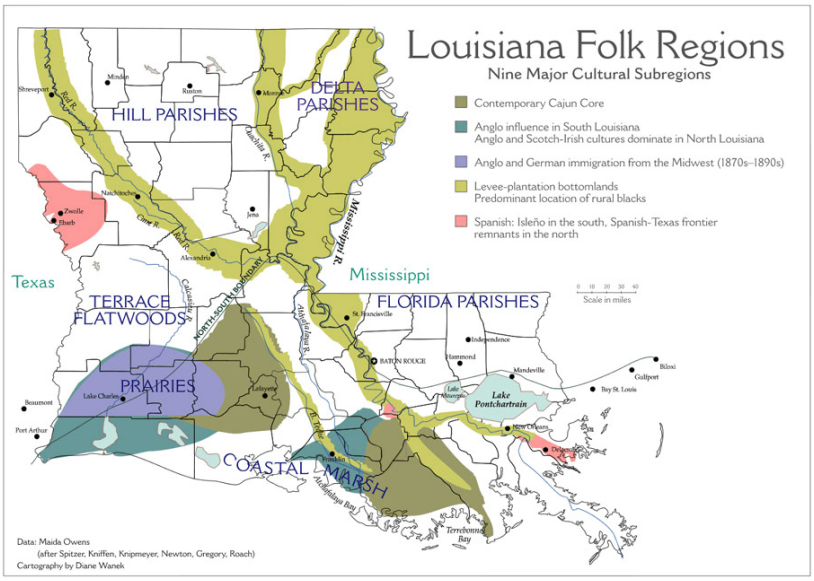



Figure 2-3: Map - Folk Regions of Louisiana. Source: Louisiana Folklife Program

Within each of the major folk cultural regions, there may be dozens of sub-regions. Consider the map of Louisiana's folklife regions (figure 2.3). Even within a small state like Louisiana, a rich tapestry of folk practices evolved, thanks in large part to successive waves of immigration and several significant barriers to travel, including the Atchafalaya Swamp.

The map of Louisiana's folk regions demonstrates the complexity of cultural practices. Too often, people tend to assume individuals are beholden to cultural ideas and behaviors of some larger group. You probably know making assumptions of that nature leads to stereotyping. In geography, mistakenly assuming that regions are uniform, or homogeneous, may lead you to commit the **ecological fallacy**, the erroneous assumption that there are no variations within a formal region. For example, a map of the US showing religion would show California as a Catholic region, but you would be very wrong to assume that all Californians are Catholic. In other words, to avoid the ecological fallacy, do not assume that sub-regions are exactly like parent regions, much the same way you should not assume that all individuals within a group (e.g. Koreans) conform to group tendencies. There are many dozens of artifacts we could study to learn more about the historical and environmental roots of our modern culture. This text focuses on folk housing, folk music, and sports. The chapter on Food and Agriculture provides some additional insights into the folk cultural roots of our foodways.




Figure 2-4: Chillicothe, OH. This house was built using hand-hewn heavy timbers with brick infill. This method of construction is replaced by the mid-1800s in the US by new, popular techniques.

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# 2.3: Folk Housing

The houses Americans built before the introduction of mass-produced housing in the mid-19th century is an excellent way for students to begin learning about folk culture. Folk houses are those houses designed and built by people with no formal architectural training. The design of these houses is the product of generations of trial and error that usually resulted in structures well suited to local conditions and local resources. Consequently, houses built with factory-made 2x4 studs using balloon framing techniques are not likely to be of folk design and construction.

Folk houses also provide an ideal subject to practice using both observational skills and spatial thinking. Small details in the design of folk houses require a sharp eye and design features invite us to think carefully about cause-and-effect relationships between climate, economics, ethnicity, and even religion in the production of something as ordinary – but vitally important – as old houses. Folk housing elements from the four major regions are explored in the sections below.

## Yankee

The northernmost US folk culture has its hearth in Boston, and it diffused outward across New England, and westward into the Great Lakes region. People who live in these areas were long called Yankees by Americans. The term Yankee is now sometimes used to reference any American, particularly by persons not from the US. However, to cultural geographers, the term is applied only to people from the northeastern reaches of the United States. Yankee cultural traces are easily found in New England, but it's also the dominant relic subculture of many communities in the northern reaches of Pennsylvania, Ohio, Indiana, and Illinois. Some areas of southern Michigan also fall within the Yankee subcultural region.



Figure 2-5: Manchester by the Sea, MA. New England Large House. Note the large central chimney and room addition at the rear.

The Yankee region fades quickly as you move west toward Chicago. There are several reasons why you don't find much evidence of Yankee folk culture west of Chicago. First, because subcultures diffuse outward from their hearth, they suffer from the effects of distance decay, much like any other phenomena. Places distant from the Yankee cultural hearth in Boston were less likely to adopt Yankee practices in the first place. Secondly, many settlers that moved to the Upper Midwest (Minnesota, Dakotas, etc.) were less likely to share the British ancestry common among early settlers to New Englanders. Instead, Minnesotans and Dakotans were more often the descendants of German, Russian, Ukrainian and Scandinavian immigrants. Finally, by the time the European settlers began moving into the Upper Midwest in the early 19th century, many folk practices, including how people constructed houses, were beginning to be abandoned in favor of popular culture practices. So, not only will you not find a large supply of Yankee folk housing in the Upper Midwest, you won't find much folk housing at all, because people rarely built houses themselves. Instead by the mid-1800s houses were more like to be designed and built by professionals who used non-local materials and were inspired by fashionable trends from Europe – all popular culture practices.




Figure 2-6: Keene, NH Temple Front House with attached barns. This house features a series of attached barns. Consider the dangers and benefits o design strategy. Note the sap buckets hanging from the tree in the foreground.

The earliest inhabitants of New England, like the Pilgrims that landed at Plymouth Rock, were not Yankees. They were English, and for several generations, built houses using folk traditions brought from England. Because the weather in New England was far colder than it was in Europe, these colonists were forced to adapt to local conditions. Building supplies, economic conditions, and the political environment were all different, so new design features crept into home construction. Eventually, they built houses using local materials that were well suited to their new environment.

As the English settlers learned to cope with the harsh winters of the region, many of which were especially brutal during the colonial era, also known as the **Little Ice Age**, architectural designs evolved. New England Yankees built houses with steeply pitched roofs, massive central chimneys, and extra-large rooms. These features helped them stay comfortable during long, cold winters. The designs also permitted families living in these houses to continue to function as an economic unit during long winters. Families living in these spacious houses were often farmers, and the large houses permitted them space to complete indoors a variety of chores necessary to their survival, like preparing food, sewing, craftworks, etc. – even during a blizzard.



Figure 2-7: Keene, NH- Saltbox House. Note the asymmetry of the gable end roofline and large central chimney.

Yankee folk house types are mostly variations on a single floor plan featuring four or five rooms arranged around a large central chimney. The smallest version is called a **Cape Cod House**. Not surprisingly, it is very common in and around Cape Cod, Massachusetts. New England Large houses are also very common in the region. They are in many ways a two-story version of the

Cape Cod House, which are a story-and-half.




Figure 2-8: Buzzards Bay, MA - Cape Cod House This model updated with roof dormers and a "mud room" to meet the demands of contemporary far adequately.

In the early 19th century, many built New England Large houses with the gable end facing the street, which gave it a more stylish appearance. Those versions are called **Temple Front House** and if an additional room was added to one side, the house was called an **Upright and Wing**. The later versions are more frequently found further west as popular style elements crept into the more purely functional design of New England folk houses of the 1700s. Yankees also built a model called a **Salt Box House**. Its odd name comes from the unusual, asymmetrical roofline that defines the gable ends of the house that mimic the side profile of boxes used to store salt in kitchens during the Colonial Era.

## Mid-Atlantic and Midwest

Immigrants that settled Middle Atlantic states, like Delaware, Pennsylvania, Virginia, and Maryland were more likely to come from continental Europe (Germany, Scandinavia, Holland, etc.) than those early immigrants into New England and the Deep South. People of African ancestry also contributed to the development of Mid-Atlantic folk culture. Perhaps because this region had a greater diversity of cultural inputs than elsewhere, the Mid-Atlantic folk culture, and the Midwestern folk culture that evolved from it foreshadowed many elements (e.g., language, politics, religion) of what has become known as the “mainstream” of contemporary American culture.

Folk housing of the middle US evolved in the Middle Atlantic States. It diffused from the Mid-Atlantic westward into central Ohio, Indiana, Illinois, and Iowa. Some also diffused southward toward the Carolinas as well. Good examples of Mid-Atlantic housing are easy to find in the Piedmont region as far south as Charlotte, North Carolina. Pioneers attempting to migrate westward from coastal Atlantic regions often found their route blocked by the Appalachian Mountains, and so turned south, settling in the Great Shenandoah Valley and into even Western North Carolina, where the settlers also adopted or invented elements of Upland South folk culture. The Appalachian Mountains became a somewhat permeable **barrier to diffusion** and these houses offer excellent evidence of historic migration patterns.



Figure 2-9: Chillicothe, OH, Hall and Parlor House. This house would have originally been two rooms wide. The extension at the rear would be a later ac

Folk housing of the Mid-Atlantic and Midwest tends to be simple in design, and only two related house types are widespread. There were a few additional (log) types once, but they are largely extinct today. By far, the most common remaining folk house types from this region are the single-story **Hall and Parlor** house and its two-story cousin known as the **I-house**. Archeologists suggest that the hall and parlor, a two-room house might be the archetype of all European-based folk housing because evidence of this house design, both in terms of size and layout, is evident in archeological digs all over Europe. American examples of the Hall and Parlor house and I-houses are two rooms wide with gable end chimneys.

I-houses, are probably the most common folk house on the landscape of the Midwest and Piedmontregions. Reputedly, this house type was given its odd name by geographer Fred Kniffen after he noticed how common this house type wasin states that began with the letter I: Iowa, Indiana, and Illinois. You can find I-houses in urban settings, but during the 18$^{th}$ and 19$^{th}$ centuries, the I-house was essentially synonymous with “farmhouse” in the Midwest. This building can be read as evidence of membership in a vast agricultural middle class. Its unusual dominance on the landscape of the Midwest is a strong indicator of how many thousands of families owned prosperous farms during the 19$^{th}$ and early 20$^{th}$ centuries. The I-house can be read as an important landscape symbol that communicates volumes about the culture, economics, and politics of the region where it is so very common. The next chapter discusses how principles of Jeffersonian democracy influenced the distribution of quality farming lands among homesteading pioneers, and how those principles helped an agricultural middle-class to thrive.



Figure 2-10: Williamsport, OH, I House. This brick I house includes a porch but has no windows on its gable ends.

# Upland South

In Southern Appalachia and parts of the American South, most European settlers came from England, Ireland, and Scotland. This region is known as the **Upland South**. Poor farming conditions in this region discouraged plantation agriculture and slavery. So, unlike the Lowland South, the Upland South's folk culture has fewer African elements.

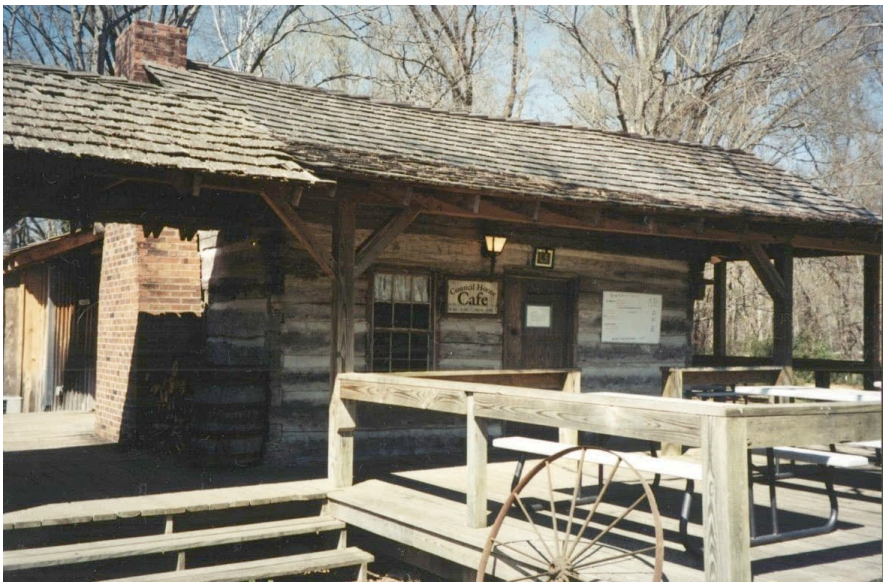



Figure 2-11: French Camp, MS - Cabin and Porch. This one room (pen) house is the foundation upon which more complex models in the Upland South are derived.

This is the "white" South, though it has never been devoid of black people. One might also call it the Hillbilly South, though some might find the term "Hillbilly" offensive in certain contexts. The Upland South is similar to, but distinct from, the Lowland or Deep South in a variety of ways. Because soils were frequently poor for crop agriculture and the region was somewhat isolated from principal trade routes, people of the Upland South have tended to be among the poorest Americans for generations. As a result, their folk dwellings were also modest and largely built of locally abundant hardwood timber.

The most basic Upland South house type is known as a **cabin and porch**. Essentially, it is a one-room house, cabin if it has a dirt floor, featuring an attached porch and a single chimney. Ideally, settlers on the Appalachian frontier constructed a one-room house upon setting up a homestead. If conditions proved good enough to remain in the location, additional rooms, called "pens" in the local dialect, would be added.



Figure 2-13: Mt. Pleasant, TN, Dogtrot House. This dogtrot was without porch and but was well restored and situated at a touristy plantation home.



Figure 2-13: Dubach, LA, Dogtrot House. This house was built o pine logs, raised on stone piers and featured a second half-sto

If the homeowner built a second pen (room), a second chimney for the new pen and connected the two pens with a single roof that created a central breezeway between the two rooms, then the building was called a **Dogtrot House**. The colorful name for this type of house seems to have come from the fact that a hound could walk, or "trot", between the two main rooms of the house. The warm southern climate makes the central breezeway of the Dogtrot House an ideal "room" where family members could do chores or simply relax.

Alternatively, a single-pen cabin could be expanded by attaching the second pen directly to the first pen and sharing a single, central chimney. This allowed the homeowner to build one fewer wall, and use a single fireplace to heat both pens. This type of house, called a **Saddlebag House**, references the appearance of a packhorse laden with cargo bags.



Figure 2-14: Blackwell, VA: Saddlebag House. This house utilized a single, central chimney to serve both "pens". A lengthy veranda porch would have ser family as important living space. (Wikipedia)

Interestingly, most saddlebag houses do not have an internal doorway allowing people to pass directly between the two pens.

Instead, inhabitants must go outside through the front doorway of one pen to enter the adjacent pen. Luckily, the weather is generally mild in the Upland South. Still, most Saddlebag Houses had a wide porch, called a veranda, to provide shade on sunny days and shelter on rainy days.



Figure 2-15: Melrose, LA. - Saddlebag Houses. These were once slave quarters and are located just within the French region of Louisiana, suggestir diffusion of style from the Upland South into the Lowland/Creole region.

## Lowland South

The area of the American South where slavery was more prevalent is known to geographers as the **Lowland South**. More colloquially, this area is known as the Deep South. The earliest Europeans to settle the region were English, but the Spanish and the French also settled parts of Florida and Louisiana. Far outnumbering Europeans though were people of African descent, brought as slaves to work in agricultural industries. In some parts of the region, over 90 percent of the population was of African descent. Many African cultural practices survived the ordeal of slavery and continue to have an outsized effect on the culture of the Deep South. Today, the legacy of these folkways remains strong, deeply influencing the religion, politics, language and the economy, especially in places most isolated from outside influences.



Figure 2-16: Central MS - Bald Cypress. The wood of these trees is prized in the Deep South for its rot and insect resistance. It is however quite suscep fire – which would make it less desirable where? Source: Wikimedia

The economic structures of the Deep South, deeply intertwined with the legacy of slavery and Jim Crow Laws, are reflected in the folk housing of the region. Unlike in the Midwest, where the most common folk house (the I house) was a substantial two-story home, or in New England where large comfortable houses were common, the Deep South featured only two types of housing - those custom-built for the wealthy and folk houses built by poor people. Houses built for the wealthy are rarely considered “folk housing” because they were generally designed by architects, often used non-local materials and do not regularly reflect local environmental concerns. Architect designed homes also reflect changing styles and fashions. The architectural “plans” of folk

structures, on the other hand, were maintained only in the collective memory of ordinary people from the region and they evolved over generations to deal with local environmental conditions and local resource availability. Considerations for “style” are often minimal in folk structures, and where style elements are found, they reflect local or regional taste preference, rather than national or international taste preferences.

Folk housing in the Deep South, like New England, evolved to suit a challenging climate. Building techniques, before the age of electricity and air conditioning, attempted to minimize the effects of the oppressive heat and humidity of the Deep South. In the $18^{th}$ and $19^{th}$ centuries, folk builders also combatted termites, wood rot and flooding, by building many houses using **pier and beam** construction, a technique that raises the floor several feet above the ground on platforms of stone or brick. This strategy keeps flooring and framing from touching the soil, where the timber framing would quickly be destroyed by termites and wood rot. Pier and beam construction also allows cooling breezes to pass under the house – as well giving a place for dogs to nap during the day.



Figure 2-17: Key West, FL -Shotgun House. This house is raised on piers to minimize termite and wood rot damage persistent in humid locations

The harsh climate also affected the choice of building materials. Where it was available, wood from Cypress trees was prized for building houses, and especially for roofing and siding material. Cypress trees grow in some abundance in swampy locations in the Deep South and so its wood is naturally resistant to rot and insects. Most houses though were built with far less durable Pine because it was widely available and very inexpensive, which helps explains why many examples of folk architecture in the South have disappeared from the landscape.



Figure 2-18: New Orleans, LA - Camelback Shotgun. This house features a second story at the rear of the house which maximizes interior space wh minimizing taxes collected according to square footage facing the street.

Surely, the most common folk house of the Lowland South is the **Shotgun House**. The design was probably introduced to the US by African-Haitians via South Louisiana and Florida. Experts disagree about the origins of the colorful name, and no argument satisfies completely. One theory stems from the fact that if you open the front door, back door and the interior doors of a shotgun house, you can see all the way through the house. Theoretically, you could fire a shotgun through the front door and pellets would fly out the backdoor. Another theory suggests that English speakers may have misinterpreted the African-Haitian word for house, “togun”, as “shotgun”, and the mistaken interpretation stuck in the lingo of the region.

The design of the shotgun house is simple. Most often, they are one room wide, a single story tall, and three to five rooms long. This rectangular, Afro-Caribbean design was perfectly **culturally pre-adapted** the European long lot cadastral system commonly used to divide property in French Louisiana. (see Chapter 3 for more) Shotgun houses proved so versatile and utilitarian, they diffused outward to many other parts of the United States, where they can be found in many neighborhoods where large numbers of African-American migrated, or where “company housing” was built by industrial concerns to attract and retain workers. As they diffused outward, shotgun houses entered the realm of popular culture.

There are multiple variants of the shotgun house. Some families modified their Shotgun house by building a second, parallel shotgun house that shared a common center wall, roof, and porch to produce a double shotgun. Other families modified their shotgun house by adding a second story to the rear portion of the house, creating what is known as a camelback shotgun. Interestingly, these second-story rooms were only added to the rear portions of the houses in an attempt to avoid incurring additional property taxes in places where they were calculated by estimating the square footage of the house facing the street.



Figure 2-19: Monroe, LA - Shotgun Houses. These houses built closely together suggest that they were "company houses" for the railroad that once em many people in this neighborhood.

## Ethnic Folk Landscapes

There are a handful of locations in North America where folk landscapes reflect cultural practices of specific (non-Anglo) ethnic groups, rather than broader regional trends. These locations are often smallish ethnic enclaves, and each offers interesting clues into the cultural values and norms of the ethnicity that constructed them, as well as differences in the adaptive strategies used by the ethnic group versus the wider host culture. A discussion of these houses could easily be presented in the chapter on Ethnic groups, but for the sake of consistency, they are discussed below.

### Franco-American Landscapes

A variety of landscape clues tell of the significant legacy of French speakers in North America. In addition to their habit of naming all of their settlements after a saint, and allotting farmland to settlers in narrow strips called long lots, the French built houses, barns and other structures unique in appearance and construction technique.



Figure 2-20: Vincennes, IN - This Creole folk house is in Indiana, one of the outposts of French settlement in the US. It has a flared roof, double ensc porches and a raised foundation.

The French attempted to colonize many parts of North America, establishing settlements in the interior of the United States well before the British. Cities like St. Louis, Detroit, and Des Moines have French histories, but the heart of French settlement in the early colonial period was in Canada, especially in the St. Lawrence River Valley, Nova Scotia and along the shores of Lake Ontario. The British also claimed these territories, and the two colonial powers fought several wars for control of these regions. The easternmost parts of Canada, known as the Maritimes, fell under British control in 1710. French settlers in Canada, known as Acadians were allowed to remain, but most refused to sign an oath of loyalty to the British crown. Frustrated with the Acadian's persistent loyalty to France, the British expelled thousands of French speakers from the Maritime Provinces in 1755. Known today as the Great Expulsion, Acadians were deported from Canada. Many moved to regions now within the United States, where they were often unwelcome. Some Acadians expelled during a subsequent wave of deportations migrated to Louisiana, another former French colonial possession that was controlled by Spain. The descendants of the Acadians are generally called Cajuns. Another group of French speakers migrated to Louisiana after a slave revolt in the French colony of Saint-Domingue (now Haiti) in the late 1790s. Many of the French-speaking descendants of these immigrants are call themselves Creoles.

Because many Cajuns and Creoles were isolated from outside cultural influences by the vast swamps of southern Louisiana, ensuring that many of their ancient folk practices survive today. South Louisiana can claim many folk-inspired practices found nowhere else in the world. Among the traditional practices that are unique are Cajun and Creole cooking, Cajun and Zydeco music, the Cajun French language and a variety of construction techniques and housing types. These distinguishing features mark South Louisiana as culturally distinct from the rest of the Lowland South.




Figure 2-21: Cutoff, LA - Creole Cottages, such as this one line the "River Road" that runs alongside the Mississippi River south of Baton Rouge. Note t and beam construction, and ensconced porch.

The scattering of French people across North America invited the invention of several folk house types. The Québécois, those that stayed and today dominate Quebec, developed unique folk adaptations to combat the harsh winters of Canada using local materials. The French who migrated to Louisiana built houses with similar features, yet altered them significantly to meet the needs of the very hot and humid South. This adaptation is an example of stimulus diffusion.




Figure 2-22: Natchez, LA - Restoration of this creole cottage revealed vertical timbers filled with bousillage.

The most common of the Franco-American house types is the **Creole Cottage**, also sometimes called the Grenier House. The most distinctive feature of the Creole Cottage is the built-in or ensconced porch. Unlike porch construction prevalent elsewhere in the South where porches are simply attached to the front of houses, ensconced porches are integral to the house (see images above). Many Creole Cottages are two rooms wide, with two front doors, but without an interior doorway connecting the two rooms. They are built using pier-and-beam construction, much like their southern neighbors. Early models sometimes used a **post-in-ground** or poteaux en terre construction technique in which builders pounded vertical timbers supporting the walls into the ground. This technique differs greatly from most log houses which are built with horizontally stacked timbers. Many French folk houses also feature walls filled with a mixture of dried mud and Spanish Moss called **bousillage**, that is similar to the earthen material used to fill wall cavities elsewhere known as wattle and daub.




Figure 2-23:Thibodaux, LA - This Creole church features many of the same design elements as French folk housing, including the galley porch and the hipped roof.

There are several variations on the Creole Cottage common in Francophone America, especially where immigrants brought construction ideas from the Caribbean. Several things to look for are the common use of dormers, little windowed roof structures that allow light and air into the sleeping quarters in the “attic”. The French were also quite creative with roof construction. In addition to the common flared bell-cast roof, you can find a variety of hipped-roof construction techniques. The French were also fond of large gallery or veranda porches that sometimes wrapped around the entire house. Large floor-to-ceiling doors and windows were also common features of French-built homes, and these, like the other design features in the Deep South, were an

adaptation to help residents cope with the heat and humidity of the region. Large, multi-windowed doors, especially when placed built side by side are frequently called “French Doors”, another example of a folk artifact that remains with us today.

## Germanic-American Folk Landscapes

So many Germans came to the United States that today they constitute America’s largest single ethnic group. Germanic people came so early, and in such great numbers to America, their impact on the landscape is at once profound and sometimes hidden because so many German folk practices are today considered “American”, especially in the Midwest.



Figure 2-24: Yellowstone National Park, WY - This photo features "square notching" corner of a log house, with white chinking. A variety of chinking notching styles were used across the country.

Germans and Scandinavians introduced several house types in the early colonial period, but the most common was the quintessential home of the American frontier, the log cabin, and its more permanent cousin called a log house. These simple structures were often built almost exclusively of wood because timber was widely available and metal nails were scarce during the colonial era. Log houses were built by stacking partially hewn logs horizontally upon one another. Corners were held tight by a variety of interlocking notching techniques. Cracks between logs were filled with a mixture of mud and plant material called chinking. Log buildings were so well adapted to the frontier resources and local climate conditions that other ethnicities adopted log cabin designs during in the 18th and 19th centuries. By the mid-1800s, log cabins had become an important national symbol. For several generations, American politicians would claim they were “born in a log cabin”. Andrew Jackson, Abraham Lincoln and U.S. Grant were among those who proudly announced their log cabin roots. Think about why log cabins became a powerful symbol embraced by Americans.




Figure 2-25: Gettysburg, PA - A classic Pennsylvania forebay barn nestled against a small slope allows farmers to access at least two floors.

German farmsteads were also unique. The most well-known Germanic farm buildings are the massive Pennsylvania Forebay barns. Their size allowed farmers to complete many activities (animal husbandry, dairying, crop storage, food processing) in a single building. However, the size of these barns also made them immovable, unlike small the barns built by Scots-Irish farmers who were known to dismantle their barns to transport them to new locations when soils were exhausted. The permanence of German barns seems to indicate a far greater commitment to the long-term husbandry of farm soils than evident in other ethnic groups.

Pennsylvania forebay barns were frequently built into an embankment, allowing farmers to access both the animal pens on the ground floor and the threshing floor above. A hayloft generally occupied the top floor. The “forebay” is an extension (overhang) of the second floor over the ground floor, providing shade, and perhaps some protection from the elements for the livestock stabled on the ground floor. Pennsylvania easily has the greatest collection of barns in the US. Pennsylvania’s state government established a commission to inventory and protect folk landscapes, partly because they have become valuable tourist attractions.




Figure 2-26: Saint Augustine, FL - Several of the Spanish era buildings were constructed of coquina a locally available sedimentary rock, making this practice. It turned out to be an ideal material for withstanding naval bombardment.

## Spanish Landscapes

It’s sometimes easy to forget that the Spanish were the first Europeans to settle in the United States. Because Spain didn’t have

the same dire population pressures as the Irish, British and Germanic peoples, they, like the French, migrated in smaller numbers than their European rivals to the US. Spanish influences are most obvious in the American Southwest, but they are also evident in a few places in Florida and Louisiana.

Founded in 1565 by Spanish colonists, Saint Augustine, Florida is the oldest town in the United States, predating the English colony in Jamestown by around 40 years. If you visit St. Augustine today, you will have no trouble seeing the impact of Spanish people on the landscape there. The massive Presidio (fort) is of a classic Spanish design. Several dozen well-preserved colonial homes also feature Spanish design elements as well, but since they are constructed from local materials, especially those made from the peculiar coquina stone, these homes qualify as Spanish-American folk dwellings, rather than Spanish houses.



Figure 2-27: New Orleans, LA. – The beautiful wrought-iron gallery porches on this building in the French Quarter were popularized during the period Spain ruled Louisiana. Note the effective shade the porches provide to the building's walls.

The Spanish also occupied Louisiana for several decades following the defeat of France in the Seven Years' War. During that time, the Spanish greatly influenced the landscape.

Ironically, the graceful wrought-iron balconies that characterize numerous buildings in New Orleans' Vieux Carré (old quarter), known by tourists the French Quarter, are actually Spanish. This part of town burned and was rebuilt during the period of Spanish occupation of New Orleans. It was the oldest part of town, which why it's called the Vieux Carré, but when it was rebuilt, the buildings were constructed according to Spanish tastes – not the older French styles.




Figure 2-28: Natchez, LA –Above-ground burials are common in French settled areas, and mistakenly thought to be a product of high-water tables. The to be Spanish in origin, and have little to do with flooding.

The Spanish also probably introduced to the US the peculiar tradition of interring the dead in above-ground vaults. Because New Orleans is famous for these kinds of cemeteries, above-ground burial is often mistakenly associated with the French. However, historical and geographical evidence strongly suggests that the Spanish brought this burial technique to the New World.

Lots of people also assume that above-ground burials are a folk adaptation introduced to counter the threat of flooding in New Orleans, where shallow water tables and frequent rains are common. Clearly, this folk burial practice is well-adapted to swampy southern Louisiana, but historic geographers point out that that above-ground cemeteries also can be found in older Spanish settlements in desert locations, and on high ground where flooding is rare. The common element suggesting that above-ground burials are an ethnic practice rather than simply a folk practice is that they are found in many locations in the United States where the Spanish settled, but are rare elsewhere.




Figure 2-29: Los Angeles, CA - The Avila Adobe is reputed to be the oldest house in Los Angeles. It is remarkably cool inside, even on very hot days. It is a museum now on Olvera Street, a tourist district near downtown.

Spanish influences on the landscape are perhaps most profound in California. Folk houses in the American Southwest were mostly constructed of **adobe**, but the Spanish can only take partial credit for the popularity of Adobe houses. Clearly, buildings made of sun-dried mud bricks were popular in Spain, many indigenous people of the American Southwest and Mesoamerica also built homes in the adobe style before the arrival of the Spanish.




Figure 2-30: Fort Stockton, TX - This house built in the mid-19th century has fallen on hard times. Adobe bricks deteriorate when exposed to rair

Adobe construction is ideal for people who live in desert and semi-desert, Mediterranean climates of both the American Southwest and Spain. The walls of adobe houses are generally several feet thick and windows are small. These design features insulate the interior from hot winds and the burning sun during the day. The adobe simultaneously stores the sun's energy and radiates it into the house during the evening when it gets colder outside.

Traditional adobe houses usually have nearly flat roofs built by laying timber beams across the top of the walls. Generations ago, flat roofs were ideally suited to those living in dry climates because they helped homeowners catch rainwater or morning dew. Steeply pitched roofs also capture heat unnecessarily while wasting scarce lumber resources. Adobe houses would not be feasible in the rainier or snowy parts of the world. Mud walls need to be painted, or whitewashed regularly to prevent them from melting away during rainstorms. Flat roofs are vulnerable to collapse under heavy snowfall. Although infrequent rains are not a serious threat to well-maintained adobesin California, earthquakes destroyed most California's once numerous adobe houses.




Figure 2-31: San Gabriel, CA - Missions like this serve as the inspiration for thousands of buildings in Southern California and beyond. There is a nos romance associated with Mission Revival architecture. What does it signify to you?

Perhaps the biggest contribution made by the Spanish to the landscape of the US is not a folk architecture type, but rather an architectural style called **Mission Revival**. This style gets its name from the fact that it was used in the construction of the 23 Franciscan Missions built in California between 1769 and 1823. Though they were largely derelict by the time California became

part of the United States, thousands of architects resurrected the look of the old missions and the Spanish Colonial haciendas to create a pop-culture style. Mission Revival style has been applied to everything from the simplest of homes, to fast-food restaurants, to major urban landmarks. Mission Revival is popular in part because it is evocative of California's colonial history, but like many nostalgic symbols, it requires the erasure of the less pleasant realities of history – in this case the devastation wrought upon California's indigenous people. Most people don't really think about the genocidal horrors of Spanish colonization when they see Mission Revival buildings. In the popular imagination of most Americans, Mission Revival evokes notions of the leisurely lifestyles enjoyed by wealthy people living in upscale Coastal California cities, like Santa Barbara, Laguna Niguel or Carmel, where Mission Revival architecture dominates the landscape.

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# 2.4: Folk Music to Popular Music

Music is another significant part of our lives heavily influenced by the folkways of our ancestors. Folk music is homemade music, produced by unschooled musicians for local audiences (See also the discussion of hip hop in Chapter 1). The instrumentation, lyrical content and performance techniques are, like other folk practices, conditioned by local conditions. The ethnicity of the musicians and their audiences also play a significant role in the evolution of musical form. There are thousands of folk music genres scattered across the globe, but this text will explore only briefly a few American folk music styles, focusing on the geographic factors that have shaped the sonic landscape of the United States.

Perhaps the oldest known American folk music, brought from Scotland and performed mostly in churches was a vocal form called **lining out** or "line singing". Introduced to New England during colonial times, this style diffused to other parts of the US. Lining out, and its African-American cousin, **call and response**, evolved during a time when few people could read a hymnal, so instead relied upon a church leader to sing each stanza first, whereupon the congregation would sing it back, repeating both lyrics and melody. White churches and black churches both adopted this style of singing in the Deep South. This style died out in New England when literacy became widespread. In isolated rural locations, where illiteracy lingered and liturgy has changed little, lining out can it can be heard in a few churches.

Work songs and spiritual tunes crafted by slaves and free blacks in the South also have a long folk history in the United States. The musical styles that developed among blacks in the South was a product of inherited musical traditions, locally available instruments and the living conditions forced upon them. African influences upon American music are many, but an emphasis on percussion and syncopated rhythms, along with bent or blue notes. From the earliest folk-art forms, evolved better known musical genres, like jazz, blues, and gospel.

In almost all folk music traditions, lightweight, homemade instruments or a capella singing is the norm. Pianos and other large and/or expensive instruments are rarely by folk musicians, except by those who happened to live in a port city. Indeed, most of the great piano-based musical traditions in the US are along the Mississippi River (New Orleans, St. Louis, etc.), where pianos could be transported more easily. In mountainous regions or out on the plains, easy-to-carry instruments are used. Therefore, harmonicas, violins, guitars, and banjos were common. Other "instruments" like jugs, washboards, spoons, etc. were used along with handclaps, whistles, and other vocalizations. It was also not uncommon for musicians to build their own instruments from locally available materials. Gourd banjos and cigar box guitars are excellent examples. Musical instruments, and the style in which they were played before the introduction of amplifiers, also shaped the nature of folk music. For instance, musicians who played for audiences at barn dances found that some instruments were far louder than others, so the music evolved to fit the venue.

Drums were too big to carry, so banjos (they have a resonator to make them louder), fiddles (violins) and guitars became popular. The dulcimer, a common Appalachian instrument, but it couldn't be heard at a barn dance, so it was never widely used by dance-oriented bluegrass groups. The mandolin is similarly quiet, so bluegrass players often play it rhythmically and percussively, to increase the volume. Consider how these adaptive strategies echo the development of early hip hop in the Bronx, New York.

American music has nearly always been a product the hybridization of European and African musical traditions, with occasional Latin American inputs as well. Perhaps the earliest example of European-African musical hybridization was produced in the 19$^{th}$ century by Stephen Foster of Pittsburgh. As a youth, Foster would hang out along at the boat docks in Pittsburgh near where he lived. He became enamored with the music of the Lowland South, as performed by African American boatmen who had come north on steamboats from New Orleans and Memphis. Foster blended those sounds with what he learned taking music lessons from his classically trained, German music teacher to produce something uniquely American and wildly popular during his day. Foster's music began as a type of "folk music" because it was a product of his local conditions, but it is fair to label Stephen Foster "America's Original Pop Star" because his music grew internationally famous. Oh Sussana, Nellie Bly, Camptown Races, Old Folks at Home, Massa's in the Cold Cold Ground, My Old Kentucky Home, Beautiful Dreamer count among his major hits. You know almost all these melodies, even if you don't really know the songs because their popularity has lingered into the 21$^{st}$ Century. Tragically, Foster died penniless and alone at age 37. The formula used by Foster to blend African and European musical ideas and traditions established a precedent that has been repeated many times since by the creators of the blues, jazz, country, western, bluegrass, swing, R&B, rock n' roll, and hip hop.

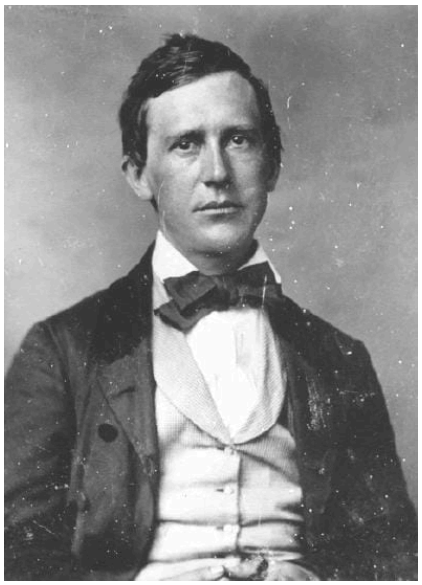


Figure 2-32: Stephen Foster, America's original pop star managed to expertly blend African and European musical traditionsinto many hits. His childhood home in Pittsburgh made this possible.

## Memphis – The Crossroads Home of Rock n' Roll

Probably, the most famous American musical invention isrock n' roll music, and like all other musical forms, its sound is rooted in the time and place of its invention. Rock n' roll was invented in Memphis, Tennessee, a crossroads location, where the youth living there in the 1950s could be influenced by various musical traditions popular both locally, and regionally. Kids growing up in Memphis in the post-war era could hear on the radio blues from the nearby Mississippi Delta, bluegrass from Kentucky, jump from St. Louis, and western swing from Texas. Of course, gospel singing was ubiquitous in the South. If you lived in the right neighborhood, you probably had friends whose parents listened to (or played) one or more of these musical styles. Like Stephen Foster, the kid from Pittsburgh who was influenced by multiple musical inspirations, kids from the Memphis region were also hearing lots of musical styles.

Elvis Presley is the most famous youths to come out of Memphis during this time. Presley was an expert at blending gospel, blues, bluegrass, country, western and R&B styles. Memphis' Sun Records company produced Presley's first record in 1954. It had only two songs. On the "A-Side" was "That's All Right", an R&B tune previously released by Arthur "Big Boy" Crudup in 1946. On the "B Side", was another song from 1946, "Blue Moon of Kentucky", a bluegrass song written by bluegrass inventor Bill Monroe. In hindsight, Presley's first record seems an incredible mashup of regional musical styles that may have been nearly impossible to create elsewhere in the US.

| | | | |
|---|---|---|---|
| Arthur "Big Boy" Crudup<br>"That's Alright"<br>1946 – Clarksdale, MS<br>ORIGINAL VERSION | Elvis Presley<br>"That's Alright"<br>1954 – Memphis, TN<br>COVER VERSION | Bill Monroe<br>"Blue Moon of Kentucky"<br>1946 – Rosine, KY<br>ORIGINAL VERSION | Elvis Presley<br>"Blue Moon of Kentucky"<br>1954 – Memphis, TN<br>COVER VERSION |

Take a minute to listen to the similarities and differences between the original versions and Elvis Presley's rendition of the same song. Note how Presley, perhaps because of his upbringing in Memphis at the intersection of the music from the lower Mississippi Delta (Crudup's blues) and Kentucky (Monroe's bluegrass), absorbed influences from both regions, hybridizing them into a single style that for a time was relatively unique to the Memphis region.

Presley was a musical genius in his own right, but clearly, geography played a role allowing that genius to develop. Special

circumstances in the Memphis region may have allowed for a greater measure of musical interaction between blacks and whites than elsewhere in the United States – fermenting musical innovation. Geographers point to numerous notable rock n' roll stars that emerged from the Memphis area in the same year as evidence that location played a significant role in the evolution of rock n' roll. Carl Perkins, Johnny Cash, and Jerry Lee Lewis, other famous early rockers, also got their start in the northern Delta and recorded for Sun Records.



Figure 2-33: Memphis, TN. The Million Dollar Quartet demonstrates the power of place in the formation of Memphis' most famous musical innovation.

As children, each of these performers had significant contact with African American musical mentors, without which, rock n' roll may not have emerged when and where it did. Carl Perkins, for example, grew up the son of a sharecropper on a cotton plantation, where his father built him a homemade cigar box guitar. After later acquiring a factory-built guitar, he took informal lessons from his neighbor, a black man named "Uncle" John Westbrook. At nights Perkins listened to the "Grand Ol' Opry" the nation's most famous country and western radio program, broadcast from Nashville, Tennessee where he learned how to play country music. As a result, Perkins' most famous song, "Blue Suede Shoes" so confused the record-buying public, that it topped the country, R&B and pop charts simultaneously. Blacks, whites and bubblegum pop teenagers all embraced the song. Reputedly, black audiences were surprised to learn that Perkins was indeed a white guy (see also the story of Charlie Pride, the first African American country music star).

The musical education of African American rockers from the Mid-South was often similar. Chuck Berry, the most famous and influential black rock star of the early era of rock n' roll was from St. Louis. Like Memphis, St. Louis is a river town in the middle of the United States blessed with opportunities for young musicians to absorb musical influences from multiple nearby folk and pop music traditions in neighboring regions. Berry simply reversed the standard pattern of influence (i.e., white boys listening to R&B). Berry borrowed from western swing to created his own brand of blues-based rock n' roll. "Maybellene", a huge rock n' roll hit for Berry in 1955 was an R&B adaptation of Bob Wills' 1938 Western Swing tune "Ida Red", itself an adaptation of a traditional mountain song of unknown origins, recorded in the 1920s.

| | | | |
|---|---|---|---|
|  |  |  |  |
| Carl Perkins<br>"Blue Suede Shoes"<br>1955 – Memphis, TN<br>ORIGINAL VERSION | Chuck Berry<br>"Maybellene"<br>1955 – St. Louis/ Chicago<br>COVER VERSION | Bob Wills<br>"Ida Red"<br>1938 – Dallas, TX<br>COVER VERSION | Fiddlin Powers Family<br>"Ida Red"<br>1924–Western Virginia<br>ORIGINAL VERSION |

Take a minute to listen to these various clips of music. Blue Suede Shoes topped the pop, R&B and Country Music charts simultaneously. Chuck Berry's Maybellene represents a similar hybridization of styles but represents a reversal of the direction of ethnic appropriation. Berry was an African-American who borrowed elements from white musicians.

## Seattle's Grunge Rock –Geography of Isolation

A more contemporary example of a folk-like, regional musical innovation evolving into an international pop-culture sensation was Seattle's so-called **grunge rock** that enjoyed exceptional popularity during the early 1990s.

Surf Rock was the first sub-genre of rock music to emerge from the Pacific Northwest. It rose and fell during the 1960s. According to music geographers who researched the evolution of the sound, bands competing to attract massive teenaged dance hall audiences realized that their singers couldn't be heard in the noisy dance halls, so lyrics and the even singers themselves became progressively less important to audiences. Listen to the songs of bands like Kingsmen (Louie Louie) and the Ventures (Walk Don't Run) and you'll see (hear) how the performance venue shaped the sound. The Surf Rock sound died out around 1970, and for a generation, very few rock bands or musical artists emerged from the Seattle region. Talent scouts for the big record companies never thought to look for "the next big thing" in Oregon or Washington.

By the mid-1980s, aspiring rock musicians from the Pacific Northwest usually moved to Los Angeles if they wanted to "make it big". Seattle was considered a backwater by record company talent scouts. As was the case in the early 1960s with the Surf Rock bands, Seattle-area hard rock bands working in the 1980s contented themselves with competing for local audiences and very little pay. By playing for local audience only they created a sound and look unique to the peculiar local taste preferences of the Pacific Northwest. They created a type of folk music. While local audiences might have liked it, the emergent grunge sound and look, was very different from that considered marketable by music executives in Los Angeles, and few predicted what would happen.

After several years of incubating the "grunge" style in isolation, a remarkable number of bands emerged in the region who played a brand of style hard rock that featured a distinct punk-rock aesthetic. Lyrically, grunge-type bands eschewed themes common to Los Angeles-based hard rock (e.g., girls/cars/partying). Instead, their lyrics took political stances, engaged topics like mental illness, child welfare or the dark side of drug dependency. Sonically, there wasn't a strict grunge formula, although many Seattle-area guitarists detuned (lowered by an octave) their guitars to get a heavier sound. Several bands featured baritone vocalists and many played more slowly than their counterparts in Los Angeles, where up-tempo songs were common. Seattle bands also looked different. They often wore beards and long hair with unremarkable clothing (e.g., flannel shirts, work boots, jeans). This stood in stark contrast to either both the spandex-and-makeup "hair metal" bands, and the pirate/biker-gang looks that dominated Hollywood-based bands in the early 1990s.

After the Seattle-based band Soundgarden proved the grunge sound and look was marketable to a national audience, a slew of other Seattle bands (Nirvana, Pearl Jam, Alice in Chains, etc.) signed major label record contracts. During the early 1990s, record company executives were clearly using location to evaluate the market potential of new bands from Seattle. Record company talent scouts operated on the logic, "...if one band from Seattle sold millions of records, there must be more bands there!" Soon, the isolation that had been critical to the development of the Seattle sound and look was replaced by intense attention from the international music industry. No longer playing just for local audiences and a few beers, Seattle based bands suddenly found themselves playing in front of record executives for the chance to make millions of dollars recording songs in Hollywood or New York and going on tours around the world. Recognizing the role of geography in the music industry, aspiring rock artists from all over the US suddenly moved to Seattle, hoping to land a recording contract. Bands that couldn't move to Seattle began aping the grunge sound and look in hopes of attracting attention from record company talent scouts. Local had become global. Folk music

had become popular music.

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# 2.5: The Geography of Sports

Sports are a big deal. In many parts of the world, participating and/or watching athletic events is a significant part of people's lives. Sports are a multi-billion-dollarindustry worldwide. In America, many NFL, NBA and Major League Baseball teams are worth more than a billion dollars. Several major soccer teams in Europe are as well. The reason why sporting teams are so valuable lies beyond their simple entertainment value. Association with a team helps build the identity of individuals and creates a sense of community. Supporting a team, for many people, functions as a kind of "tribal affiliation" in an anthropological sense. Teams help build a sense of community belonging, making sports of intense interest to geographers.

## Participation in Sports and Physical Geography

Where people play a specific sport is a fascinating entry point for students of geography. Answering "why?" by first asking "where?" is an effective means of understanding numerous, important cultural dynamics. An analysis of sports offers us important clues into how cultural behaviors, far more important than games, evolve within societies

Climate is a significant factor in the geographical variation in sports participation. Ice Hockey, for example, is clearly a more favored sport among those living in northern climates, although as indoor hockey facilities open in warmer parts of the world, there is sure to be an increase in participation outside of the Frost Belt. Frigid, but smallish, Norway has won more medals in the Winter Olympics than any other country but has won only about half the number of medals in the Summer Olympics (281 vs 148), despite having more than triple the opportunities to win medals in the summer games. Golf, baseball, and water sports are more popular where warm winters permit year-round play.



Figure 2-34: Los Angeles, CA - Water Polo is a more popular sport in the US where climates permit year-round play.

Participation in some sports is conditioned by topography. The Austrians and Swiss dominate Olympic downhill skiing partly because those countries are situated in the Alps. Olympians from flat countries wouldn't have much chance to practice those sports, so it makes sense that a Ukrainian has never won a downhill skiing medal. Various styles of auto racing seem to follow topographic cues as well. Drag racing is more suited to flatlands. Dirt track racing on small ovals is far more popular in Appalachia where building drag racing courses would be challenging.

Space is another key geographic element. Some sports require enormous amounts of space. For example, equestrian events, especially cross-country eventing and polo, require huge fields of play and so would be unlikely sports to gain popularity in either mountainous or urban regions. One bizarre exception to this trend is the famous polo series played at 12,200 feet in the Shandur Pass in Pakistan.



Figure 2-35: Santa Ynez, CA. Some equestrian events require hundreds of acres and expensive equipment. Here a rider competes in a dressage competition.

On the other side of the coin are the world's most popular sports, like soccer, cricket, and basketball. Each sport requires little space and few resources. Full-sized cricket/soccer pitches and basketball courts are not necessary, especially for children to play these games. Equipment is minimal for each sport, players can create homemade goals, balls, and other equipment. Vacant lots, streets, parking lots and small parks are all capable of serving as fields of play.

## Basketball

In the United States, basketball is the most common sport played by Americans. It was invented in the Springfield, Massachusetts in 1891, so it's hardly surprising that the United States dominates this sport internationally. However, basketball is not uniformly popular in all parts of the United States. Certain states, like Indiana and Kentucky, have a special passion for basketball that is difficult to explain. It appears that Indiana developed a love affair with the sport from its earliest days. For many years, Indiana also hosted a statewide tournament for high school teams that attracted far more attention than similar tourneys did in other states. Perhaps, as a result, top athletes in Indiana have been drawn to the notoriety to be gained playing basketball versus that gained playing other sports. Indiana, and indeed most other top basketball regions, around Kentucky, Illinois, and New York, are relatively weak in other sports, especially football.

Analyzing basketball participation at the state level though hides another process that becomes evident viewed at a finer geographic resolution. Since the 1950s, most top basketball talent in the US has come from big cities. It stands to reason that athletes in large cities would be attracted to basketball more than other sports because baseball, football, golf, etc. each require much space and may be too costly for poorer inner-city families (and their school systems). Many large cities, especially on the East Coast and in the Midwest, have high percentages of black residents, which helps explain why African-Americans dominate professional basketball. Non-geographers might suggest that biological factors account for the predominance of African-Americans in the NBA, but to those who think spatially, location has more compelling explanatory power. In recent years, white players from big cities in Europe, Canada and Australia have become more common in the NBA in recent years, while suburban and rural whites from the US have dwindled.

# Biology vs Geography

Geographers will readily admit that biology probably does explain a small part of the racial biases evident in sport, but mapping the origin of world-class athletes in various sports strongly supports an alternate theory. In places where a passion for a particular sport motivates large numbers of people to hone a specific skill, exceptional athletes in that sport almost inevitably emerge. Once "stars" are identified from a region, aspiring youngsters (and their parents) from those regions quickly identify local role models, prompting legions of youth to attempt to emulate their local heroes. When a local star athlete (or rock star, or movie star) emerges from a region, it provides critical information about necessary strategies for success. As the number of entrants into a talent pool increases, competition creates pressure to excel, creates additional knowledge about viable success pathways, and invites again more entrants. The pattern has a tendency to create a local **virtuous circle**; a type of **positive feedback loop**. Processes such as this are of great interest to geographers studying a wide variety of subjects.

# Jamaica and Sprinting



Figure 2-36: Berlin, Germany: The Jamaican 4x100 meter relay team won gold in the world championship, demonstrating the power of the cultural obsession with sprinting in Jamaica.

Evidently, a virtuous circle has emerged in Jamaica where numerous world-class sprinters competing in track and field events have emerged. A lot of people have offered explanations how a tiny country like Jamaica could come to dominate sprinting events. Of course, some would suggest genetics. One study pointed to the effects of the high concentration of aluminum oxides in Jamaican soils. However, a study of high-profile US and Jamaican athletes found that neither group had an unusual genetic profile. The popular statistician/journalist Malcolm Gladwell makes a far more compelling spatially based argument. He notes that since running has the lowest entry barrier of any sport, it is attractive to people in the world's poorest countries. What sets Jamaica apart is the national passion for the sport. One of the first great runners from Jamaica, Arthur Wint, became a national hero in the 1940s, and his popularity encouraged tens of thousands of young Jamaicans to copy him. The United States, with a population more than 100 times greater than Jamaica's, dominated sprinting for much of the 20$^{th}$ century, but in recent years, exceptionally speedy American youngsters (especially boys) increasingly have other, more lucrative, pathways to success. Fast boys in the US are more likely to play football than to run track. American girls rarely dream about playing in the NFL, and the monetary rewards for competing in Olympic sports so small that in the US, the logical thing to do is to focus on getting good grades.

Athletic people everywhere are drawn to sports because they enjoy playing them, but the lure of fame, and especially fortune, create additional incentives to excel. An analysis of the origins of pro football and basketball players strongly suggests that sports are viewed as a viable path to economic security in places where opportunities to move up the socio-economic ladder are limited and/or poorly understood. Maps of per capita production of NFL and NBA players demonstrate significant over-representation of players from poor and working-class locations. Factory towns in the Midwest, inner-city locations and impoverished rural areas in the Deep South produce a disproportionate number of professional football and basketball players.




Figure 2-37: Agoura, CA. Many of the exceptionally athletic boys in the US often play youth football, baseball or basketball because there is a chance to play in college or professionally, however unlikely.

# Fandom

Football, baseball, basketball, and hockey are the most popular American sports. Soccer is increasing in popularity rapidly. Auto racing, especially NASCAR, has declined in popularity recently. Each of these sports has regions of the country where it is more popular. Certainly,specific teams have fans inhabiting specific locations.

Recently, geographers have made clever use of information culled from Twitter, Facebook, and other social media sources to create a series of interesting maps, and other infographics, about sports, politics, music, etc. Their series on college football is interesting on several levels for a geographer or anyone interested in sports, marketing or the politics of regional identity.

Several compelling trends are evident in these maps, and the story told by these maps goes well beyond what is immediately obvious. Click on the maps below and ponder the role of state borders on the pattern of fandom for some sports. The effect of borders on the college football fandom is fascinating. It appears that in much of the United States, college football fans won't cheer for a team from another state. People living near state borders seem to be a minor exception. Also, because there is some neighborhood effect, when fans do cheer for a team, it's usually in a neighboring state. Why do you think this pattern so evident and persistent?

There are a couple of important exceptions. In much of the Pacific Northwest, including parts of Northern California, the Oregon Ducks are more popular than teams from the "home state". What does that indicate about the how people in Northern California identify as Californians? Fans of Notre Dame's football team are found in both northern Indiana and the Chicagoland area in Illinois, as well as other scattered spots around the US where there is no strong affiliation with another school, and there exists many Catholics or Irish-Americans. The University of Texas also is claimed by fans well into New Mexico, a state without much of a college football history.

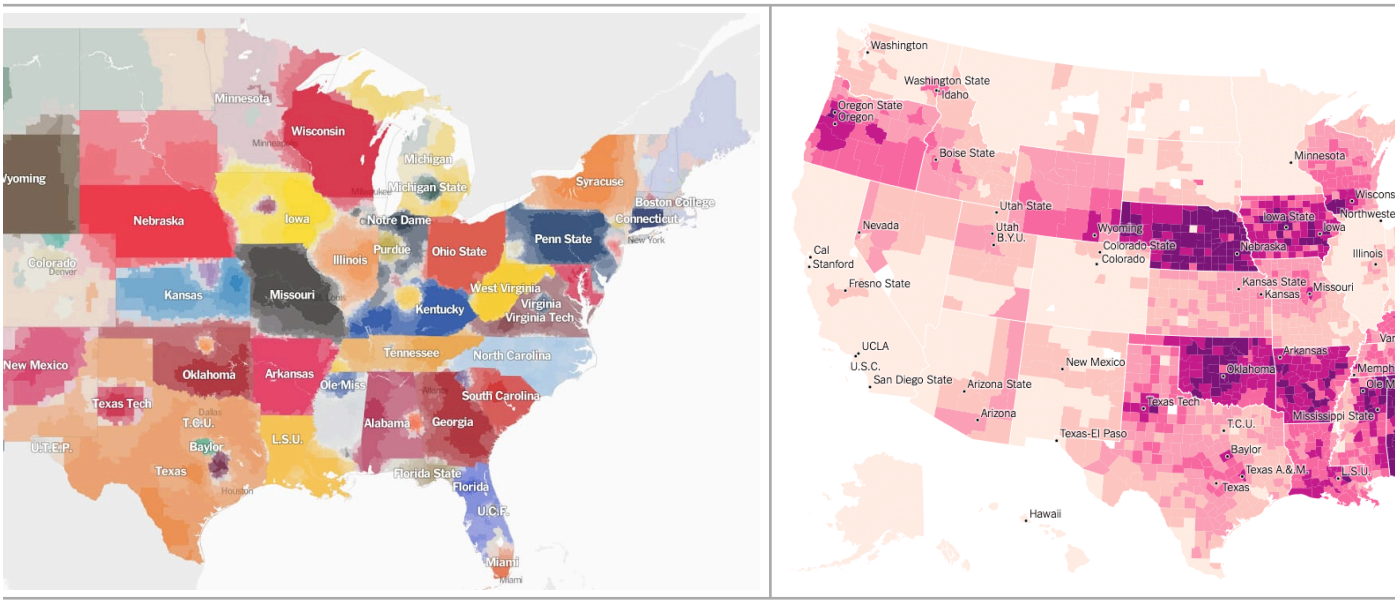



Figure 2-38: Infographics.
On the left
is a map of fan preference for specific college football teams. The
map on the right
is a map of the intensity of the fandom. Source: New York Times,
The Upshot

The intensity of fandom (map on the right above) for college football seems to be a product of the success of the teams on the field and the availability of other outlets for attention (see map on right in figure 2.37) Alabama appears to have the highest percentage of people identifying with a college football team. This isn't surprising. The University of Alabama has a long, rich tradition of success in college football.

In recent years, both of Alabama's major football factories (University of Alabama and Auburn) have won "national

championships", certainly intensifying the effect. Other states, including Nebraska, Oklahoma, Arkansas, Mississippi, South Carolina, and Iowa also have strong fan support for college teams. The intensity of fandom may be related to the lack of a professional football franchise to split the loyalty of fans. Louisiana and Ohio are the two states that seem to have a love for both college and pro football.

Just as interesting are locations with a low interest in college football. An affinity for other college sports, especially basketball, may explain the relative lack of interest in college football in places like Kansas and Indiana. New Englanders, don't seem to like college football much either. No championship-caliber college team has come from New England since the 1940s, and combined with their deep affection for the New England Patriots, a successful professional team, may account for New Englanders' lack of interest in the college game.

Californians also don't seem very interested in college football, even in Southern California where the University of Southern California (a private school) has had a long tradition of gridiron success, and until recently no NFL team to compete for loyalties. Perhaps the ethnic mixture of California helps undermine interest as well since most players are non-Hispanic whites or blacks. The lack of interest in American football may change as Latinos and Asians become more fully assimilated into American culture, and Asian and Latino football stars emerge in the NFL.

Consider the degree to which the patterns of fandom conform to age-old patterns of folkways discussed earlier in the chapter.

Similar patterns of fandom exist in other sports, and the patterns seem to have connections across a broad range of non-sporting behaviors. The maps below, also from the New York Times' infographic service called "The Upshot" demonstrates how county borders, at least in Southern California determine affiliation for supporters of the two local pro baseball teams. People living in Orange County are much more likely to be Angels fans than Dodgers fans, even though the border is largely invisible on the landscape, and the Angels have tried hard to attract fans from L.A. County in recent years.

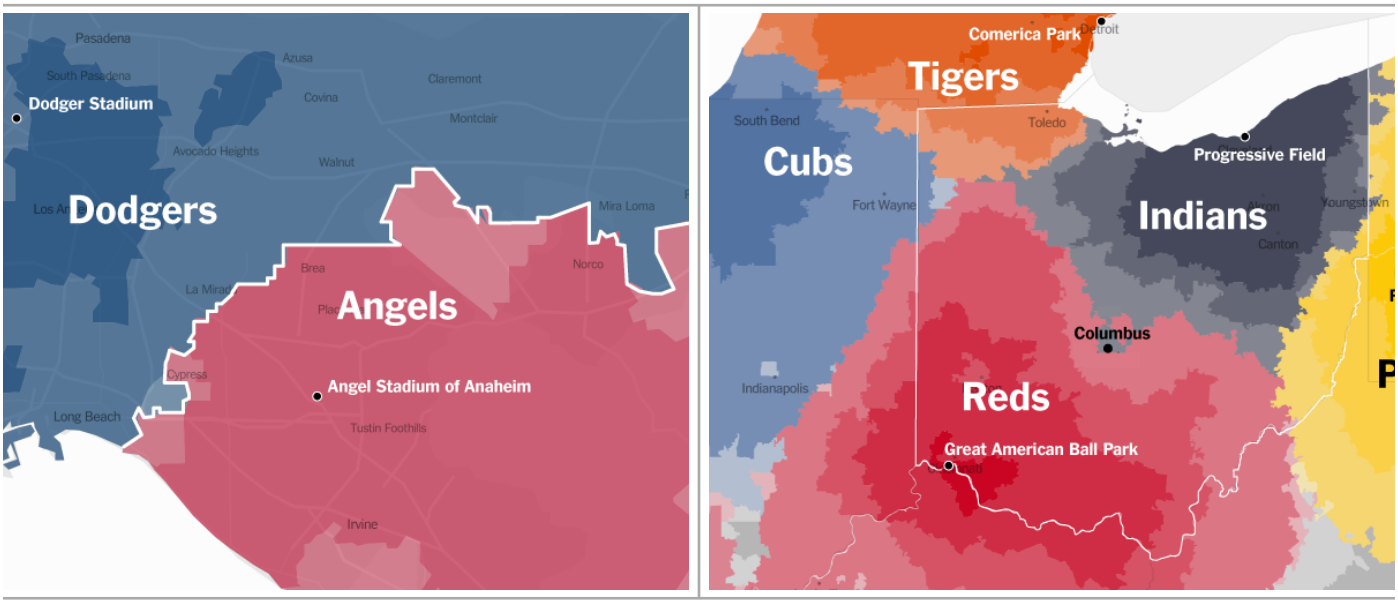



Figure 2-39: Infographic Maps - On the left, note the effect of county borders on fanhood. On the right, state borders seem to have little sway on baseball fanhood. Source:

New York Times

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In Ohio, where fan loyalty for the local Ohio State Buckeyes college football team is well-defined by state borders, the same cannot be said of support for local baseball teams. In this instance, it seems that fan loyalties follow more of a contagious diffusion pattern. Fans generally root for the team closest to home, without regard to state borders. Consider why college football and Major League Baseball fan maps look very different.

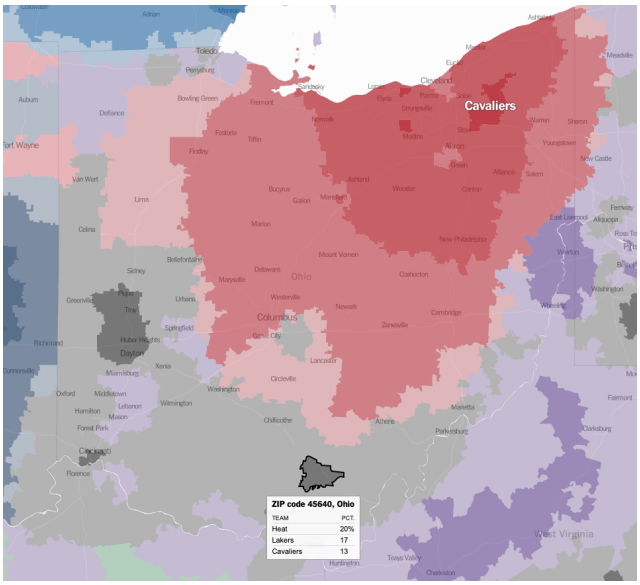



Figure 2-40: Map - NBA fanhood by county, 2014. Source: New York Times

Another very compelling element of the maps presented on these pages is the methodology used to secure the data. Consider how you might use data from social media sites like Twitter and Facebook to explore cultural practices, ideas, and fads. How might data culled from social media sources be unreliable, or corrupt? What misinterpretation might occur if you used this sort of data? One example comes from The New York Times' Upshot infographic department's 2014 map of NBA fan affiliation. Their data, collected from Facebook, suggests that many people in Ohio were rooting for the Miami Heat, a team located over 1,000 miles from Columbus. Why would this be the case? Geographers who know something of sports might point to the fact that LeBron James, the most famous Ohio-born basketball player played for the Heat for some years before returning home to play for his hometown NBA franchise, the Cleveland Cavaliers. For a time, the fans' loyalty to the team from Ohio was overwhelmed by their devotion to their favorite player from Ohio: LeBron James. A similar map produced in 2019 might suggest that basketball fans in Ohio are rooting for the Los Angeles Lakers, where LeBron James plays in 2019. Astute consideration of the data source might also suggest that a significant percentage of those Ohioans probably switched loyalties to the Cavaliers upon the return of LeBron James, or to the Lakers upon James' re-exit from Cleveland, but fan have yet to update their loyalties on Facebook.

## ADDITIONAL LINKS TO CULTURAL GEOGRAPHY R ESOURCES

YouTube: Appalachia Clog Dancing Video: https://youtu.be/vJB_HGdGfic

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# 3: AGRICULTURE AND FOODWAYS

**What you eat and where your food comes from are fundamental issues. Our foodways greatly affect agricultural practices both near and far away. In turn, agricultural practices have profound effects on the environment, the economy, our diets, and our health.**

About half of all the land in the US is dedicated to the production of agricultural products. However, not all "agriculture" products are consumed as food. In fact, most agricultural lands in the US don't grow human food. Some farmers grow things like trees, flowers, cotton, switchgrass (for biofuel), or even marijuana. In addition, millions of acres are dedicated to the production of food that is not eaten directly by people, but rather by chickens, cows, and pigs, which are in turn eaten by humans.



Figure 3-1: Chino, CA. These Holstein dairy cattle are part of a factory farm system created to deliver vast quantities of milk to Southern California. The constant demand for land suitable for suburbanization threatens to push agriculture further from Los Angeles, altering prices for milk and the likelihood people will buy cow's milk for their cereal.

Everyone eats, so the landscapes of food production and food consumption are rich sources of information about human cultures. On the consumption side, restauranteurs, grocers, and other food vendors all vie for the attention of hungry customers. Together these landscapes represent a $300 billion industry that employs hundreds of thousands of people and feeds millions.

For most people in the world, farmlands and/or ranchlands are common scenes, and people have a deep knowledge of the processes by which their food comes to their bowls. In the United States though, most folks have a poor understanding of the systems that make our food so wildly abundant, and for many, very inexpensive. Only about 2 percent of Americans are employed in agricultural industries, so for the 98 percent who are not farmers, why we eat what we eat is a bit of mystery. It is important to our survival that the public knows something of the basics about the interaction between agriculture practice and dietary foodways. In this chapter, we will explore some of the factors that affect our diet by examining where and how the agricultural economy works, and how those processes affect what you routinely eat for breakfast, lunch, and dinner.

The landscape of food varies because of the diversity of farming techniques and the numerous ways in which we buy food at restaurants, grocery stores, and farmers' markets. As you move through the landscape, look for examples of food production. What types of farming exist near your hometown or college? What crops are grown to feed animals rather than humans? Are farmers growing staples; food meant for daily consumption, or are they growing non-staple items, perhaps for export, or mostly for rich people? What sorts of restaurants are popping up everywhere? What are trendy people eating? Where do you buy food? Where do you eat?


3.1: Why do we eat this stuff?

3.2: The Geography of Barbecue (BBQ)

3.3: Agricultural Regions

3.4: Von Thünen's Model

3.5: Agriculture around the World

3.6: Agricultural Landscapes

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# 3.1: Why do we eat this stuff?

Why we eat the things we eat is a complex question. The answer might seem as simple as “I eat what tastes good”, or “I eat what my mom cooks”, but as any mom who cooks for her family will tell you, opinions often vary wildly on the issue of “what tastes good” among individuals, even within the same household. Despite the presence of picky eaters in almost every family, it’s easy to identify food preferences that characterize towns, regions, countries, and even continents. Food preferences of individuals are generally conditioned by their geography or the geographic histories of their family. So, what tastes yummy to people in one location might be considered disgusting to people elsewhere. Consider Vegemite, a type of sandwich spread much beloved by Australians, yet considered horrid by most Americans. Within the US, crawfish is a favored delicacy to many Louisianans, but many other Americans find crawfish too gross to eat. Foodways are so varied across the US and the world because there are so many variables that affect what we eat. It is often said, “you are what you eat,” and that might be true, but geographers might add “what you eat depends on where you eat.”

## Migration-Ethnicity

One of the main variables explaining what Americans eat can be found by looking at our immigration history. European immigrants to the US established many mainstream American foodways because they migrated to North America early and in large numbers. The first Europeans to arrive in the Americas would readily recognize many modern American dietary staples, such as beef, pork, chicken, bread, pasta, cheese, and milk, as well as a number of the fruits and vegetables we commonly eat today.



Figure 3-2: New Orleans, LA – This dish of boiled crawfish represents a lengthy history of folk adaptation to a locally abundant, food source. The preference for crawfish seems to have evolved among the Cajuns who dwelled among the swampy regions of Louisiana, and diffused outward from there. Source:

Wikimedia

The grandparents of the first Europeans arriving on American shores, those living before the Columbian Exchange, (1492) would not have recognized many foods we eat regularly today, including maize (corn), tomatoes, and potatoes – all of which are native to the Western Hemisphere. It’s hard to imagine, but tomato-based marinara sauce is relatively new to Italy. The tomato was not introduced to Italy until the 1500s. Germans once drank beer and ate sausages without their famous potato salad, because the potato was not introduced to Europe until the 1500s.

The French, Belgians, and Swiss, who so love chocolate had none before transatlantic trade. Alternatively, bananas, onions, and coffee were unknown to the people of the Americas before 1492. The exchange of agricultural wisdom and food processing techniques between the indigenous people of the Americas, Africans, and Europeans is largely responsible for most food traditions and agricultural practices found in the US today. Several elements of the North American’s diet are also traceable to

Asia (e.g., citrus, sugar, rice, soybeans) as well, though much of those traditions were introduced to the Americas via Europe, rather than being directly imported by Asian migrants. Can you think of new foodstuffs and foodways actively entering the US diet? Your diet?




Figure 3-3: Antwerp, Belgium. Chocolate is a national obsession in Belgium. Brought from Meso-America by the Spanish in the 1600s, chocolate has become an important part of European culture, and a valuable export.

Our eating habits also offer an interesting glimpse into how certain cultural practices function. Eating is a daily ritual, which helps deeply engrain our food preferences into our cultural habits. This is evident by looking at how resistant to change our foodways are, even over generations. This fact is a causal factor in America's obesity crisis. Our lifestyle has changed rapidly as technologies have helped us become more sedentary, but many of our foodways have not evolved accordingly. The diets that served our ancestors, who worked exceptionally long hours, engaged in strenuous activities, provide far too many calories and/or fat for modern people working and living in the digital age. Cultural lag is the concept that describes the inability of cultural practices to keep pace with changes in technology and the economy. Numerous behaviors exhibit cultural lag, and culturally conservative regions, many of which are geographically isolated, exhibit more cultural lag than less isolated places where greater exposure to new ideas and greater exposure to food traditions from afar alter local foodways.

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# 3.2: The Geography of Barbecue (BBQ)

Local food traditions are affected by the specificities of place and geographers have done a great job exploring many foodways. Barbeque (BBQ), a favorite American dish that involves cooking meat, very slowly, over indirect heat (it's not the same as grilling meat over an open flame) is a great example of how geography affects diet. Worldwide, there are many dozens of BBQ styles. Jamaica, Mexico, and South Africa each have well-known practices, and within the US there are a dozen or more distinct practices. BBQ was probably introduced to the Americas in the 1600s by the Spanish, who may have learned how to BBQ from Caribbean Indians.

BBQ restaurants can be found in most of the US, but it is most popular in the US South where a warm climate and poverty combined to encourage the adoption of BBQ. Before the invention of refrigeration, fresh meat had to be eaten quickly, or otherwise preserved to avoid spoiling or rancidification. BBQ offered a solution.

There are several ways to preserve meat: salting, pickling, and drying are popular methods, but the one that gained favor in the US South was smoking meat in a pit or some other container. Using the pit BBQ method, anyone who slaughtered a pig or a cow could cook the entire animal in a few hours. This style of cooking also makes some of the less desirable cuts of meat easier to eat while improving the flavor. Most importantly, smoking meat extends the length of time before it turns rancid. Because poor people often have little protein in their diet, any strategy to prevent spoilage was embraced. Southerners 100 years ago often had too much starch (carbohydrates) in their diet and too little protein.




Figure 3-4: Nashville, TN- Pork Barbeque is a the most popular type of BBQ in much of the South and Appalachian. This restaurant is on Music Row – which invites us to think of connections between music and food

Other areas of the US copied the process, but as the practice diffused, adopters were forced to alter the practice to fit local conditions (stimulus diffusion). As a result, more than a dozen recognizable BBQ styles emerged in the US alone, each with a unique combination of meat preference, cut of meat, smoking wood, and flavoring strategies. In the Carolinas alone, there are more than a half-dozen variations on the basic recipe for BBQ sauce or marinade.

## Meat

The meat used in BBQ varies by region. Mostly this is because different regions have different agricultural potential. So for example, in Appalachia, the Piedmont region, and much of the piney-woods South, there is a strong preference for pork BBQ. In these heavily forested regions, Anglo settlers raised hogs for meat because it was easy to **free-range** hogs in nearby woodlands. Pigs will wander within a forest where they eat acorns, tree nuts and whatever else they could forage - at no cost to the farmer. Hogs only needed to be trained so they could be "called" back to the farm. Sometimes pork BBQ is served as ribs, but in the Carolinas, it is often served "off-the-bone" or "whole hog" served chopped or "pulled" into little pieces and served on a bun.




Figure 3-5: Hutto, TX - This restaurant featured beef, which is the most commonly used meat for BBQ in Texas where the climate favors cattle ranching.

Where the land is flat and grassy, like most of Texas, the Great Plains, and parts of California, grazing cattle evolved as the prevalent agricultural practice, beef became the most popular BBQ meat. In some places, beef ribs are preferred, in other regions, brisket or rumps are preferred. Californians often serve a cut called tri-tip, which is typically used to make hamburger outside the West Coast. Other regions of the US prefer chicken, turkey, or fish, depending on local availability.

## Wood

The type of wood that is most locally available is another critical ingredient in differentiating American BBQ regions. Hickory, a hardwood tree common to the forests of the Eastern US is a favored wood for smoking pork BBQ in Appalachia. Oak or Pecan wood is popular in eastern Texas, but out in West Texas, they use the wood of mesquite trees. In West Texas and the other parts of the dry southwestern US, mesquite is plentiful. Most mesquite trees are shrubby, but their wood is hard, burns slowly, and has a unique flavor, making it great for BBQ. In California, Spanish/Mexican settlers invented Santa Maria-style BBQ. There, they roast tri-tip over the wood of Coast Live Oak trees. Maple and Apple trees furnish wood for smoking chicken and flavoring pork in other parts of the US, particularly in New England, where BBQ is not as popular.

## Flavorings

The last, and perhaps most geographically random, element of the geography of BBQ is the flavoring technique. Many regions apply a wet sauce. The most widely known and copied sauce comes from Kansas City. Variations on the sweet, dark Kansas City BBQ sauce are available at most supermarkets in the US alongside ketchup. Many South Carolinians favor a mustard-based sauce, perhaps an innovation introduced by Germans who migrated there a century or more ago. Many East Carolinians pour a vinegar-and-hot pepper sauce on their BBQ. In the more mountainous areas of the Carolinas, they add a tomato sauce to that mixture. In Louisiana, of course, the Cajun influence means that their BBQ sauce is going to contain their special cayenne pepper flavored hot-sauce (like Tabasco brand). Cooks in Memphis, Tennessee; another city famous for its BBQ, tends not to use BBQ sauce at all. Instead, they flavor their meats with a dry rub mixture of spices, like paprika, pepper, chili powder, garlic, etc. Santa Maria-style BBQ in California also uses a simple “dry rub”. Even the side dishes vary regionally – again based on the local availability of beans, bread, and greens. For example, Santa Maria BBQ in California always features pinquitos, a type of small pink or white bean, grown in the Santa Maria Valley. Hushpuppies, a kind of deep-fried corn cakes are often served with spicy cole-slaw in parts of the Carolinas.



Figure 3-6: North Carolina - This plate features pulled pork and red coleslaw combo flavored with vinegar. It is commonly served with beans and hush puppies. Source: Wikimedia

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# 3.3: Agricultural Regions

As is the case with BBQ, numerous geographic variables inform the choices farmers make about what to do with their land. The first factor is climate. Weather is a controlling factor in most agricultural decisions. Many crops and some livestock just can't survive in harsh climates. Some crops are exceptionally hardy, and some even require harsh weather conditions to thrive. The availability of water, either via rain or irrigation is another fundamental issue for farmers. Most farmers also need to turn a profit; and the clear majority prefer to maximize their profits, so farmers carefully choose the crops and animals they raise. Farmer decisions, in turn, affect what we eat, just as what we eat affects what they plant. Taken together, these decisions have created roughly five major agricultural zones in the US, each aligned with a climate zone. The paragraphs below explore the evolution and function of some of the major agricultural regions in the US, and elsewhere.

## Corn and Wheat Belts

The two largest agricultural regions in the United States are roughly split by the 100$^{th}$ meridian, a line of longitude that marks a transition zone between the humid eastern half of the US and the drier western half. The 100th meridian runs straight through the middle of the US, where the land is flat and ideal for row cropping. Farmers east of the 100th meridian generally plant corn (maize) and soybeans, and therefore this region is called the **Corn Belt**. It's roughly centered on Iowa, "The Tall Corn State". Much of this land now used to grow cornwas once tallgrass prairie before it was plowed under and made into cropland. Tallgrass prairies are marked by very fertile soil conditions. Over centuries, deep rich topsoil developed in this region where adequate summer rains fueled abundant plant growth, and winter snows helped plants decompose slowly into organic, fertile, humus. Almost no tallgrass prairie remains in the US. It's all been plowed under for agriculture.

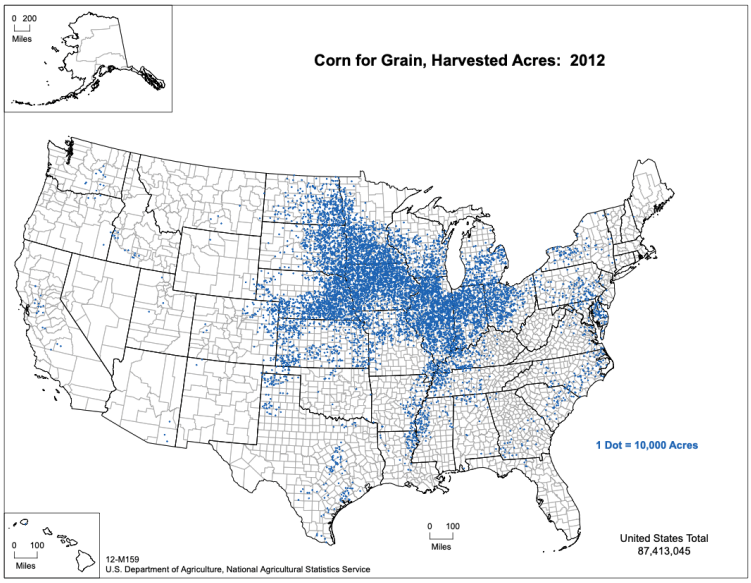



Figure 3-7: US - Each point on this map represents 10,000 acres of grain corn harvested in 2012. Note the steep decline west of the 100th meridian. Source: USDA

Farmers on flatlands west of the 100$^{th}$ meridian tend to plant wheat. Farmers in this region would probably prefer to plant soybeans and corn because they are more profitable per acre (see the case study on the economics of corn below). West of the 100th meridian, it is generally too dry for corn and soybeans, so farmers plant wheat instead. The **wheat belt** extends from the panhandle of Texas up through the Dakotas, in a region that was originally dominated by short grass prairie before it was converted to agriculture. The soils of shortgrass prairie are less productive than those created by tallgrass prairies because the region's dryness both slows plant growth in the summer and provides a less reliable snowpack in the winter thus reducing the effectiveness of the decomposition processes that turn dead plants into soil.

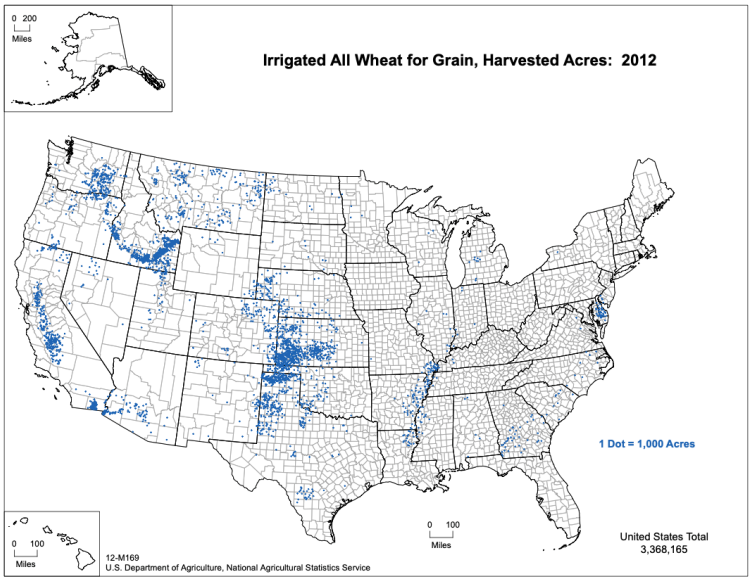



Figure 3-8: US - Each point on this map represents 1,000 acres of wheat harvested in 2012. Note its predominance west of the 100th meridian, and compare to the corn map. Source: USDA.

There are hundreds of types of wheat, but American farmers favor only a few varieties. Farmers plant winter wheat in the fall and harvest it in the early summer. Winter wheat accounts for about three-quarters of all the wheat produced in the US, and we used it to make bread and rolls. Kansas is at the heart of the winter wheat (formal) region. Further north, in the Dakotas, wheat farmers favor spring wheat. They plant it in April and harvest it in the fall. Bakeries use flour made from spring wheat to make dough for pastries and cakes. Durum wheat is a special variety of spring wheat, planted mostly by Americans in North Dakota. Pasta makers prefer Durum wheat to make the semolina flour used in the production of pasta. Durum is a beloved wheat variety of Italians as well.

Wheat is the leading agricultural export from the US, and the US leads the world in wheat exports, but thanks to shifting government policies and **climate change**, wheat production has fallen in the US since the 1970s. Since 1900, the length and timing of growing seasons have changed so much that corn production is displacing wheat production in regions where the growing season was once too short for profitable corn production. For example, in North Dakota, the first killing frost of the year is now often in October, rather than September as it was for centuries. This allows corn plants to ripen a few weeks longer, and as a result, corn is now more profitable than wheat even in North Dakota - especially given the subsidies for corn production (see below). An interesting positive **externality** of climate change has been that the alarming out-migration of young people from North Dakota has slowed as farming has once again become profitable in the north-central United States.

# Cattle Ranching

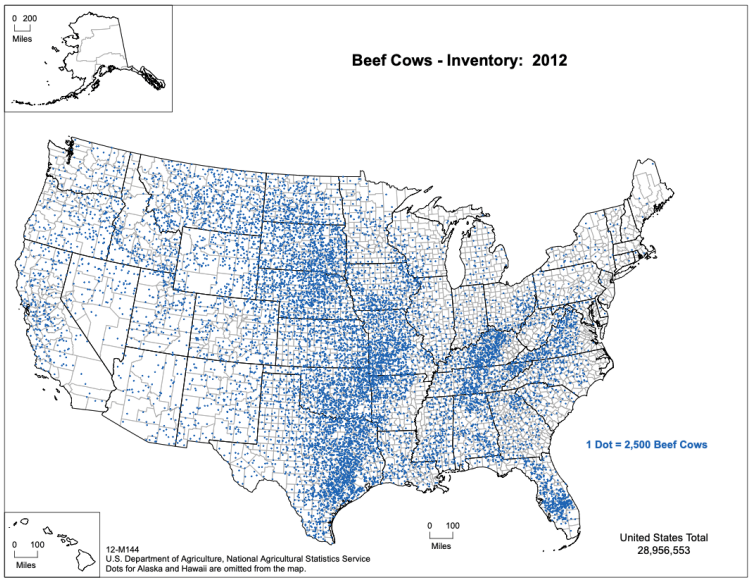



Figure 3-9: Point Map - Map of Beef Cattle Inventory. Note the dispersion of cattle production into hilly regions of Appalachia and the Ozarks
Source: USDA

Beef cattle can be raised just about anywhere, but generally, this activity is favored only where more profitable agricultural land uses are impossible. So, in places with less than 20 inches of rain per year, or where it's hilly and crops cannot be grown profitably, cattle ranching is common. So, in the dry parts of the Great Plains where irrigated farming is unavailable, or hilly Appalachia, ranching is a common agricultural alternative because cattle require mostly grass and space. Texas, Nebraska, Kansas, California, and Oklahoma all have vast dry flatlands, and therefore lead the country in cattle production. Ranching is probably the least profitable type of farming measured in terms of profit per acre. For this reason, farmers in Illinois, a state blessed plentiful rain and exceptionally good soils, dedicate their farmlands to the production of corn, which is far more profitable per acre than cattle. Illinois, not surprisingly, has a very small inventory of beef cattle.



Figure 3-10: Interstate 5, Kern County, CA. This massive feedlot operation is essentially a "beef factory" serving Southern California. Grain and silage is brought to this site to fatten cattle for slaughter. Angus and Hereford breeds dominate.

Typically, cattle grazed on wide-open lands are allowed to mature only long enough to grow to market size, at which point they are collected, or "round up", and placed in a feedlot. Once confined to a feedlot, the cattle are fed a steady diet of inexpensive corn and silage, brought in on trains or trucks from the Corn Belt. Once the cattle are suitably heavy for slaughter, they are processed into hamburgers, steaks, etc. Some ranchers nowadays keep their steers on a more expensive grass-only diet. Beef connoisseurs

considered grass-fed beef to be both healthier and better tasting, which allows grass-fed beef to command a higher market price.

## Irrigated Drylands

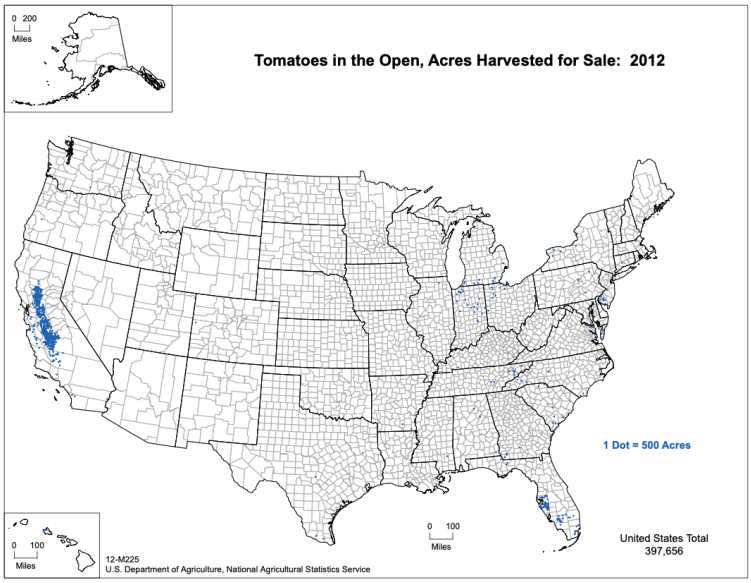



Figure 3-11: US - Point map of Tomato acreage in the US. Most all tomatoes in the US are grown on irrigated fields in California's dry Great Central Valley. Source: USDA

In some arid regions, including parts of California and Arizona, farmers apply vast amounts of irrigation water to fields that would otherwise be too dry for most crops. Elaborate systems of dams, irrigation canals, pumping facilities, and water storage facilities, built with taxpayer funds, allow farmers in arid regions to grow an enormous variety of foods and sometimes reap great profits. Because the Southwestern US has abundant sunshine, long growing seasons, and in many places, excellent soils, the addition of irrigation creates exceptionally productive, and profitable farmlands. Perhaps the greatest irrigated farmlands in the world are found in California's **Great Central Valley** where individual counties have larger farm economies than most US states. Most of the fruit and vegetables that you've eaten in your life came from irrigated fields in California

Fruit and vegetable farming, like that practiced in California, is often the most labor-intensive style of agriculture in the United States, requiring large numbers of farmworkers to pick, process, pack, and ship fruits and vegetables because few machines are capable of doing these tasks. Because low-wage laborers both willing and able to this kind of work are critical to the profitability of fruit and vegetable farming, immigrant labor is highly desirable. California's Great Central Valley has been for many decades a point of entry for many thousands of immigrants seeking to live in the United States. Many migrants find work in the fields for some years before moving on to other occupations. Immigrant farmworkers fundamentally alter the societies where they live in terms of culture and the economy. Debates rage both in the US and internationally about the benefits and costs of immigrant labor, especially when the immigrants are undocumented. Two points are irrefutable. First, very few American citizens are willing to work picking fruits and vegetables for the prevailing wages offered to farmworkers. Two, if farm wages rose enough to attract native-born workers (say, $20 to 30/hr.), the fruits and vegetables would become too expensive to be competitive with those grown outside the US, and the farm economies in the US that are dependent upon immigrant labor would suffer. The issues surrounding farm economics, environment, politics, demographics, culture, and foodways represent a classic example of the concept of cultural integration and the value of a spatial-geographic framework for understanding.

# Red Dirt and Chickens



Figure 3-12: Cottondale, AL -The presence of reddish soil and pine trees is an indicator of the limited agricultural possibilities at this location. Geographers read this also as an indicator the economic profile of the region.

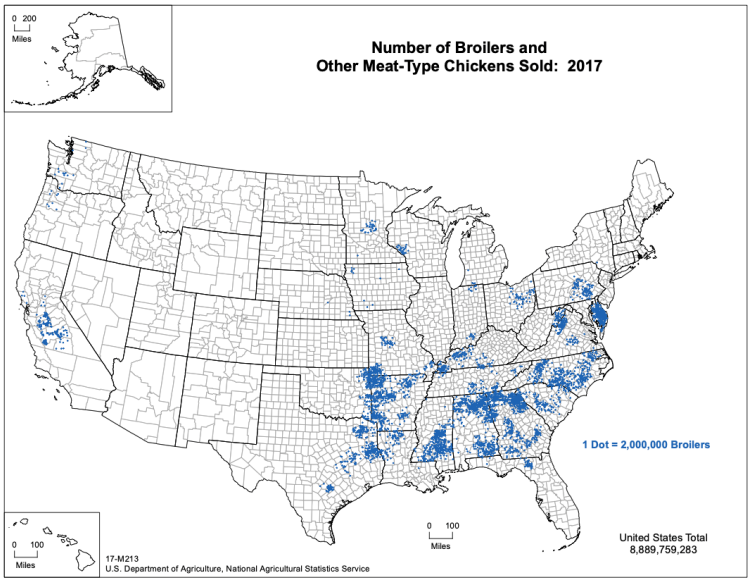



Figure 3-13: US - Southeastern states dominate chicken production in the US. Source: USDA

In the Southeastern US and the Pacific Northwest, over-abundant rainfall makes it difficult to profitably grow many crops. In damp climates, numerous diseases attack plant roots. Insects and other blights also undermine farm profits in humid locations. Also, soils in many parts of the southeastern US are **leached** because over-abundant rainfall washes away many of the nutrients necessary for vigorous crop growth. The famous “red dirt” of Georgia and Alabama is not ideal for many crops. Still, farmers adapt and they search for agricultural activities that maximize the potential of local soils and climate. In both the Pacific Northwest and Southeastern US, where pine trees grow well in poor soil harvesting timber provides an alternative to more to row crops. However, lengthy harvest intervals make forestry less reliably profitable. Another common option is to focus on raising poultry. Southeastern states dominate the “broiler” industry – chickens raised for meat. In the Pacific Northwest, marijuana has become the leading agricultural pursuit.

## Specialty Crop Areas




Figure 3-14: Peaches, peanuts and onions are three crops that grow well in specific places in Georgia. Many other locations in the state are poor for agriculture.

In some locations, peculiar local soil and/or climate conditions allow farmers to grow very specialized crops. Sometimes these crops are very profitable because they grow well in so few locations. This reduces the supply of the crop, and if demand is high prices will follow, according to the economic model of **supply and demand**. You can probably think of several locations that specialize in very specific crops. Idaho is famous for its potatoes. Georgia is famous for peanuts, peaches, and onions. Washington is famous for apples. Thanks to irrigation and its rare Mediterranean climate, farmers in California are the dominant producers of many crops including broccoli, carrots, cauliflower, celery, lettuce, and spinach. California farmers grow more than 99% of America's almonds, artichokes, dates, figs, raisin grapes, kiwis, olives, pomegranates, pistachios, and walnuts.

## Dairy Lands

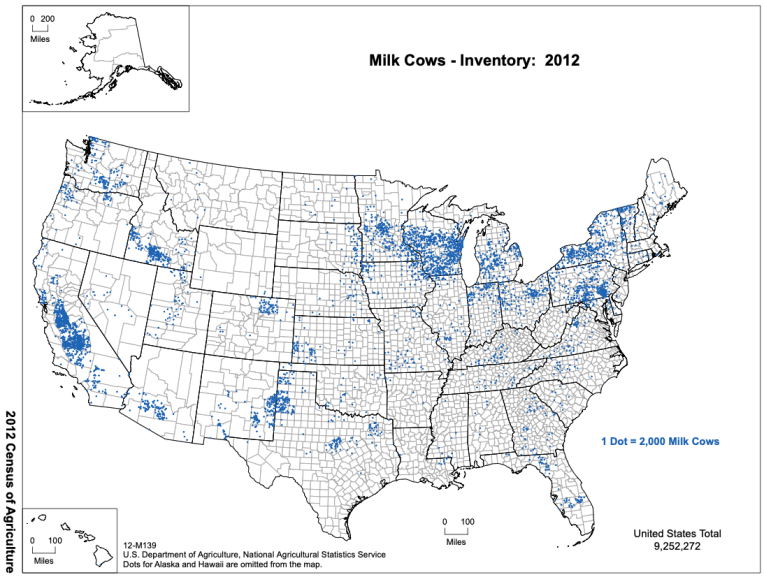



Figure 3-15: US - Dairy farms are generally near population centers - New York, Illinois and California Source: USDA

Dairy farmers raise milk cows across the US. The Northeast and Great Lakes regions are famous for their vast herds and are known as "America's Dairyland." California produces more milk than any other state, despite not having a reputation as a dairy state. Dairy farming is nearly ubiquitous across the US because almost everyone drinks milk, and it is perishable. Regions with large populations create high demand for milk, and since milk must be transported quickly to market, the map of milk production

echoes the map of the population. Each large city has a regional hinterland of milk production known as a **milkshed**. Milksheds were once found in about a 50-mile radius around cities, but now thanks to improvement in refrigeration and transport speed, milksheds have radii of over 500 miles.

Most European Americans are lactose tolerant, which boosts demand for milk, cheese, butter, and ice cream. This seems especially true in places like Wisconsin, where a pronounced Germanic heritage exerts a strong influence on regional demand for dairy products. This is an example of **cultural integration** because patterns of regional ethnic heritage affect regional agro-economics.

Hay farming, which supports the dairy industry, also tends to be co-located with dairy regions because milk cows are fed a steady diet of hay, especially during winter months when field grazing is limited.

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# 3.4: Von Thünen's Model

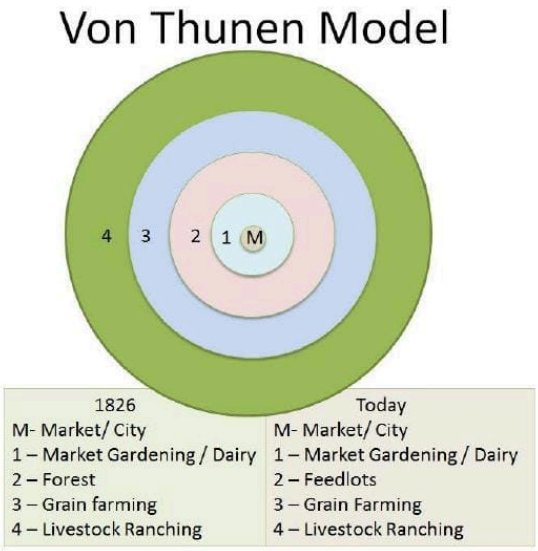



Figure 3-16: An adaptation of Von Thünen's Model that predicts and/or suggests ideal locations for agricultural production based on distance to market and cost of transportation.

Weather, climate, and soils are important variables affecting the decision-making process of farmers, but the cost of transporting agricultural products is just as important. Two hundred years ago, economic geographer Johann Heinrich von Thünen recognized that because each crop presented a different set of transportation costs and challenges, profitable farming was partly dependent on distance to markets. His ideas led him to develop a theory of agricultural **land rent** that is now widely known as the **Von Thünen Model**.

This model incorporates several assumptions that are not always present in the real world, but the model is useful for understanding the decision-making process of agriculturalists. First, the model assumes that all farmland is of equal quality (topography, soil, water, etc.) and that no place has a transport advantage over any other (a river or rail line). Second, the model assumes there is only one market city where farmers sell their goods. Third, the model assumes farmers are economically rational: they understand how to maximize profit and always choose the most profitable use for their land.

Von Thünen argued that farmers living closest to the market city will produce dairy and/or fruits and vegetables because those products are both perishable and expensive to transport. Dairy farmers who live closest to urban markets will specialize in liquid milk, while dairy operations further from large cities will convert milk to less perishable dairy items like, butter, cheese, and ice cream because those products are less perishable. It would be foolish, especially in 1826, for farmers living at a great distance to the city to specialize in foods that spoil quickly. Von Thünen argued that farmers living far from the city market specialize in grain crops because they are cheaply transported and can be stored for long periods. Tree crops, used for home heating in the 1800s will be grown near the city because firewood was heavy and expensive to transport.




Figure 3-18: Oxnard, CA. A sign protesting the conversion of prime farmland on the Oxnard Plain into suburban housing tracts. Consider the difficulty of creating laws to prevent farm loss.



Figure 3-17: Union Stockyards, Chicago, IL 1947- livestock is prepared for slaughter near meat packing plants. Advances in transportation and refrigeration forced urban feedlots out of business by the mid-1900s. Source: Library of Congress.

Von Thünen knew that farmland near cities was more valuable because that land was also valuable for those interested in building housing, factories, etc. If farmers living near cities wanted to maximize the value of their land by farming, they had to engage in **intensive agriculture**, like fruit and vegetable farming known as **market gardening**. Otherwise, they should simply convert their farmland to some other purpose to make maximize their land rent. Farmers living further from cities, because they have greater costs associated with transporting crops to market, must engage in **extensive agriculture**, the type of farming best suited for less valuable land, which requires less costly farm labor.

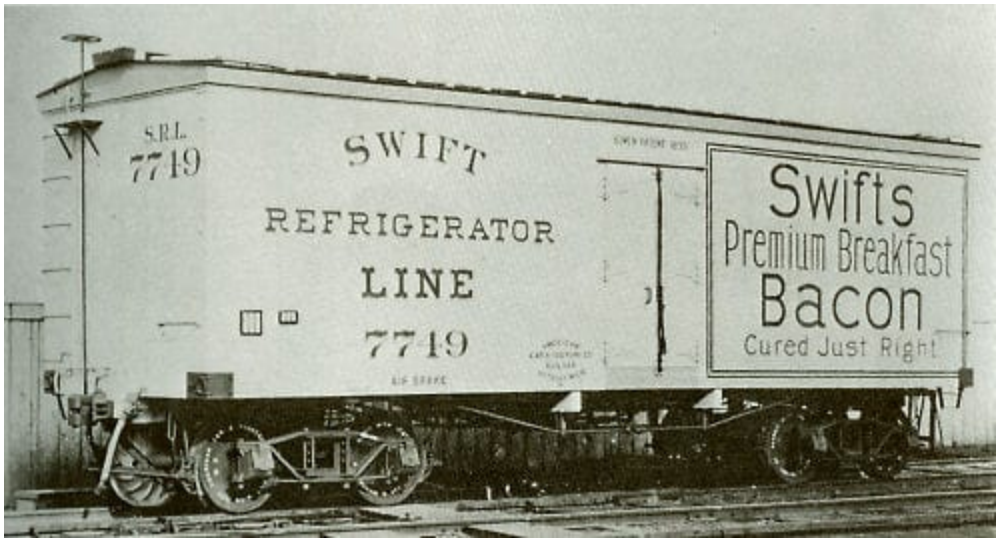



Figure 3-19 : The refrigerated rail car radically changed the way distance factored into the operation of the Von Thünen Model. Can you think of affected farm commodities? Source: Wikimedia

Technological innovations, particularly refrigeration and rapid transportation undermine some of the applicability of Von Thünen's model today, but the logic behind it is still very potent, and current agricultural maps reflect the ongoing importance of transportation costs to farmers. New York City, Los Angeles, and Chicago all have large hinterlands where farmers remain engaged in intensive market gardening and liquid milk production. New Jersey is called the "Garden State" for exactly this reason.



Figure 3-21: Los Angeles, CA - Cattle Cars like this one in a museum were rendered obsolete by the invention of refrigerated box cars, which in turn allowed urban stock yards also obsolete.

Market gardening farms still tend to be found in the US within a one-day drive to a nearby city's central produce warehouse district. California, with the largest population of any state, therefore, leads the country in the production of fruits, vegetables, and milk – just as Von Thünen's model would suggest. It's not just the weather. Large grain farms continue to be rare in those same areas. The biggest changes from Von Thünen's original model are the location of forestry operations and livestock feedlots. Thankfully, most hogs and cattle are fattened and slaughtered far from cities nowadays. Thanks to the elimination of wood as a heating fuel, fuel forestry regions, which once supplied wood to heat homes in the nearby city no longer exist.

## CORN, SUGAR, FARM POLICY AND PUBL IC HEALTH

Today, the operation of Von Thünen's Model is also affected by numerous government policies that greatly influence what farmers

do and what we eat. To provide you some insight into how geography is useful in analyzing complex questions, the section below offers a quick case study into some of the relationships between politics, farming, dietary practices, and public health.

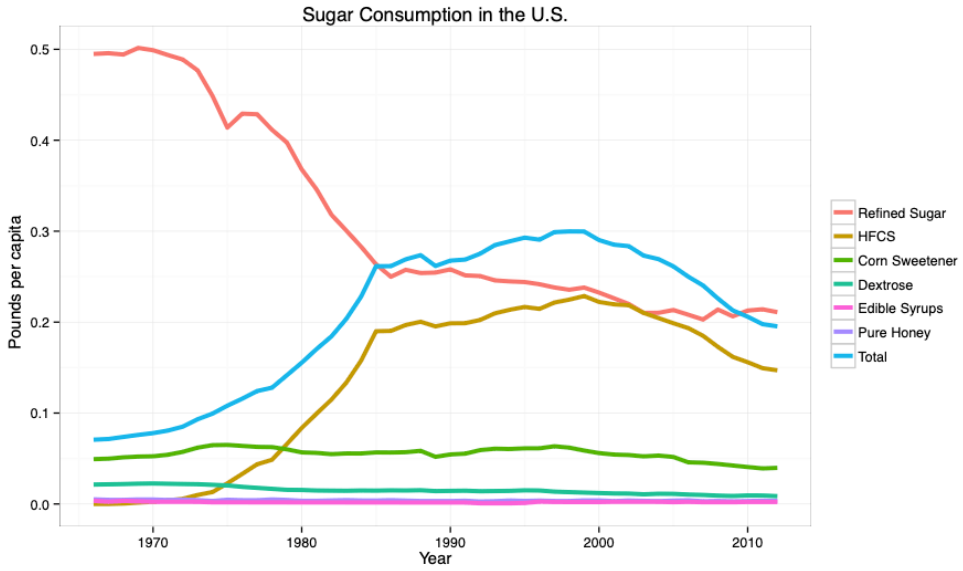



Figure 3-22b: Infographic - Since 1970 cheaply produced HFCS has replaced cane sugar, driving a significant increase in total sugar consumption in the US. Source: Wikimedia

Perhaps the most important food in the world is maize, popularly known as “corn” in the US. Domesticated by the indigenous people of Mexico thousands of years ago, maize has proven an exceptionally versatile and hardy plant. It’s so adaptable, that much of the world eats maize in some fashion today. There are multiple varieties of maize. Most Americans know maize as sweet corn or corn on the cob Sweet corn is also available canned and frozen and appears in a wide variety of dishes. Less well known are the dozens of maize varieties known as field corn, even though vastly more field corn is grown than sweet corn. Field corn is processed into dozens of other products. Some of it is ground into cornmeal and cornstarch, which we use to make things like corn chips, tortillas, and sauces. We also convert millions of tons of field corn into corn syrup and high fructose corn syrup (HFCS). Corn syrups are used as sweeteners, thickeners, and to keep foods moist or fresh. Since the early 1970s, HFCS has become a common and inexpensive replacement for cane sugar and beet sugar. HFCS is now the most common sweetener used in processed foods and soft drinks.



Figure 3-21: Sweet Corn. This variety of maize is consumed directly by humans, unlike field corn which is generally processed into flours, syrups or used for animal feed or fuel. Source: Wikimedia



Figure 3-21 Croatia. Field corn is the most common crop in the US, and ranks only behind wheat and rice worldwide. Source: Wikimedia

Cost is the main reason the displacement of granulated cane and beet sugars by HFCS in the American diet and the geography of sugar production explains the difference in costs. Field corn grows well in much of the US, so lots of it can be produced, which drives supply up and costs down. Sugar cane, on the other hand, is poorly adapted to most American climates. Sugar cane yields are highly dependent on climate. A good crop of sugar cane requires plenty of rain and a very long growing season, In the US, only Hawaii has ideal conditions for profitable sugar cane production. Cane yields in Hawaii are triple those in Louisiana, but delivery costs from Hawaii and competition for prime farmland on the islands drive up the price of Hawaiian sugar. Sugar beets grow well in a variety of climates. You might drive past a field of sugar beets in the desert of California and up in Minnesota. Half of the US granulated sugar production is made from sugar beets. Climate conditions and cheaper labor outside the US make foreign-produced sugar cheaper than domestic sources.




Figure 3-23: Brawley, CA. This massive sugar beet factory relies upon irrigation waters and helps promote the local dairy industry via by products. Note the sea-level marker.

Since the Great Depression of the 1930s, the US government has provided special **subsidies** to cane sugar producers to help

keep them in business via tax breaks and a variety of other incentives. The government even buys cane sugar at prices above world market value if American sugar producers cannot profitably sell it on the international market. The US government also restricts sugar imports, especially from Cuba, which supplies sugar cheaply to Mexico and Canada. Tariffs on imported sugar also increase prices within the US.

These **trade protection** policies help sugar farmers stay in business, but they create burdens elsewhere in the economy that often hidden. Those hidden costs are known as **externalities** or **external costs**. Geographers tend to be very interested in identifying and calculating external costs because our discipline approaches most topics holistically. Geographers think it is important to calculate all costs and benefits of government programs including those that subsidize sugar production. Geographers keep a keen eye on hidden environmental and societal costs often overlooked by economists and accountants.

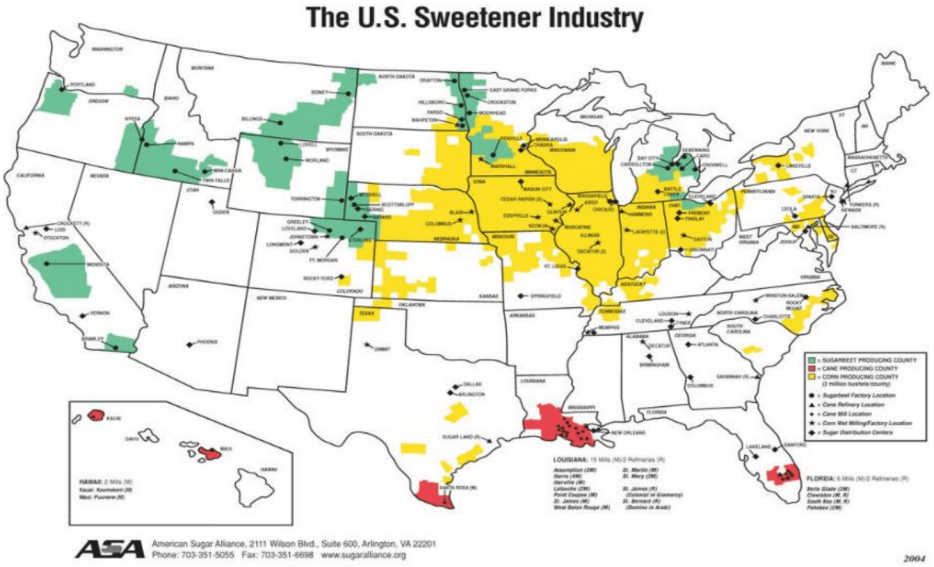



Figure 3-24: US Sugar Production Corn sweeteners are produced in the Midwest. Sugar Beets (green) are produced in California and elsewhere. Sugar cane is grown in Louisiana, Florida, Hawaii and Texas. Source: US Sugar Alliance

In addition to costing taxpayers billions of dollars, sugar subsidies and tariffs act to make cane sugar more expensive at the grocery store than it would be otherwise. Candy and soda manufacturers also pay higher prices for sugar because of these policies. As a result, many thousands of manufacturing jobs involving sugar (i.e., candy making) have left the US for foreign countries where sugar is cheaper. For example, in Mexico, where the industry is not subsidized or protected by tariffs, cane sugar costs about half of what it does in the US, so numerous candy factories have moved there. Brach's Confections and Kraft Foods have both moved candy manufacturing plants out of the US in recent years because of the high costs of cane sugar. Many of you have probably drunk a so-called Mexican Coke: a Coca-Cola produced in Mexico. Many cola aficionados prefer these because in Mexico Cokes are still made with cane sugar, rather than the cheaper HFCS used to make Coke at most US bottling plants.




Figure 3-25: Coca Cola bottles from Mexico. Soft drinks produced outside the US are more likely to contain cane sugar because those manufacturers outside the US may buy cheap cane sugar from Cuba and elsewhere. Flickr

While the US government drives up the price of granulated sugar, US farm policy simultaneously drives down the price of corn and products made from corn. In 2014, there were about 1.63 billion bushels of corn left unsold at harvest. So abundant and cheap is field corn, that Americans are wasteful with it. About half of the yearly US crop of field corn is used (along with excess sugar cane bought by the government) to make biofuels, particularly ethanol fuel that is blended with gasoline. Much of the additional corn crop (both grain and silage) is used to feed cattle. Rather than feeding cattle grass and/or hay, which is their natural diet, we feed them corn because it is cheaper and fattens animals quickly. Chickens and hogs are also fed corn. The government even tries to get rid of corn by manipulating the definition of what counts as "healthy" in school lunches. In 2011, the US Congress famously declared pizza sauce a "vegetable", over the objections of health advocates in an effort to help specific agribusiness interests.

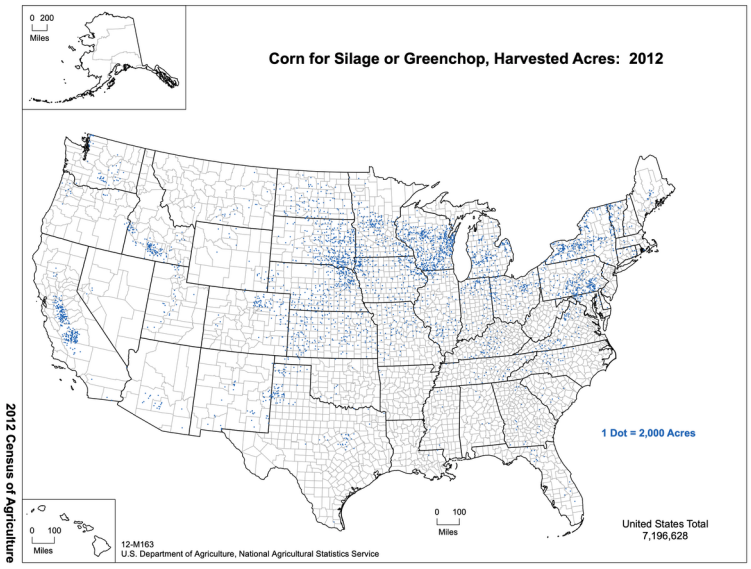



Figure 3-26 US Map - Each point on this map represents 2,000 acres of corn grown for silage. Why might so many dots appear in Wisconsin? Source: USDA

Government policies make corn-based products cheaper than they would be in a free-market environment. Farmers growing fruits and vegetables are subsidized so those products are relatively more expensive. The differential government subsidies help explain why it's a lot cheaper to buy a burger combo than a green salad in most places.




Figure 3-27: Northridge, CA - An advertisement for a burger combo meal at a campus fast food restaurant. A salad at a nearby restaurant on campus cost double on the day this photo was taken.

Poor people, whose health is often at risk from a variety of other factors, often become over-dependent on a diet of cheap, but fatty (corn-fed) meats, sugary processed foods, and starchy carbohydrates. Some scientists suspect that corn sweeteners play an additional role in the worldwide obesity crisis. They argue that although corn sugars taste similar to traditional sugars, HFCS alter human metabolisms, pointing to the fact that in the years since HFCS replaced cane sugar as the most common sweetener, a variety of obesity-related health issues have appeared in the US and elsewhere. Of course, the corn industry disputes these charges. Even if HFCS is not worse for you than granulated sugars, it is commonly accepted that diets high in fats and carbohydrates and low in vegetables invite a variety of chronic health issues, which in turn costs taxpayers even more via government-subsidized health care for the poor – yet another external cost perhaps overlooked by others.

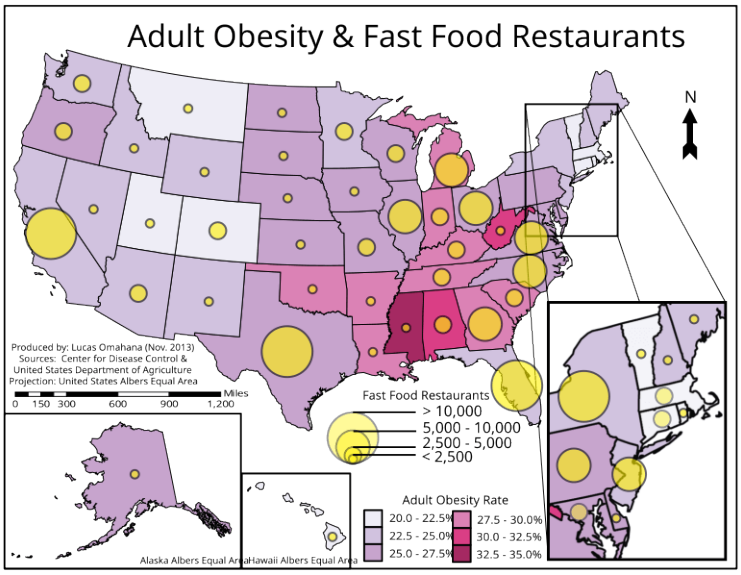



Figure 3-28: US Map - The number of fast food restaurants and the rate of adult obesity are depicted simultaneously on this map. What criticisms of this map would you provide? Source: Wikimedia.

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# 3.5: Agriculture around the World

Farming outside North America is different, but still subject to the same climatic constraints and market logics that shape agriculture in the US and Canada. Some foreign agribusinesses compete with farmers in North America, but the majority of farmers in the world engage only in **subsistence agriculture**, a type of farming designed to feed only the farmer's family, rather than the international marketplace. In some parts of Africa and Asia, over 80% of the population is engaged in subsistence farming. Still, food shortages are common in many parts of the world. By comparison, in the US, agricultural workers account for only 2% of the workforce, yet food is somewhat abundant, leaving the rest of the population to pursue other activities.

Agricultural success and failures are easy to find. Food shortages occur in many countries because the population of many regions has exceeded the local **carrying capacity** of the land. Unfortunately, too many people live in regions of the world where poor soils and harsh climates limit agricultural productivity. Despite harsh climates and poor soils, farmers in some developing countries, have developed highly efficient farming techniques uniquely adapted to local conditions. Agricultural economists have suggested that some techniques, including slash-and-burn, and wet rice farming are more productive per acre or unit of energy than the best US farms.

## Herding and Ranching

In the places where there is not enough rain or it's too cold for field crops, livestock production predominates. Many regions focus on cattle ranching as we do in the drylands of the US, but sheep ranching is more popular in regions where the British colonial influences linger. **Pastoralism** is a nomadic herding alternate to ranching occupying large stretches of our planet's lands ill-suited for crop agriculture. Nomadic herding requires those who tend herds of animals (e.g., cattle, sheep, reindeer, etc.) to move frequently in search of grazing pastureland. Without constant migration, herds may **overgraze** the land, causing livestock and people to starve. Pastoralism can only support a small population, so it is the world's most land-extensive form of agriculture.

## Wet Rice Cultivation



Figure 3-29: Cambodia. Agricultural laborers work to plant rice in a flooded "paddy". The water functions mainly to inhibit weed growth. Sometimes fish are intercropped in the field, helping control mosquitoes and providing protein.

Rice feeds more people on earth than any other crop. Billions rely on rice as the main staple of their diet. The great rice production areas of the world are in South and East Asia, where the seasonal monsoons and quality soils make it a logical agricultural option. Americans grow rice too, mainly on irrigated acreage in California and the Mississippi Delta, using advanced machinery, and even airplanes, for seeding. Not only is most Asian rice still planted, weeded, harvested, and processed by hand, but there is also a significant amount of manual labor involved in the maintenance of the rice paddies to keep water in the fields at an ideal depth to ensure that rice matures properly. Luckily, for those who depend on rice for sustenance, it is a wildly productive plant,

capable of massive caloric yields per acre. In the last two generations, thanks to scientific advancements in rice genetics and fertilizer science, known as the **Green Revolution**, rice farmers in Asia often harvest fields twice or even three times per year, vastly increasing yields over the levels known in the 1940s. Asian rice cultivation remains exceptionally labor-intensive and **land-intensive**– making it the opposite of nomadic pastoralism which requires few people and supports few.

Because rice provides only carbohydrates, people living in wet rice regions must supplement their diets to remain healthy. So many Asians, even those living in big cities, maintain intensively cultivated vegetable gardens. Paddy rice farmers also practice a type of **intercropping** by introducing fish and other forms of aquaculture into fields. By putting fish that eat bugs into rice paddies, farmers can reduce both pesticide and fertilizer costs while adding dietary protein and a commodity they can sell at local markets. As a bonus, fish also eat mosquito larvae, helping reduce the instance of mosquito-borne diseases, like malaria.

## RICE AND MATH SCORES

Paddy rice farming may also contribute to the success of Asians on math tests as well. At least that's the argument forwarded by Malcolm Gladwell a journalist who writes best-selling books that explain a variety of cultural phenomena with statistical analyses, and often, the spatial logic of geography. One theory Gladwell forwards is that Asians may be good at math because many Asian societies have long engaged in labor-intensive wet rice cultivation. The theory goes that over centuries wet rice cultivation taught Asians cultural lessons about the value of burdensome work in the rice paddies. The intense work ethic embraced by communities living in wet rice regions can be applied to other burdensome activities, like learning math. Alternatively, people from regions where agricultural abundance traditional comes without intense effort, it became easier to not recognize the relationship between effort and reward. This theory is an attempt to replace a racial or genetic narrative with a narrative about cultural practice. Geographers often argue that cultural and physical environments have a significant influence upon each other, but the specter of environmental determinism continues to prohibit many geographers from fully embracing ideas like Gladwell's. It's a reminder to keep in mind the logical pitfalls associated with the ecological fallacy.

# Slash-and-Burn – Shifting Cultivation

Very different from wet rice farming is **slash-and-burn agriculture**, also known as swidden or milpa farming. Whereas wet rice farming predominates in monsoonal climates, requires good soils, a substantial labor force, and is capable of feeding millions, slash and burn farming is practiced exclusively in equatorial rainforest climates where poor soils support only small populations.



Figure 3-30: Quiche Guatemala - Typical of the three sisters field cropping system. Corn (maize), beans and squash grow in this field. Note the way in which weeds have also grown along the walkway where squash leaves have not shaded them to death. Source: Wikimedia

Slash-and-burn is practiced in rainforest areas because soils there are **leached** by excessive rainfall, a process that removes soil nutrients essential for farming. To add nutrients, farmers cut down patches of forest, allow the felled vegetation to dry, then burn the logs and debris. The ashes of the burnt plants are worked into the depleted soil as fertilizer. Each burnt field remains somewhat fertile for a few years before the rains once again leach away soil nutrients. When soils grow infertile, farmers must

begin the process anew in a nearby field. Farmers must leave exhausted fields **fallow**, for several years so the forest can regrow. Eventually, farmers can return to the regrown patches of forest and begin the process once again. This type of farming requires much land, but luckily very little labor, so it is characterized as a **land rotation system** (rather than a crop rotation system), and it is an example of **land extensive** farming. Remarkably, because slash and burn farming requires so few laborers, and minimal effort to produce a crop, this kind of farming is characterized as exceptionally caloric efficient.

Slash and burn farming has also proven to be sustainable in locations where the population relying on it remains small. For thousands of years, people living in the rainforests of Asia, Africa, and Latin America used slash-and-burn agriculture without seriously threatening the ability of the fragile soils to produce food. However, explosive population growth in many of these regions threatens precious rainforest reserves as farmers burn ever larger patches of forest and shorten fallow intervals. Inga Alley Cropping, or planting crops between rows of nitrogen-fixing Inga trees, offers an intriguing alternative to slash and burn, that preserves forest cultures.



Figure 3-31: India – Farmers recently cleared this land for cropping. Done occasionally, it's OK, but population growth makes this practice unsustainable. Source: Wikimedia.

In the Americas, slash and burn farmers often plant within the same field the three sisters: corn, beans, and squash. These plants offer an ingenious solution to a variety of agricultural and dietary problems. Corn provides carbohydrates to the diet and supports bean plant vines. Beans provide protein to the diet, often deficient in poor regions of the world where fish and/or game are scarce. Beans also are nitrogen fixers, meaning they help fertilize the soil for the corn and squash. Vitamins and minerals are provided by the squash, and the broad leaves of squash plants help preserve soil moisture while discouraging weed growth. Some also believe that when intercropped (planted together in the same field), the three sisters create a sort of natural pesticide. After the harvest, farmers plow dying plants back into the ground to fertilize the poor soils.

## Plantation Agriculture

In many coastal regions of the developing world, especially where European colonial powers once ruled, **plantation agriculture** is the dominant style of farming. In this agricultural system, agricultural land is dedicated to growing cash crops, generally at the expense of staple crops. Some of the more popular plantation crops are bananas, cotton, tea, cacao trees, and coffee.

There are multiple, serious problems with the plantation agricultural systems, but most countries find it difficult to develop viable, profitable alternatives. Many countries in Africa, Asia, and Latin America rely on plantation-style agriculture because they have no other industry capable of earning much needed foreign currency like US Dollars or Euros. An over-reliance on cash crops can lead to food insecurity – or famine. When all the best farmlands in a country are planted with export-oriented cash crops, the production of food for local consumption is diminished. Secondly, many plantation regions are guilty of **monocropping**, the practice of relying on a single crop. Not only are monoculture economies vulnerable to crop failure (e.g., insect invasions, diseases, droughts, etc.), they can be devastated by unpredictable swings in market prices for their product. The US has regions where monoculture is common, but the US economy is diverse and can easily withstand the failure of a single crop or commodity market. Many developing economies do not have this luxury. If the market price for the main farm commodity falls, or a blight attacks the

main crop, the entire economy can be in trouble and the burden of such failures always falls on the poor, especially those working on plantations.

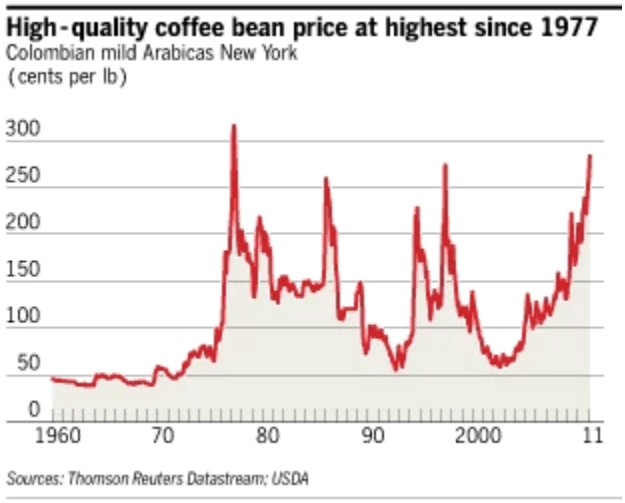



Figure 3-32: Coffee Prices, like many other agricultural commodities, are prone to dramatic changes in price, supply and demand. Unpredictable economic conditions are a result. Source: Financial Times.

Commodity prices can fall when too many competitors join a market, bloating the supply and crashing the price. Coffee, in particular, has seen wild price swings since the 1960s. One cause of the famous Latin American Debt Crisis of the 1980s was a collapse of export agricultural commodity prices at the same time as a spike in world oil prices that caused a global recession.

Plantation agriculture is also responsible for most of the nearly intractable **land tenure** problems that plague many countries engaged in plantation agriculture. During the 18$^{th}$ and 19$^{th}$ century, colonial powers like England and Spain robbed indigenous people of their land and forced them to work on plantations. Others became peasants, confined to marginal lands least desired by the colonial, landed elites. In many cases, families of elites and peasants continued in their roles for many generations, and in the process, created both a permanent underclass and a landed oligarchy. Violent clashes between socialist or communist land reform advocates and capitalists who favored the status quo erupted frequently during the 20$^{th}$ century, especially in Latin America. The economic hopelessness and violence that plantation agriculture spawned spurred migration. In Latin America, those fleeing plantation economies came to the United States, where opponents of land reform efforts in Latin America simultaneously oppose immigration from Latin America.

Because plantation agriculture is often highly competitive, and sometimes a highly profitable endeavor, efficiency is a paramount concern. Large plantation operations take advantage of **economies of scale** that small-hold farming cannot, so there is significant pressure from the market, and the agribusiness corporations who own large plantation, to ensure that massive farms continue to use the best farmlands in a country. In those rare instances where land reform has taken place, and highly productive agribusiness farmlands were redistributed to the poor; the export economy has faltered, and economic chaos ensued. Zimbabwe's land redistribution is the classic modern example.

## WE ARE THE WORLD




Figure 3-33: Philadelphia, PA. Live Aid was a significant cultural event raising awareness of African famine. Though money and awareness were raised, most involved failed to understand the economics and politics behind the famine. Source: Wikimedia

In the mid-1980s, a drought, war, and bad governmental policies in the Horn of Africa led to one of the great humanitarian crises of the modern era. Famine struck Eritrea and Ethiopia causing an estimated half-million deaths. A documentary news crew broadcast the tragedy back to the rest of the world, shocking many into action. Two of the better-known charity relief efforts came from pop and rock musicians. Live Aid, Band Aid and USA for Africa were efforts launched by famous music acts to raise money and awareness of the crisis. Donations poured in because people believed that the crisis was largely the result of a natural disaster. Few knew that during this great famine, Ethiopia remained a net exporter of food. Grain and other agricultural commodities were being shipped from Ethiopia around the world, often as animal feed, while thousands within the country starved. Transportation and safety issues were partly to blame, but in the end, the Ethiopian famine was caused by a land tenure crisis and poverty as much as drought and desertification. When poor people can't grow food, they often cannot buy food either. The aid money that poured in did help some in the region, but corrupt local officials likely siphoned off much of the food aid intended for the truly needy.

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# 3.6: Agricultural Landscapes

The United States has more arable land than any other country. If you drove around the US, about half of what you would see out your window would be farmland of some sort. About 400 million acres within the US are planted in crops, and over 600 million are used to graze livestock. Those numbers have been shrinking by about 3,000 acres per year, as suburbs and commercial developments gobble up farmland (EPA). Still, farming remains extremely important both as an economic activity and as a hidden element in our daily existence. So, reading the landscapes of farming is a valuable skill for the well-educated citizen.

## Cadastral Patterns

If you're flying over the US, looking out the window of the plane and paying attention, you'll notice a variety of **cadastral patterns**, which reflect are the various systems the government has used to divide the land among people. Cadastral systems are most evident in farm country, but they also affect the division of land in cities. The patterns created by the various land division schemes both reflect and shape our politics, culture, and economy. There are several cadastral systems used worldwide, but in the US, only a few merit our attention.

### Metes and Bounds

English settlers introduced the metes and bounds cadastral system during the colonial period. Generally, those who wished to obtain land during the 17th and 18th century would scout a piece of unclaimed land, perhaps near the town where they lived or on the frontier, and upon finding a suitable location they would hire a surveyor to inspect the land and write a description of the desired plot of land. This description constituted a legal claim to the land that was in turn registered with government authorities. The shape and size of the land parcels were quite random, often described using very local landmarks, like trees, boulders, or streams. Here's an example:

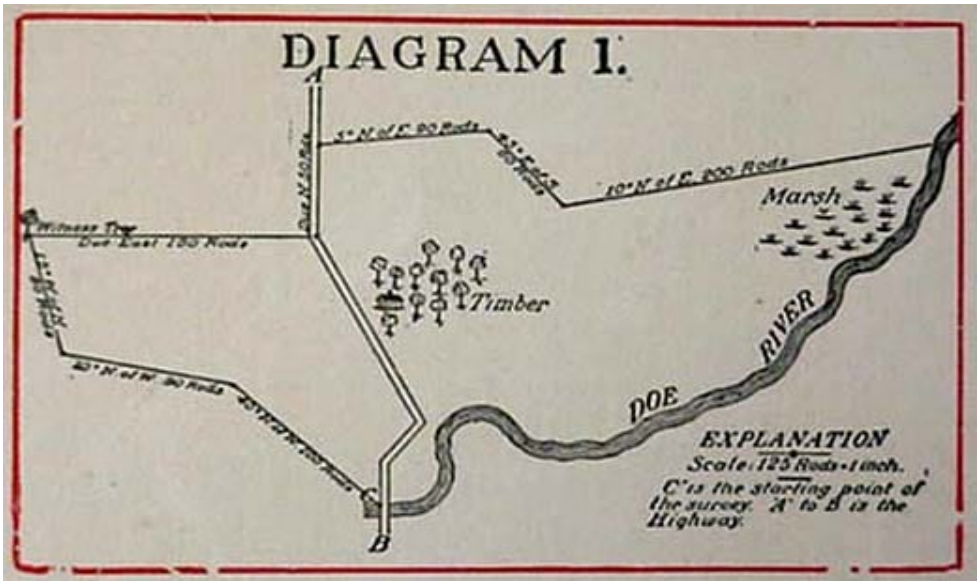



Figure 3-34: Diagram of the land parcel described by the passage quoted below. Note the highly irregular outline. Source: Virtual Museum of Surveying.

Beginning at a stone on the Bank of Doe River, at a point where the highway from A. to B. crosses said river (see point marked C. on Diagram 1); thence 40 degrees North of West 100 rods to a large stump; then 10 degrees North of West 90 rods; thence 15 degrees West of North 80 rods to an oak tree (see Witness Tree on Diagram 1); then due East 150 rods to the highway; thence following the course of the highway 50 rods due North; then 5 degrees North of East 90 rods; thence 45 degrees of South 60 rods; thence 10 degrees North of East 200 rods to the Doe River; thence following the course of the river Southwesterly to the place of beginning. Source: surveyhistory.org

In the regions of the country using metes and bounds, local property maps eventually came to look like a huge jigsaw puzzle, as waves of settlers made claims to unoccupied plots of land. The irregularity of this land division system created numerous problems, not the least of which was the difficulty in determining property lines demarcated by moveable objects like trees, rocks, and streams.

Metes and bounds also contributed to an unfair distribution of quality farmland. People that arrived early to a location on the frontier often carved out parcels of high-quality land for themselves, leaving poorer quality land for latecomers. Often, those who carved out choice parcels were wealthy land speculators, the surveyors themselves, or politically well-connected people. Once in possession of the best lands, they stood to dominate local politics and the local economy. Many land speculators, made fortunes buying up choice lands early and cheaply, then selling them to those arriving later the frontier.

Today, so-called “house flippers” engage a similar business model. People who arrived late to the frontier often found available parcels of land were of poor quality and expensive. In some places, this exacerbated class distinctions because the quality of farm fields varied greatly. Colonial tobacco farming regions were especially vulnerable to this condition because tobacco plants quickly exhaust the soil. Farmers with poor soil and without adequate farmlands to leave some fields fallow would soon face bankruptcy, only to be bought out by wealthier neighbors who were bought, or inherited, prime farmlands earlier.



Figure 3-35: Ross County, Ohio. The region west of the Scioto River is the Virginia Military District. It uses metes and bounds. East of the river, the township and range system is used. Note the stark difference in pattern. Think about the implications these patterns have upon the culture, politics and economics of each region. Data courtesy of Ross County GIS (Greg Rouse)

## Township and Range –Grid Squares

Thomas Jefferson recognized several problems with the metes and bounds system, so he introduced the township and range cadastral system, officially known as the Public Land Survey System, as a logical, well-ordered replacement for metes and bounds that divided land using a rectangular grid system. Jefferson hoped that if each farm family moving to the frontier could buy a farmstead of roughly the same size as all his/her neighbors, as long as the quality of that land was reasonably similar, a robust middle class of yeoman farmers would emerge, invigorating democracy.

Deeply in debt following the War for Independence, but flush with land acquired from the British in the war, the continental congress passed into law Jefferson’s idea as the Land Ordinance of 1785. This law has since regulated the sale of most of American land west of the Appalachian Mountains. It allowed homesteaders to buy land without seeing it first, did not require complex surveying and description, and sped up the settlement of the frontier.

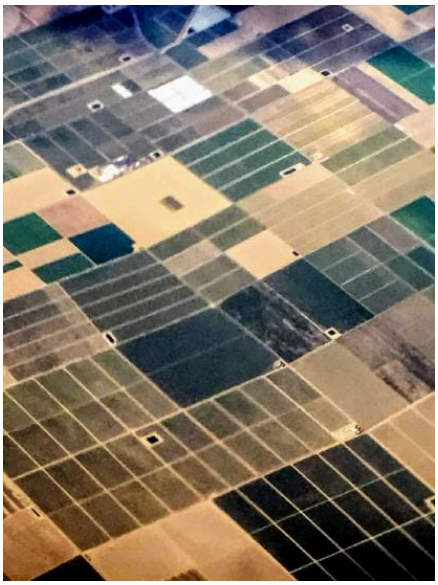


Figure 3-36: San Joaquin Valley, CA. Multiple political ideas and government policies are evident on this farming landscape in arid California.

The basic unit of division in the grid system is the township, a square parcel of land six miles wide. Townships were sub-divided first into 36 one-square-mile parcels called sections. Square mile sections (640 acres) were subdivided further into quarter sections (160 acres) and quarter-quarter sections of forty acres. Homesteaders generally purchased quarter sections where rain was plentiful. But where the climate is drier, and ranching displaced farming, larger parcels were more common.

The grid square dominates the American landscape. It's hard to overstate the impact of this system. Roads, farmlands, houses, property lines, telephone poles are just but a few items on the landscape locked onto "the grid". Even the room you're in now, along with your desk, couch, or chest of drawers, is probably aligned with Jefferson's grid. The brilliant landscape essayist JB Jackson argued that the grid is a grand symbol of the kind of thinking that characterized the **Age of Enlightenment** while also affecting the cultural practices in regions dominated by the grid, perhaps imparting a sense of order and conformity to communities locked into the grid. Even the personal insult "square" that refers to persons who are orderly and conformist may be tied to the pervasiveness of the grid.

In much of New England, the land was divided very differently. Colonial-era communal-style agricultural villages were centered on village greens. These were abandoned in the Midwest and far west, and communal agriculture gave way to independent farming – a type of individualism encouraged by the grid. The implications are profound in terms of the political and economic philosophies characterizing modern American politics. Chapter 8 explores more deeply the competing political philosophies deeply associated with the various US cadastral systems.

Jefferson's cultural and political goals have been mostly realized. Democracy did indeed flourish, and to this day, the region of the country with the most equitable distribution of wealth remains where the township and range system created innumerable farmsteads of roughly equal size and equal quality. Interestingly, the Gini coefficient, a measure of income equality, is generally lowest in the grid-dominated states of the Midwest where the middle class remains large.



Figure 3-37: Fayette County, Ohio - Section 16 in many townships was given to the local the school district to generate school funding and to provide space for a local school. Abandoned one-room school houses like this dot the rural landscapes of the Midwest.

Perhaps the only disadvantage to the grid system is that it seems to encourage farmers to plow their fields in straight lines, regardless of the topography of the fields, a practice that increases soil erosion and water loss, compared to the more eco-friendly contour plowing practiced more frequently by farmers living on metes and bounds lands in the East.

## Long Lots

Colonists from other parts of Europe, especially the French, introduced the **Long Lots** cadastral system. Derived from the seigneurial land tenure system used by the French in their colonial holdings (mostly in what is now Canada), it was replicated in elsewhere in North America where French settlement occurred, most notably Louisiana, but you can find evidence of Long Lots near other French settlements like St. Louis, Detroit, and Vincennes, Indiana. Long lots are narrow parcels of land, typically one-tenth as wide as long, with one of the narrow ends generally bordering a transportation corridor, generally a river or stream.



Saint James Parish, LA. Long lot cadastral patterns create numerous ribbon farms along the Mississippi River. This land division system profoundly affects the road network, housing and perhaps even social and cultural systems. Note the equal access to the river (and now highway). Data courtesy of

St. James Parish GIS

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The political implications of long lots are like Jefferson's grid because each property owner had a roughly equal chance to succeed in the regional farming economy. Access to transportation (e.g., a river) was a crucial element for farmers hoping to sell their crops. Dividing land in this fashion also insured farmers reasonably equal access to quality farmland. Soil characteristics near rivers differ by distance from the riverbank. Sandier soils are often found near the river. High-quality loamy soils are found at an intermediate distance from the river, and in the bottomlands more distant from the riverbank, less desirable, clay-rich soils are more common. Farmers in this system commonly arranged farm activities to mimic the spatial logic of Von Thünen's model presented earlier in the chapter. Can you apply the logic of the Von Thünen model to a long lot? Long lots create cultural conditions as well. Because families built their houses near the river, neighbors lived close to one another. The French also divided family holdings evenly among all children (or just males) upon the death of a family elder, resulting in the creation of additional narrow strip farms, each with a house at the riverfront after each successive generation. You'll remember from Chapter 2, that shotgun houses may have become more popular in part because they fit nicely on long lot style land parcels.

## Spanish Land Grants

In the American Southwest, where vast areas were once governed by Spain (1521-1821) and later Mexico (1820-1846). Spain and Mexico both advanced land distribution policies that created massive land grants that are still evident on the landscape, especially in California.

Spanish (like the French) families were less likely to practice primogeniture, the tradition in which families bequeath all their lands to the oldest son. The Spanish and French were more likely to divide property among children. As a result, there was a smaller pool of landless people willing to move to the Americas from those areas. The British, as well as some other parts of Northern Europe, did practice primogeniture, which encouraged vast numbers of "second sons" to move to North America. Without an excess of landless young men and/or significant religious minorities, the Spanish had some trouble getting Spaniards to colonize their lands in the Americas.



Figure 3-39: Solvang, CA - Mission Santa Ynez once controlled all the lands in this photo, a massive land grant from the King of Spain. Soon after the fall of the Spanish crown, these lands were acquired by wealthy elites (Californios). Land tenure issues would likely plague California today, like they do in Latin America, had the US not taken California from Mexico by force in 1848 and instituted metes and bounds.

A lack of willing migrants and a very difficult path to the Pacific Coast, combined with challenging farming conditions discouraged European settlement of the western margins of North America for hundreds of years. To entice settlement of their claims in the Americas Spanish Kings made significant land grants available to those willing to move to "New Spain", especially if the person was a political ally of the king. In California, about 30 grants were made by the Spanish crown, but corrupt and weak Mexican governors granted many thousands of acres in land grants to political allies, friends, and family members and the process created a huge network of plantation-style ranchos across California during the Mexican era.

A feudal style land tenure system evolved in California during the Mexican era, characterized by an exceptional concentration of land, wealth, and power into the hands of a few dozen families, almost all of whom operated massive cattle ranches, employing Indians and mestizo peasant-laborers. Dozens of huge ranchos remained in the late 19$^{th}$ century. Some mimicked the large agricultural plantations of the Deep South – but without the enslaved labor force. However, after the Mexican-American War(1848), most large ranchos were broken up, because either the US government did not recognize the legitimacy of the property claims, or powerful American interests simply wanted to steal the land – which had been previously stolen from Native Californians. Real estate developers made fortunes by buying well-placed ranchos and turning them into thousands of small suburban home lots. A few have managed to survive, sometimes as state parks or wilderness areas, like the Ahmanson Ranch, at the western border of Los Angeles County, which was formerly part of the 113,000-acre Rancho San Jose de Gracias de Simi.

Where the Spanish system survived in Latin America, the maldistribution of land had profound effects on the region's political, economic, and social structures. Where agriculture is the predominant industry, land equals wealth. Therefore, where large percentages of the land were given to a few powerful families, oligarchies developed alongside a disenfranchised peasantry.




Figure 3-40: San Fernando Valley, Los Angeles, CA. The Spanish and Mexican governments made many very large land grants to powerful interests. For example, the El Encino ranch on this map was 4,460 acres. After the US acquired California, the US government allowed homesteaders access to the small 40-acre plots, but many American claimed more in the West.

The Spanish Land Grant system worked well to advance plantation economic systems discussed earlier in the text and together created enormous hardship for many people in Latin America. Democracy, urbanization, and industrialization diminished the effects of the Spanish Land Grant system in the US, but inequality remains high in regions of the country where this system was predominant.

## Farm Buildings

Agricultural buildings provide clues about past and modern farm systems. Barns are the most obvious element of the agricultural landscape, but fencing, barbed wire, grain silos, and other outbuildings are sources of landscape information, readable by the trained geographer. As you ride in the agricultural countryside, try to understand the narrative evident in the landscape.

Consider for example the different styles of barns found across the United States. Barns can be general-purpose structures or may be built specifically for farmers engaged in a specific type of agriculture. The style of the barn and agricultural outbuildings sometimes reflect the ethnic groups that settled a region and simultaneously provide clues to the political, cultural, and religious environment in which barns were built. For example, the tobacco barn below serves as a reminder to passers-by of the economics of tobacco farming, slavery, inequality, and soil exhaustion. If you were to see Bavarian hay barns dotting the American roadside, you could expect the local culture to exhibit many other cultural traits from Germany.



Figure 3-42: Green County, TN. This tobacco barn is a good example of a purpose-built barn. The crop hangs from many poles arranged in the well-ventilated barn to allow proper drying before the product is shipped for processing. Source: Wikimedia.



Figure 3-43: Mittenwald, Germany. In the Bavarian Alps, small hay barns, made of locally available logs, dot the landscape and provide a due to the folk heritage of the community here. Similar structures were introduced to the American landscape, but are rare in the US today.



Figure 3-44: US Highway 20, New York: Dairy Barns such as this one dot the landscape of the Northeastern US. Note the silos for cattle feed in the winter months. Nearlly every building is connected to the next. How might that be an adaptation to the local climate?

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# 4: HEALTH AND DISEASE

**Everybody gets sick and everyone eventually dies but, where you live is an important factor in how often and from what causes your health will suffer. Geography offers a powerful set of tools to investigate the spatial patterns of health and health care.**

Medical Geography, also sometimes called Health Geography, is a vibrant subfield of the discipline. Great variations are evident in the patterns of both diseases and health care at many scales. Geographers use spatial analyses to figure out why people get sick. Geographers can also analyze patterns of health care, to measure the effectiveness of treatments. This chapter explores the patterns of health, disease, and treatment while presenting examples of how geographers use their epistemology, methodologies, and communication strategies in the fight to maintain the health and well-being of individuals and communities both in the United States and elsewhere.

The application of geographic techniques in the quest to address health crises is one of the earliest and most famous uses of spatial statistics to solve a pressing medical problem. In London in 1854, there was a severe outbreak of cholera, a gastrointestinal illness generally caused by drinking water contaminated by human feces. Back then, nobody quite understood that microscopic organisms, like bacteria, were capable of causing such violent illnesses. Instead, most medical experts believed that a kind of poisonous air, called miasma, was responsible for infectious diseases like cholera and the plague. The fear of miasma drove thousands, especially the wealthy, to seek healthy air in mountain or coastal resort towns. John Snow, a physician from London, worked in a neighborhood where there were many cases of cholera during the 1854 outbreak. Snow suspected that the miasmic air could not be the cause of cholera because other neighborhoods had similar air quality characteristics, but not the same rate of cholera. Instead, Snow guessed that the water supply was somehow contaminated, although he could not identify the "poison" in the water, even with a microscope. To test his theory, Snow first made a mental map of the locations where people had contracted cholera. He realized that cholera cases were spatially clustered around one public water well. Snow then hypothesized that if the handle to the water pump at the geographic center of the cholera outbreak was removed, then neighborhood residents would be forced to get water elsewhere, and the neighborhood incidence of cholera would subside. To test his hypothesis, Snow convinced local authorities to remove the well's pump handle, and indeed the cholera epidemic lessened. Snow later made a physical point map indicating the location of the cholera patients' residences and the poisoned well. Snow's effort can be quickly replicated today using GIS and the results of simple statistical analyses of Snow's data points to the remarkable accuracy of his initial hypothesis. More importantly, Snow's map overturned centuries of bad science on disease while paving the way for the adoption of the germ theory of disease that is widely accepted today.

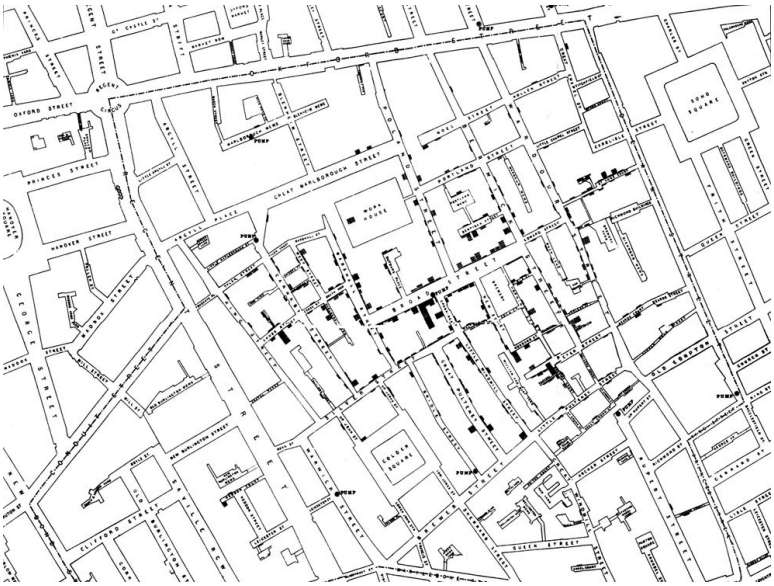


Figure 4-1: Lithographic Map - John Snow mapped locations where cholera victims lived in London to isolate the source of the cause of the disease Image Source: Wikimedia. Link: Interactive Map.



Figure 4-2: London, England. This memorial water pump commemorates John Snow's scientific breakthrough in the diagnosis of Cholera. Note: the missing pump handle. Wikimedia

Though cholera still affects several million people per year, causing over 100,000 deaths worldwide, it is no longer the threat it once was, thanks in large part to advancements in basic water sanitation technology. Still, millions of people in the developing world have poor access to clean drinking water. As a result, water-born illnesses like cholera kill many thousands, especially children, through dehydration caused by diarrhea and vomiting.


4.1: Health Metrics

4.2: Geography of Disease

4.3: Geography of Care

4.4: Regional Variations in Health Care



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# 4.1: Health Metrics

How healthy people are in a country, a state, or neighborhood is both critical and complicated. There are various measures of well-being called health metrics, that one could use to compare the physical and/or emotional well-being of persons and/or groups. A health metric that combines several measures known as a health index is probably the most useful type of health metric for a group of people. Experts disagree though on which factors are most important to include in a health index, who should be included in a health index, and what sort of other factors (like poverty or war) should be included in a health index.

## Infant Mortality Rate

One of the most useful health metrics is **Infant Mortality Rate** (**IMR**), which is a count of the number of children who die during their first year of life per 1,000 live births in that region.

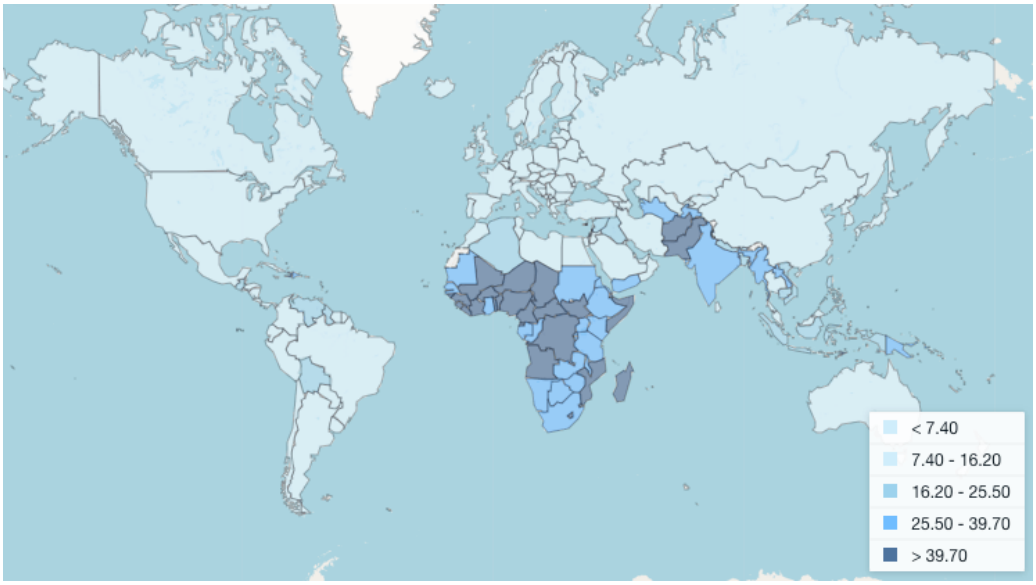



Figure 4-3: World Map - Infant Mortality Rate. Sub-Saharan Africa has rates ten times that found in the developed world. Source: World Bank.
** Interactive Map

Global disparities in IMR are substantial. Much of the variation in infant mortality can be traced to poverty, and the various problems associated with being poor, especially malnutrition. Other factors, including disease, lack of access to quality health care, and unsanitary living conditions also contribute to poor survival rates for infants. For these reasons, the infant mortality rate is an excellent indicator of the overall health of a population.

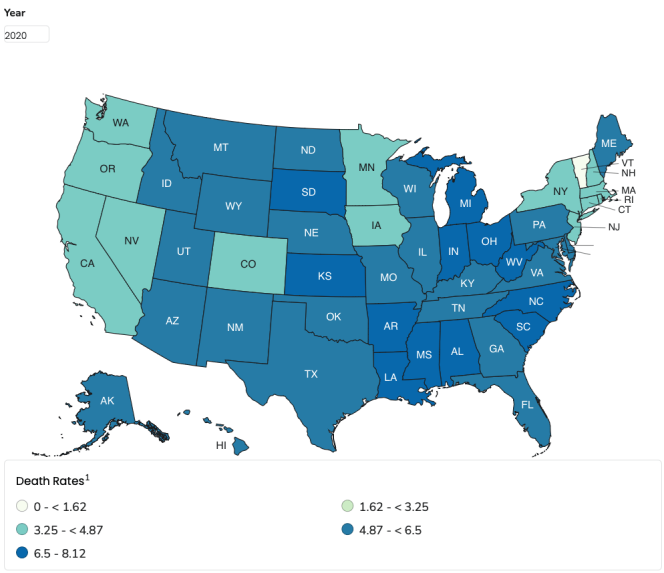



Figure 4-4: US Map - The Infant Mortality Rate in the United States is twice as high in Mississippi than it is in New Hampshire. Source:

CDC Interactive Map

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Infant mortality rates in the United States are low on average. They should be in the country that spends more on health care by a wide margin than any other country in the world. However, despite the extremely high medical costs in the US, the IMR for American babies is three times higher (6 vs 2 per 1000) than it is for babies born in Finland or Japan. Shockingly, the American IMR is also higher than it is in Botswana, Lebanon, and Cuba. The reason for the high IMR in the US is complex, but poverty and the peculiar American health care system are major factors. The role of women in society also affects a country's IMR. That piece of the puzzle is explored later in the chapter on gender.

The map of IMR by American states makes it evident that poverty, ethnicity, and the local political climate are key predictors of infant health in the US. Babies born in liberal, white and prosperous Vermont are half as likely to die as those born in states with many poor, minority and politically conservative voters – like Mississippi and Alabama. Studies show that the problem lies not so much in the hospital care provided babies but in the 10 months or so after babies come home from the hospital. It is during these later months that the health care system breaks down for infants from poor families, especially if their parents are African-American. The world map of infant mortality shows this is not just a matter of poverty or ethnicity. Cuba, for example, has much less wealth than the US, and a higher percentage of people of color, but the Cuban government's willingness to deliver quality, cheap, accessible healthcare for everyone keeps their IMR lower than United States' IMR.

## Life Expectancy

Like IMR, **life expectancy** is a useful indicator of the overall health of a population. This metric is an estimate of how long a person is expected to live on the day they were born. Calculations are largely based on observed death rates, plus additional considerations. The life expectancy of any group of people can be greatly affected by things like war, or the outbreak of diseases. In Africa, for example, after years of improvement, the life expectancy recently stagnated as AIDS swept across the continent. Iraq and Syria have seen life expectancy downgraded in recent years as wars in the region continue indefinitely.

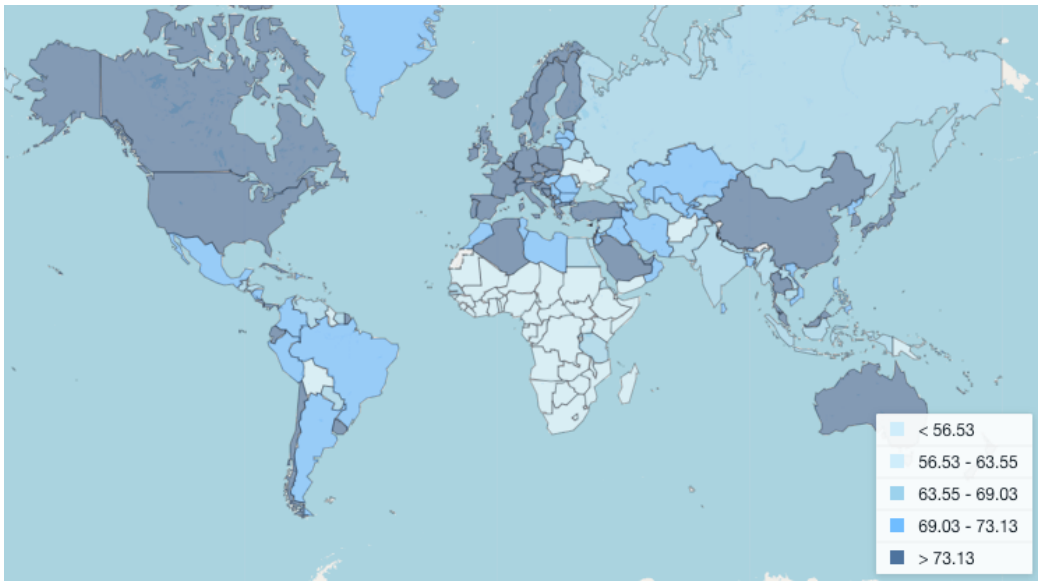



Figure 4-5: World Map - Life expectancy ranges from a low of less than 45 years in parts of Africa to 82.5 in Japan. Source: World Bank. Interactive Map

In the United States, babies born today can expect to live to be about 79 years old. Again, this isn't great considering that life expectancy generally is a product of national wealth and health care expenditure. Almost every developed country in the world and even some developing nations (Chile, Cuba, Costa Rica, e.g.) better life expectancies than Americans. Depressingly, in recent years, life expectancy in the US has gone down which indicates troubling trends in our society. Rising poverty and associated lifestyles are generally cited as reasons for the shrinking life span in the US.

The geography of poverty, government policies, and cultural practices all affect longevity. In McDowell County, West Virginia, where Americans have the shortest life expectancy (76.5 males; 81.2 females), you'll find that their median income is around $25,000 a year, about 20% don't have health insurance, few people complete college, over 16% suffer from diabetes, and over 35% of adults smoke. Even the homicide rate is exceptionally high McDowell County. As a result, babies born in wealthy and health-conscious Marin County, California can expect to live nearly 15 years longer than babies born in McDowell County, West Virginia.

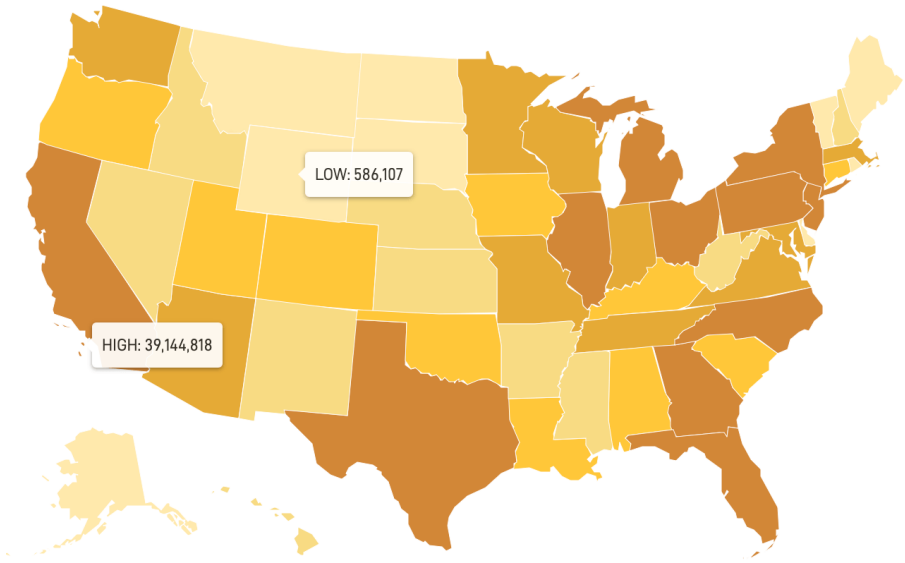



Figure 4-6: US Map - Life expectancy in Mississippi is 75 years, but in Hawaii, it is over 81. Substantial variation exists within states too. Poverty and ethnicity are key causal variables in the differences. Source: Measure of America/CDC Interactive Map

Ethnicity plays an important role in health too, but it appears to be less important than geography. For example, Asians, perhaps because of their dietary practices, better access to health care, and maybe genetics, can expect to live about 13 years longer

than African-Americans in general. When you combine ethnicity, gender, and location, the difference becomes even greater. For example, African American boys born in Washington DC today have a life expectancy of only 66.5 years, whereas Asian-American girls born in Boston are expected to live, on average, to almost 92! On the other hand, African-American boys born today in Minnesota may expect to live to be about 80 years old on average, which is about the same Asian-American boys born in Hawaii. The point is that lifestyles, dietary practices are affected by both ethnicity and geography. Indeed, what may seem a common "ethnic behavior" in one part of the US may not be so common among the same ethnicity in another part of the country.

# Physical and Mental Health

Another way of gathering data about the overall health and well-being of an individual or a group of people is to survey them. Geographers use survey methods to gather information about a wide range of topics. Well done surveys are complex to plan, perform, and analyze; so,researchers must exercise extreme caution when using survey data, especially when the survey data was collected by others. The world's largest telephone survey is done by the Centers for Disease Control and Prevention (CDC) with the aid of local health departments. This survey is called the Behavioral Risk Factor Surveillance System (BRFSS) and it provides a substantial amount of quality data about the health and health care of Americans. Several questions are useful in measuring the quality of life of people around the US. The CDC makes this data available in a variety of formats, including format useable in a GIS, allowing health geographers easy access to exceptionally high-quality data sets necessary to solve numerous health-related problems.

## Healthy Days

A couple of the most basic questions asked by the CDC on the BRFSS are "Would you say that in general your health is _____? (Excellent, very good, good, fair, poor) and "How many days in the past 30 days was your physical health poor?" (numeric answer, none, not sure, refuse to answer). Similar questions are asked about mental health. The answers to these questions can be mapped at various scales (county, city, state, etc.) to paint a compelling picture of a region's health. Hundreds of researchers, and dozens of organizations working to improve the health and well-being of communities, use this data.




Figure 4-7: US Map - Eastern Appalachia and parts of the South report five times as many poor health days as some counties in the Upper Midwest. What are the costs to employers and taxpayers? Source: County Health Ranking – Interactive map

Survey results indicate a wide variation in the number of days people are sick in the US. In some places, people on average have less than two "sick days" per month. In other places, especially the Deep South and Appalachia, people are sick, on average, about seven days per month. While a few days difference may not seem noteworthy, multiplied by millions of people that live in most states, it is a huge difference. Chronic illness has significant implications for the economy of a region at the very least. Imagine for a moment how a company looking to open a factory in Appalachia would evaluate the health indicator data for a county where people are sick about three months out of every year? How much money would the factory stand to lose in a location like this? The unhealthy conditions of Americans living in poverty are not only a humanitarian concern but a significant economic drain on the entire US economy because the poor health of Americans in other regions of the country is often passed on to the rest of the country via external costs -like extra taxes and increased health insurance costs.

## Disability

One of the key outcomes of poor health is disability. Over 10 million Americans were receiving disability payments at the end of 2017. On average, the monthly benefit paid to claimants was around $1,200. The program began in 1957, but expanded rapidly in the 1990s after cuts to other welfare payments eliminated cash payments to the able-bodied poor, many of whom were economically struggling parents of small children.




Figure 4-8: US Map - Many poor counties have over 10% of their population receiving disability payments from the US government. Age is partly a factor, but unhealthy lifestyles cost American taxpayers billions annually, while contributing to a cycle of poverty. Source: Social Security

Unhealthy lifestyles, dangerous working conditions, risky cultural behaviors, and bad luck all increase the likelihood of individuals becoming dependent on the government for support. By mapping these individuals as groups, we can see very uneven patterns of disability across the US, which strongly suggests that both cultural practices and economic conditions are important causal variables in the creation of a disability crisis in the United States. Employment in mining and factory work seems one predictor of worker disability, which makes sense because those jobs are often physically demanding and sometimes dangerous. A lack of economic diversity in many of these same locations means that few other job opportunities are available for those with only a physical disability. This means, that even if you were injured while working in one job, in some parts of the country, you could find another job where your physical condition didn't matter. In some parts of the US, because the types of jobs are limited to hard physical labor, an inability to lift heavy objects (for example) would keep you from finding almost any job.

The geographic pattern evident in the map of disability welfare differs wildly from media stereotypes about persons receiving government welfare. Mapping disability coverage offers a counterbalance to a common, misguided stereotype of the urban **welfare queen**, the politically charged symbol of those who abuse government assistance, generally assigned to women of color. The map of disability payment hotspots shows that, in reality, welfare payments go to communities that are overwhelmingly rural, and predominantly white. While it is difficult to estimate the percent of fraudulent disability claims, the intense clustering visible on the map invites further research into why some counties have so many disabled people. It is statistically unlikely that nearly one-third of any region's total population could be physically disabled by workplace injuries, even though the demographic profiles of poor, rural counties skew toward the elderly and ill-prepared to survive with a disability. To account for this reality, geographers **age-adjust** data to help account for the fact that older people are more likely to suffer a workplace injury from which they cannot recover. People without a high school diploma may also be declared disabled by an injury that would not qualify as an injury for a person with a college degree. It is reasonable to assume serious injuries should occur in a somewhat random pattern around the US, producing a somewhat random pattern to the disability map as well. Instead, there is a definite clustering pattern to disability claims in the US, which suggests fraud -which is very difficult to prove. Closely associated with the disability epidemic in the United States is burgeoning opioid drug addiction. Many of the same regions of the US where physical disabilities are very common also suffer from widespread opioid addiction. This crisis is explored more fully in the chapter on crime and punishment.

## Autism

One of the disabilities recognized by the US government is Autism, which is, in reality, a group of related conditions characterized by a range of cognitive and behavioral impairment levels, more properly known as Autism Spectrum Disorders (ASDs). ASDs are among the fastest-growing health concerns worldwide. The cause or causes of ASDs is the subject of exceptionally intense debate and millions of hours of research. Nobody yet knows for sure what causes ASD.




Figure 4-9: Map: Autism Cluster in wealthy, northwestern Los Angeles, County. Source: UC Davis Health System

Generally, researchers think that genetics is the primary factor in ASD, but determining causality has proven to be very complex. Partly this is because the symptoms themselves are hard to identify, but it's also because of the geography of autism. Medical geographers and spatial epidemiologists are heavily involved in autism research because autism clusters are reasonably easy to identify on a map. In greater Los Angeles, for example, unusually high rates of autism appear in Torrance, Beverly Hills, Van Nuys, Calabasas, Laguna Beach, and Mission Viejo. Of course, Los Angeles has a well-earned reputation for air pollution, leading some to believe that exposure to airborne toxins is a causal variable. Indeed, there is some evidence to suggest that environmental exposures to various pollutants may function as triggers for the condition, but definitive answers have proven elusive. What is clear is the effect of the neighborhood on the diagnosis of ASD. Most of the autism clusters in greater Los Angeles are in wealthy neighborhoods; so geographers suspect that the disorder's dramatic rise in upscale areas is likely a product of improving diagnostic capabilities among medical professionals serving the upper-middle class, rather than evidence of a real increase in ASD. In poorer areas, where environmental conditions are generally far worse, parents, families, and school officials appear to misdiagnose ASD or overlook symptoms that are commonly noticed in wealthier communities. Ethnicity and economics may also affect the likelihood that parents will acknowledge or accept a diagnosis of ASD for their child. The uneven spatial pattern of diagnoses makes the task of identifying the root causes harder because the known pool of persons with diagnosed with ASD is an **unrepresentative sample** of the true ASD population.

## Vaccinations

The most controversial topic surrounding ASD has been the popular, but the scientifically unproven, belief that vaccinations cause ASDs. These unfounded fears keep many parents from vaccinating children against common, and sometimes deadly, diseases. As a result, a handful of diseases thought extinct have re-established themselves in the US.

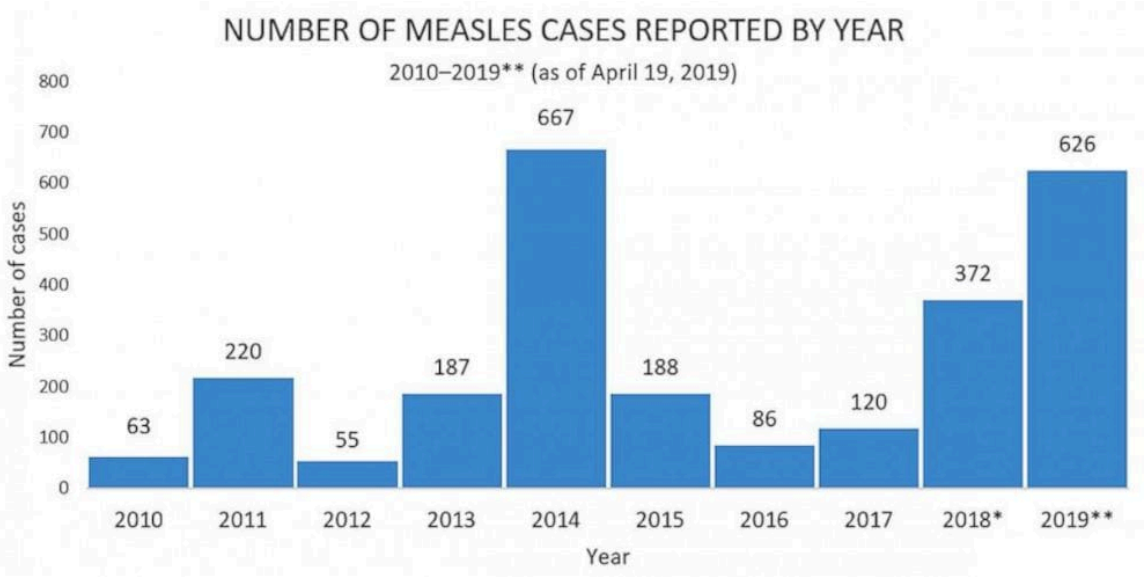



Figure 4-10: Infographic - In recent years, measles, a disease that was once declared eliminated in 2000 has re-established itself. Most people who get measles were not vaccinated, so exposure from outside sources spreads rapidly. Source: CDC

Measles is a classic example. In the year 2000, the CDC declared measles "eliminated" from the US because no Americans had the disease. In the 1960s, millions were infected with measles and hundreds died every year. Today, Americans not vaccinated against measles remain at risk when traveling internationally, or when exposed to international visitors, or immigrants from affected regions. A significant outbreak of measles occurred in Southern California during early 2015, after a tourist with measles visited Disneyland in Anaheim and it spread among unvaccinated children in the region. In 2019, the worst outbreak in many years sent hundreds to hospitals across the country. The worst outbreak was probably in New York City's Orthodox Jewish community, where exposure to people from Israel is high and vaccination rates are relatively low.

Pertussis, better known as "whooping cough" is another disease that has re-emerged in recent years thanks to vaccination paranoia. In recent years, the number of pertussis cases in the US has risen to levels not seen since the 1940s. By mapping pertussis rates by California's county shows an interesting pattern. Higher rates of pertussis are evident in parts of California with many Latin American migrants. Latinos had by far the highest rate of whooping cough at 174 cases per 100,000 in 2014. This high rate is likely caused by poor access to affordable, quality medical care for pregnant women and infants. Language barriers between patients and health care providers may exacerbate the problem. Extended families who live together in crowded housing, especially if adults recently arrived from Latin America without updated vaccinations, can put at risk the health of infants and small children living within the household.




Figure 4-11: California Counties - Pertussis infection rates vary considerably across California in 2014. Areas with large immigrant populations and large anti-vaccine populations show high infection rates. Source: CHHS – downloadable data

The map of pertussis in California also shows outbreaks in some of the wealthiest, best-served counties. Many wealthier families purposefully opt-out of vaccination programs, thereby fueling the pertussis epidemic in otherwise wealthy, healthy, and medically well-served communities. In parts of upscale Sonoma County, where pertussis rates were exceptionally high in 2014, several schools had vaccination rates well below the rates considered safe. In some schools, more than half of the children were not vaccinated. Their parents had signed "personal belief exemptions", which excused children from being vaccinated based on religious or moral grounds. Still, they sent their children to school not immunized against common contagious diseases. Though pertussis is unlikely to kill healthy children in upscale neighborhoods, it is nevertheless highly contagious and spreads into other neighborhoods, or even countries, where infants from poor families are at serious risk from the disease. California eliminated most exemptions for children attending public school in 2015.

Children who are not immunized against disease take advantage of what is called, **herd immunity**, a condition that characterizes groups of people in which around 90% of the group have developed immunity, generally through vaccinations, to an infectious disease. The group immunity critically lowers the chances of infection for those without vaccinations and/or immunity. This behavior is sometimes used as an example of the **free-rider problem**, that occurs when individuals take advantage of a community resource without contributing to the maintenance of the shared resource. The free-rider problem echoes the "tragedy of the commons" scenario, discussed in the Political Geography chapter. Those people with compromised immune systems who cannot be vaccinated must rely on herd immunity to keep from getting sick, making it imperative that those with otherwise healthy immune systems get vaccinated for the good of others.

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# 4.2: Geography of Disease

Pertussis is an example of an **infectious disease** because it is transmitted from person to person. Some infectious diseases also are transferred from animals to people. Infectious diseases, also known as communicable diseases, figure prominently among the leading causes of death in developing countries. In the United States, Europe, and other developed regions, people are more likely to die from **non-communicable diseases**, such as heart disease, stroke, and cancer. Most non-communicable illnesses are also considered **chronic diseases** because they affect people over a longer period, and generally affect older adults. Infectious diseases, on the other hand, may affect anyone but are more likely to kill people who are poor, already unhealthy and/or children.

## Covid-19

The Covid-19 pandemic of 2020 killed hundreds of thousands and caused billions of dollars in economic dislocation and suffering. Epidemiologists and health geographers worked feverishly to track the origins, spread, and retreat of the disease. A recognition of the role of micro-geography in the spread of the disease, one of the hallmark behaviors of the 2020 pandemic was “social distancing”, a recommendation occasionally ignored by individuals who imperiled the health of individuals, family members (especially the elderly) and strangers alike because a large percentage of persons with the virus were asymptomatic.

Early hotspots of the disease were cities with large international airports. The hardest-hit area in the United States during the earliest period of the disease was centered on New York City, which serves more international air travelers than any other city in the US. Ski Resorts hosted other important superspreader events in the US. The George Floyd protests, which erupted in the spring of 2020 brought many thousands of protestors out of quarantine and into the streets also were identified as potentially catastrophic gatherings of people who would share the virus. Especially at risk were African-Americans, who participated in the protests, because of the variety of underlying health issues facing people of color and the lack of affordable health care in black neighborhoods.

As of June 2020, the total number of confirmed cases worldwide had surpassed 6.5 million with close to 400,000 deaths. The United States accounted for an outsized proportion of both cases and deaths, raising significant questions about why the country with the most expensive health care system in the world had, by some measures, worse outcomes than other countries with advanced economies. Many would point to poor political leadership at both national and local levels. The Brazilian and Swedish government, for example, refused to take measures to enforce distancing and face mask guidelines adopted by most countries in the world, probably resulting in elevated death rates in both of those countries. In the United States, vastly different infection and death rates across the country created fascinating, albeit ghastly, patterns on maps of the disease, sparking intense interest in the multiple variables contributing to the spatial evolution of the pandemic.

## Influenza

Influenza, popularly known simply as “the flu” is an airborne infectious disease that generally spreads when someone sneezes or coughs microscopic pathogens (germs) into the air. The flu kills thousands of people each year. Sometimes, flu outbreaks are regional and last only a few months. These short-lived regional outbreaks of diseases are called epidemics. Occasionally, diseases like the flu get out of control, spreading across vast areas, and lasting for many months. Massive, worldwide disease outbreaks such as these are termed pandemics. The most infamous flu pandemic was the dreaded Spanish Flu that broke out during World War I and killed somewhere from 50 to 100 million people. Nearly the entire globe was affected, and poor countries, like India and China, suffered exceptionally high death tolls. In the United States, over 1/4th of the population was infected. Over one-half million Americans died from it, far exceeding the number of Americans that died in fighting in World War I.



Figure 4-12: Seattle, WA - Policemen wear masks during the great influenza pandemic of 1918-20 Source: Wikimedia

Recently, a version of the Spanish Flu (now called H1N1) returned. It was declared a global pandemic and generated worldwide panic. Nobody is sure where the flu strain began or where patient zero (index case) lived, but the epidemiologists traced the first obvious signs of the pandemic to Veracruz Mexico. There, factory-style hog farming may have created conditions ideal for the first known cases to develop and diffuse around January of 2009.

By April 2009, it was clear the flu was rapidly spreading in Mexico. In response, officials drastically curtailed public activity in Mexico City. The European Union Health Commission issued travel advisories, urging people not to travel to Mexico, or the United States, where flu cases were beginning to appear. A variety of quarantine orders swept the globe, keeping people in motels, on cruise ships, and in airports. After about six months, the incidence of new flu cases began to fall, and by February 2010, the pandemic was over. The 2009-2010 flu pandemic officially killed 18,000 worldwide, but other estimates suggest as many as 500,000 died because so many deaths were in parts of Africa and Asia where few laboratories exist capable of confirming the exact causes of death. In the United States, where the public health system responded quickly and efficiently, Americans appear to have suffered only about 10,000 deaths from H1N1, which was nearly normal for a flu season.




Figure 4-13: Canoga Park, CA. This billboard appeared in LA's San Fernando Valley in early 2010 as part of a large public health campaign to dampen the effects of the H1N1 influenza outbreak. The campaign was generally successful.

While the 2009 version of H1N1 appeared to have been less deadly than its 1918 ancestor, the activity of health departments around the world was essential in averting disaster. Geographers working at the CDC in Atlanta, Georgia knew that a flu outbreak

diffusing outward from Mexico was likely to appear first in California or Texas. Indeed, the first American cases appeared in San Diego and Imperial Counties, California, on the Mexican border. Other early cases were in Texas. Armed with data from previous flu outbreaks, computer models and GIS technologies, health geographers working at the CDC were able to accurately predict where and when the flu would flare up in various parts of the United States. Being able to predict the spatial patterns of disease helps health officials direct vaccines and other resources necessary to combat diseases to locations where populations are most at-risk. The outsized effort by the CDC and other public health agencies probably saved thousands of lives in 2009-10. Similar efforts characterized government efforts to treat or otherwise combat the spread of Covid-19, with mixed results.

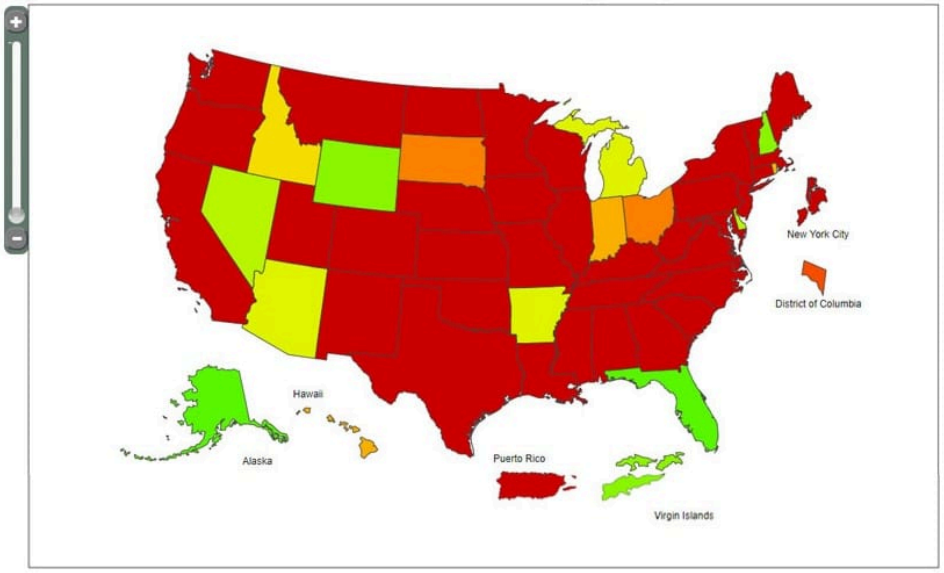



Figure 4-14: US Map by State. The severity of the flu by state in October, 2009. Note the contagion pattern from Southwest to Northeast. The color ramp violates standard cartographic principle – how? Source: CDC – Interactive Map

# Malaria

Malaria is another infectious disease that kills at least a million people worldwide every year. It sickens millions more, and by doing so, creates huge burdens on the developmental potential of many regions in Africa and Asia. Malaria is a parasitic infestation of the blood. Malaria is transmitted when female mosquitoes inject parasites into the blood through their saliva as they take a blood meal. Mosquitoes carry around the parasite, so mosquitos are called the disease vector because they transport the infectious parasites between hosts. Flies, ticks, fleas, and lice are other common disease vectors. Malaria is a very complex disease because the parasite that harms people goes through many life stages. The parasite can also lay dormant for long periods, living part of its life in a human host, and some of its life in the mosquito. The parasite can invade multiple parts of the body. Sometimes the parasite is hosted by an animal (monkeys, e.g.) Mosquitos, hosts, and parasites all have different spatial behaviors and environmental needs, which contributes to the difficulty of controlling malaria. Solutions require spatial methods and geographic tools.

Malaria has been around for thousands of years, and likely contributed to the fall of the Roman Empire, but it was nearly eradicated in the 1950s. Or so it was believed. After World War II, effective drugs and massive insecticide spraying campaigns appeared to be working miracles against this age-old scourge. However, both the mosquitoes that carry malaria and the disease-causing pathogen evolved over the last few decades, rendering many drugs and pesticides largely useless in the fight against today's version of malaria.

## Malaria in the United States

English colonists who came to the region thought North America to be free of malaria. They didn't yet understand the source of the disease. They mistakenly thought that it, like cholera, was a product of miasma. Because both European and African settlers brought with them reservoirs of malarial blood within their bodies across the Atlantic Ocean, the disease had only to find a suitable mosquito vector (i.e., Anopheles quadrimaculatus) to begin spreading. Within a generation, malaria had become a serious problem in the American colonies, especially where rice plantations created ideal breeding grounds for mosquitoes. Africans had some measure of resistance to malaria, contributing to their desirability as slaves in the plantation system that grew in during the

1800s.

By the mid-1800s, malaria was out of control in the United States. A series of changes in American society nearly eradicated malaria within 100 years. The remarkable turnaround was created by several changes in the American economy. The demise of wet-rice culture in the Deep South was the first change. During the 1800s, thousands of mosquito-infested, wet rice paddies were drained all over the southern US as cotton and corn crops became more profitable. The profitability of these new crops also encouraged farmers to drain thousands of acres of swamps and wetlands for use farmland, thus destroying ideal mosquito habitats. By the mid-1800s railroads also began to replace river and canal transportation across the US, thereby redirecting many thousands of travelers away from the places where they were most likely to be bitten by mosquitos. At the same time, steam power began replacing waterpower, eliminating the need for thousands of mill ponds all over the country. People also became more prosperous, moved to cities, built houses with windows and screens, and generally got healthier. Eventually, the anti-malarial drug quinine became widely available in the United States, helping deplete the blood reservoir of the disease. Another important moment in the battle against malaria came in the early 1900s when scientists discovered that mosquitos transmitted malaria. Slowly, health officials in the US took steps toward mosquito eradication. Government workers drained swamps and manipulated water levels in lakes by constantly raising and lowering dams. They removed vegetation from lakes at the shoreline and provided houses within a mile or so of lakes or ponds window and door screens.

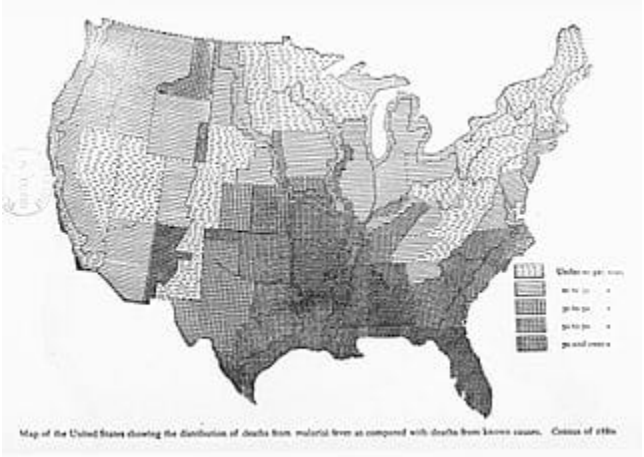


Figure 4-15: US Map - Malaria killed and sickened many thousands in the United States prior to the 20th century. The US Census produced this map from 1880 data. Source: Wikimedia.

After World War II thousands of soldiers returned from Asia carrying the malaria pathogen in their blood. The government took steps to prevent malaria from spreading once again. The biggest effort was in the US South where the military already had practice preventing malaria on southern military bases. The secret weapon in this post-war campaign was a new, highly effective insecticide called DDT. The government launched a massive effort spraying DDT on millions of acres across the US. By 1949, the government declared the US free of malaria. The headquarters of the anti-malaria effort was chosen to house the CDC.




Figure 4-16: Atlanta, Georgia - The Center for Disease Control headquarters includes several emergency management command and control centers featuring GIS displays of data on outbreaks, resources and threats. Source: CDC, press release.

Other countries copied America's strategy for fighting malaria. Unfortunately, the widespread and indiscriminate application of DDT across the globe created a different crisis of interest to biogeographers. After about 10 years of widespread use of DDT in the US, it became apparent to wildlife biologists and birdwatchers that DDT and related insect poisons were harming animals other than just insects. Anything that ate insects regularly, like birds and fish were at risk. Alarmed by the unusual number of bird deaths in areas sprayed with DDT, environmentalist Rachel Carson wrote the book, Silent Spring, detailing the numerous ecological dangers posed by the overuse of chemical pesticides. In addition to pointing out how chemicals could be responsible for human cancers, and the near inevitability of **pesticide resistance**, the book also detailed how the toxic effects of pesticides grew slowly over time in the bodies of predators (like birds) through a process called **bioaccumulation**. Carson's book also condemned chemical companies for misleading the public about pesticides, which of course drew scathing rebuttals from chemical companies and their allies in Congress. Nevertheless, the book became a best seller and is widely regarded today as a significant milestone in the American environmental movement. The US government banned DDT for agricultural use in the US in 1972, though it is still used in Mexico. Scientists credit the ban on DDT for helping Bald Eagles and other birds-of-prey return from the brink of extinction.

## Cancer

One of the leading causes of death in the United States is cancer. Cancer is a group of diseases that are characterized by an out-of-control growth of specific body cells that erode life functions. Of the many varieties of the disease, skin cancer is the most common among Americans. It is associated with overexposure to the ultraviolet light from the sun and/or tanning beds. Lung cancer kills more Americans than any other type of cancer, and about 90% of lung cancer fatalities are associated with smoking tobacco. Smoking also causes a host of other deadly cancers. Other behavioral factors linked to cancer involve alcohol, weight control, and dietary practices. Cancer is not contagious, but many cancers display spatial patterns like infectious diseases. Geographers study cancer and their techniques offer insights into both behavioral and environmental causes of cancer, and as a result – insights into strategies to combat cancer.

Cultural practices can both cause and help prevent cancers. There are clear regional differences in the rates at which people smoke, exercise, drink booze, and eat healthy, making it easy to measure the correlation between lifestyle and cancer rates.

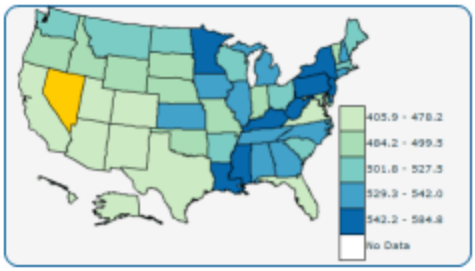



Figure 4-17: US Map – The overall cancer rate is highest in Southern and Appalachian States where cultural behaviors elevate the risk of getting cancer. Source: CDC Cancer Atlas.

Some cancers are associated with ethnicity or national heritage. Partly this is because some cancers are inherited. Some forms of breast cancer, for example, are inherited, prompting numerous women with a family history of breast cancer to undo preventative mastectomy surgery. Because genetic traits are often shared among groups of people living in a region, ethnic or national groups often have genetic anomalies predisposing them to specific types of cancer. For example, studies have found that the rate of stomach cancer is above average for Finns and Koreans and that liver cancer for Vietnamese men is higher than in other groups. However, because ethnicity and national origins also predict many cultural and economic practices, it is difficult to statistically determine causality. Children who are adopted by people from a different ethnic group, or people who move beyond their ethnic homelands are often studied by medical geographers because such people help separate genetic causes from cultural ones.

Exposure to environmental pollutants is also linked to certain cancers, making geographic methods indispensable in the search for causes and preventative measures. Unlike the national or state maps of cancer showing general trends occurring within arbitrary boundaries, maps plotting **cancer clusters** at regional or neighborhood levels can be compelling. In Los Angeles', for example, one study found elevated levels of some types of cancer among residents living near the Santa Susanna Field Lab in the hills between Simi Valley and the San Fernando Valley.

Consider, for example, mesothelioma, a rare type of lung cancer that showed signs of geographic clustering in the 1960s. By mapping mesothelioma clusters and various types of industry, researchers saw that locations where asbestos was mined and processed had much higher rates of the mesothelioma than regions where mining and processing asbestos was absent. This finding later allowed biomedical researchers to establish a causal relationship between various lung diseases and prolonged exposure to asbestos fibers.



Figure 4-18: Baton Rouge, LA - One of the largest oil refineries in the United States is located on banks of the Mississippi River where transportation advantages accrue. Related industries cluster nearby. What are the health effects of this cluster of petrochemical industries on the health of Louisianans? Source: Wikimedia
.

## Cancer Cluster – Cancer Alley

The most famous cancer cluster in America, an area known as **Cancer Alley**, may not be a cluster at all. The gap between perception and reality here highlights the difficulty of identifying the environmental causes of cancer. Cancer Alley lies along the Mississippi River in Louisiana between Baton Rouge and New Orleans and shares territory with a significant number of petrochemical factories.

This corridor does have one of the highest cancer rates in the United States, but because “Cancer Alley” does not have a statistically significant greater cancer rate versus other parts of Louisiana health geographers doubt that the region is actually a cancer cluster, and doubt that the factories are the cause. Unhealthy lifestyles, poverty, and poor access to affordable, high-quality health care both within and beyond this industrial corridor make it difficult to separate the effect of the petrochemical industry on cancer rates from the effects of poverty and unhealthy lifestyles that characterize the entire region.

Some health problems, such as birth defects, asthma, and miscarriages, are easier to connect to exposure to toxic chemicals. The most well-known toxic pollution site in America is **Love Canal**, a neighborhood once home to some 900 families near Niagara Falls. It was abandoned in the mid-1970s after hundreds of residents were sickened by toxic chemicals that had been buried nearby 20 years earlier by a chemical company. Poor construction practices and lax environmental laws resulted in chemicals seeping upwards through the soil and into basements. The health of hundreds of residents suffered. Elevated rates of illness were common in Love Canal indicating that the chemicals were the cause.



Figure 4-19: Niagara Falls, NY – The Love Canal neighborhood stands abandoned after toxic waste from a landfill was found in the local soil and water in the 1970s. Source: Wikimedia.

In recent years, the **Flint Michigan Water Crisis** has brought some renewed attention to the danger of lead poisoning, a health issue that had declined greatly in the US since the government banned lead additives in paint and gasoline in the 1970s. Flint’s problem grew out of a reliance on very old city water pipes, a search for a cheap source of drinking water and mistakes by Flint’s water management team. As a result, people living in older parts of town (poor, African-American) were exposed for many months to poisoned water.

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# 4.3: Geography of Care

The geographical variation in death and disease can also be attributed to the geography of health care. Wealth explains most of the variation in access to quality health care globally and nationally. The health of poor people everywhere suffers from multiple burdens, many of which begin well before a person is born. Impoverished pregnant women may be malnourished and unable to afford the costs associated with proper pre-natal childcare, especially where the government does not provide health care. Poor women also tend to have babies born prematurely, and premature babies often suffer from low birth weight, which in turn invites numerous additional ill-health outcomes, most notably infant death. Poor children often continue to suffer from poor diets and an inability to access regular, high-quality health care throughout their lives which shortens their lives and reduces their capacity to be productive citizens. Many of the poorest areas in the United States have high percentages of physically or mentally disabled citizens.

## Access to Medical Facilities

Poor people are not attractive customers for profit-driven health care providers. Poor people, especially before the Affordable Care Act (Obamacare), frequently had little means to obtain health insurance outside of the government-run Medicaid program. This fact limits health care options for millions of people in the United States. As a result, uninsured people tend to wait until they are very ill to see a doctor, often requiring a visit to a hospital's emergency room where federal law requires the provision of medical care, regardless of the patient's ability to pay. The government partially reimburses hospitals for the costs of emergency room care, but much of the cost of caring for the indigent is paid for by charities and/or passed on to those with insurance – another example of an economic externality. Hospitals that serve too many indigent patients risk going out of business. As a result, doctors and hospitals avoid many of the poorest areas of the United States, favoring places where well-insured patients generate bigger profits. https://arcg.is/zTXbn

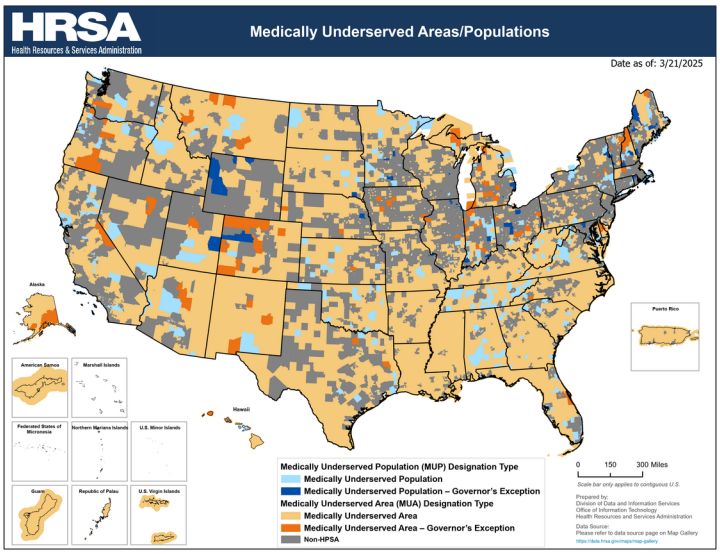



Figure 4-20: US County Map: Orange indicates medically underserved regions, blue indicates medically underserved populations. Source: HRSA – Interactive Map *or* ArcGIS Online Interactive Map

Geographers sometimes call regions without medical facilities **medical deserts**. Most medical deserts are in poor rural areas, but a few inner-city areas in America's largest cities also suffer from limited access to health care provision. The passage of the Affordable Care Act was intended to shrink or halt the expansion of medical deserts in most of the US, but the expansion of medical deserts continues in states where politically conservative politicians opposed to Obamacare prevented their state from funding expansion of Medicaid programs for those who were both too poor to afford private insurance, but not poor enough to qualify for Medicaid. Multiple challenges to Obamacare, especially since the election of Donald Trump have reversed some of the gains made from 2010-2019. An estimated 10-15 million additional uninsured people, largely living in poor, and politically conservative regions, has expanded the threat of medical desertification.

Geographers also analyze health care access at very local scales. Perhaps the most closely scrutinized region has been Los Angeles' "South Central" neighborhood. As far back as the 1965 **Watt's Rebellion**, black residents of Los Angeles have complained about poor access to doctors and hospitals. Government officials, in an attempt to shorten the distance residents of South Central LA had to travel for medical care, opened the King-Drew Medical Center in the early 1970s. However, after years of shoddy health care provision by the staff at King Drew, the facility was closed in 2007, including its very busy trauma center. The closure angered nearby residents who would have to be transported to more distant emergency rooms for emergency treatment. Although it was controversial, most residents of South LA have reasonably good access to trauma care compared to residents of many areas of the US. Indeed, all Los Angelenos have reasonably good access to trauma centers and hospitals.

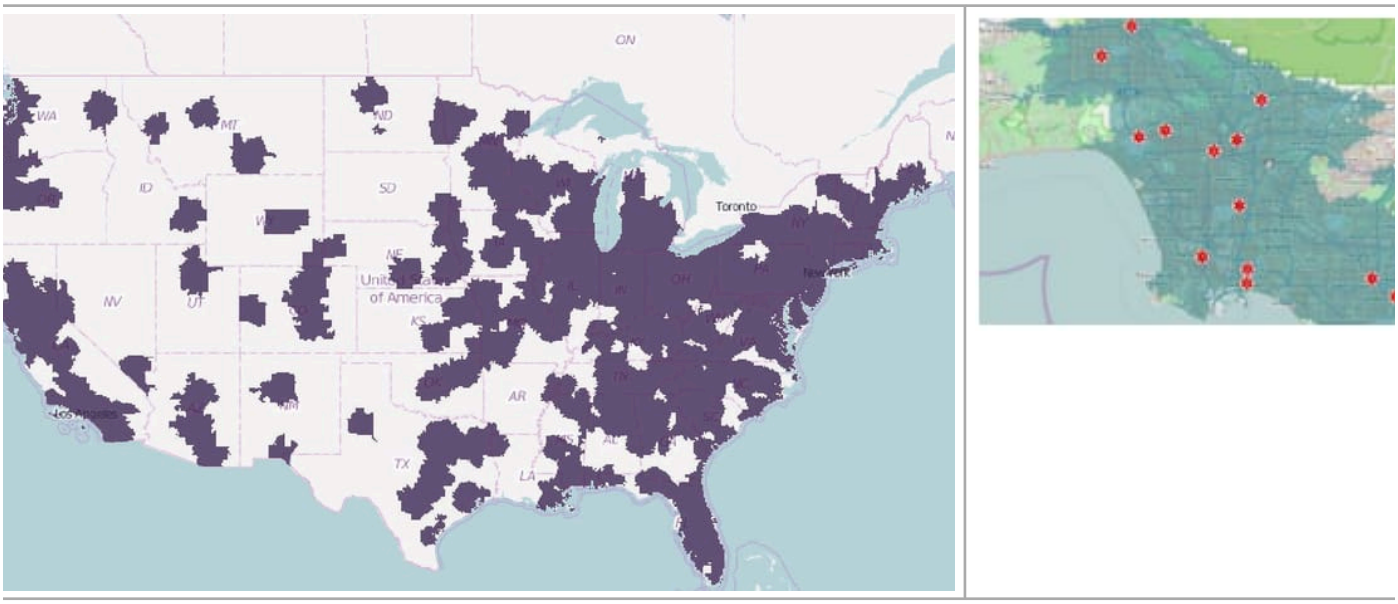



Figure 4-21: Maps. On the left is a US map showing one-hour transport distances to trauma centers. Los Angeles area trauma centers and a 45-minute ambulance ride are mapped (right). Source: Traumamaps.org

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# 4.4: Regional Variations in Health Care

In addition to regional variations in access to health care, there are significant variations in the style of health care both within and beyond the borders of the United States. How often people are diagnosed with specific illnesses varies greatly across time and space as do the strategies doctors use to treat conditions. Geography is exceptionally useful in highlighting and addressing these discrepancies. For example, in South Korea, there has been a startling rise in the incidence of thyroid cancer in the last 20 years. The rate is fifteen times higher than it was a generation ago, and it appears at first blush to be an epidemic. But, upon closer study, it turns out that changes in Korea's health care system simply encouraged doctors to look for thyroid cancer more often than before. Because doctors were looking for the disease more aggressively, they found it far more often. As it turns out, quite a few people have thyroid cancer and live with it for many years. Unfortunately, many Koreans chose to have the cancerous thyroid gland removed and as a result, suffered more complications than they would have, had not just left it alone.

Similar situations occur in the United States. The rate of diagnosis and their preferred treatments for diseases depends a great deal on where you live. For example, If you live in the Southeastern United States, and you get a cold, there's a much better chance you'll be prescribed an antibiotic drug than if you live in California, Vermont or Colorado. If you and a cousin are both diagnosed with bad tonsils, where you live may dictate whether you get them surgically removed or are prescribed pain pills.

These variations in care are troubling because it suggests that geography may be influencing doctors more than accepted medical protocols. Geographers would investigate mapping treatments first, and then conducting a statistical test for **spatial autocorrelation** to determine if the spatial pattern of treatment is random or clustered. If the pattern of some disease does not mimic the pattern of treatment for that disease, then serious questions about the quality of health care should be raised.

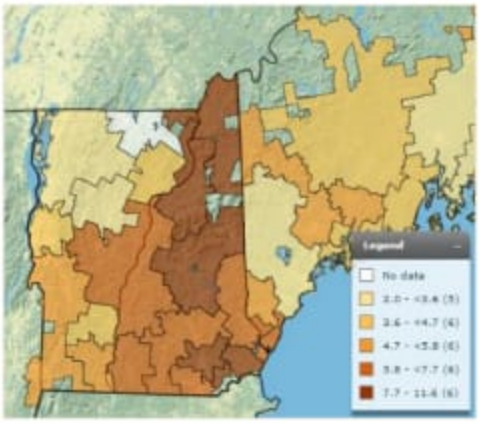



Figure 4-22: Map - Significant variation in the rate of tonsillectomies exist across parts of New England suggesting inconsistent treatment practices. Spatial Autocorrelation is evident. Source: Dartmouth Atlas of Health Care.

## Health Care Systems

The ability to pay for health care is another
important question that medical geographers try to solve. The health profile of people around the globe is worth examining because, despite American's troubling sense of exceptionalism, which leads us to believe that what happens in other countries is of no value to us, we indeed can learn much from other countries. Except for the United States, citizens of other developed countries access **universal health care**, which is generally run by the government and funded largely through taxes, with varying levels of individual, or employer payment options. A few countries, like the United Kingdom and Canada, have wholly government-run or single-payer programs.

The United States has a peculiar system of health care compared to most of the world. In the US, health care is largely run by companies from the private sector. By some measures, Mexico and Turkey are the only other countries in the world without universal health coverage. In the U.S. about 80% of the hospitals are not-for-profit businesses, but most physicians' offices function as for-profit enterprises. About two-thirds of those who have insurance in the United States get it through their employer. The US government provides health insurance for about one-quarter of Americans. Medicare is the popular single-payer system (tax-supported) for the elderly in the US. The poor and/or disabled who are under the age of 65 may qualify for Medicaid an

insurance program jointly funded by states and the US government. Together, the government pays about half of all medical costs incurred in the US each year.

## The Affordable Health Care Act - Obamacare

In 2010, the US Congress passed the Affordable Health Care Act (Obamacare) in an attempt to correct some of the problems with the US health care system. The law requires all citizens to have some form of health care insurance. The ACA subsidizes the cost of insurance for the poorest of the poor and had several provisions designed to reduce health care costs for everyone. When it went into effect, about 16% of the US population was uninsured, but in 2016, only about 8.8 percent had no insurance.

Obamacare offered some help by extending coverage to more people, especially in the 23 states that accepted an expansion of Medicaid funding. States with significant Republican majorities, largely in the South, on the Great Plains, and Mountain West, declined to expand Medicaid, keeping it difficult for some poor citizens to get health care coverage. Congressional Republicans have tried more than 60 times to repeal part or all the ACA, without success. Although, the fine for refusing to get insurance was scheduled for elimination in 2019.

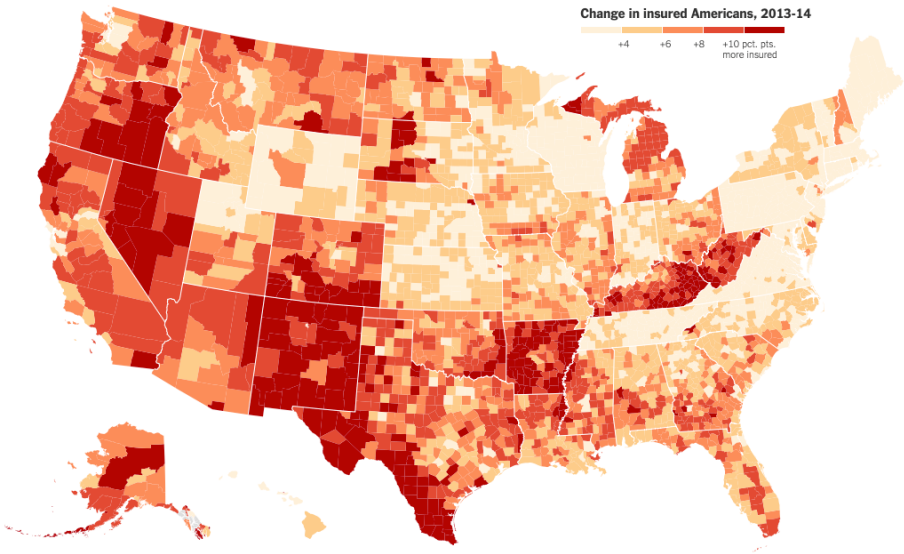



Figure 4-23: US County Map – "Obamacare" significantly decreased the number of uninsured persons around the United States, including many locations, like Arkansas and Kentucky, where resistance to the program was intense. Source: New York Times/Enroll America-Interactive Map

## Risk Pools

A very important feature of the Affordable Care Act was the creation of state-wide health care exchanges, which offered insurance to those who were not eligible for neither Medicare nor Medicaid and could not get employer-provided health insurance. The idea was to create large risk pools of insurance customers who all contribute to a common fund from which individuals in the pool can withdraw money to pay for medical expenses. These risk pools are of interest to geographers because risk pools are defined by state borders, health risks vary greatly not only by individuals but by geography.

The key to successful health care exchanges (risk pools) is a very good ratio of healthy people to sick people. Because chronically ill people use most of the pool funds, sustainable insurance pools require a large majority of participants in the risk pool to be healthy. An abundance of chronically ill people in an insurance pool drives up the cost of insurance for healthy people in the pool, which in turns causes healthy people to drop their insurance or seek it elsewhere, creating a situation in which chronically ill people rapidly deplete the common fund in a process known as an insurance death spiral. Before 2010, insurance companies tried to avoid creating unstable risk pools by denying enrollment in a plan to those with a known chronic disease or injury, called a pre-existing condition.

Those without insurance tend to have poor health, live fewer years and occasionally contribute to the proliferation of contagious diseases. Uninsured people can be expensive for healthy people. US law requires hospitals to provide emergency care for anyone.

So, poor people without insurance often wait until a medical condition becomes both a crisis and more expensive to treat. Uninsured people tend to rely on emergency room care, rather than preventative care. Those who wait until they are extremely ill to seek emergency care can find themselves bankrupted by the costs and/or unable to work. The costs are passed onto taxpayers and to people with health insurance in the form of higher costs and taxes.

How to fix the expensive and dysfunctional American health care system is an exceedingly complex issue. Health care has become an important political issue in the US in the last two decades, and it's sometimes unclear who favors what solution and why. Libertarians (see politics chapter) argue that nobody should be forced to join an insurance pool and that health care costs should be paid by individuals, and health care costs should be determined by the actual cost of care incurred by individuals, not the risk behaviors of a group. If people choose not to pay, then they get should get no treatment. Other conservatives believe that the government must force everyone to pay for health insurance because virtually everyone eventually gets sick and needs medical care. To them, buying health insurance is a matter of individual responsibility, that should not be shouldered by the government or taxpayers. Ironically, these views are often held most fervently in many of the states with high percentages of voters using government-sponsored Medicaid and Medicare, such as Alabama, Kentucky, and West Virginia.

Progressive politicians favor more government involvement. They point to the overall lower costs and better health care outcomes for people living in countries with government-run health care systems. They believe every citizen in the country should be automatically placed in an insurance risk pool of some sort. It can be done, but to keep taxes low, governments (or insurers) must work hard to keep people healthy to lower the cost burden on healthy members of the risk pool. For it to work, government and/or insurers must encourage healthy diets, exercise, and regular checkups as a part of a healthcare strategy known as preventative healthcare. Progressives point out that the economic logic of our current privatized health care incentivizes unhealthy lifestyles because there are enormous profits to be made by treating, but not curing, chronically ill people. The opioid crisis may indeed be a result of a preference for long-term treatments of pain over cures for chronic pain. Finally, there are few monetary rewards for either the insured who stays healthy and for a health care industry with few patients.

Progressive economists also estimate that over the long run, the external costs of our health care system are far greater than what American taxpayers would pay if we adopted a socialized health care system. For example, they point to the cost of an automobile produced in the United States. A mid-sized sedan built by Ford or General Motors in the United States costs around $2000 more than similar cars built elsewhere, because of the extra costs American manufacturers pay in medical insurance for their workers and retirees. Manufacturers in countries where health care is provided by the government do not bear this cost directly, so the costs of medical care passed on to car buyers are smaller. Some American companies move jobs to places where health care is cheaper, and this results in yet another loss of tax money from both payroll and corporate taxes that would otherwise go to the US Treasury.

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# 5: LANGUAGE AND DIALECT

**The language we speak is perhaps the most important element of our culture. Language, dialect and even accents are extraordinarily powerful markers of identity. Language shapes our worldview, both constraining and liberating what we can know and feel. Language is often embedded in the landscape, where it can be read, interpreted and its power over us analyzed.**


5.1: Introduction

5.2: World Languages

5.3: American Languages

5.4: Language on the Landscape

5.5: Toponyms –Place Name Geography

5.6: Language and the Environment


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# 5.1: Introduction

What we speak and how we speak is the most powerful marker of who we are. Language marks us as individuals, but also seems to be primary marker of our group identity. Language constrains and liberates our thoughts and feelings, in turn creating a battlefield where various interests compete to control of the chains of meaning attached to words and phrases. Power is thereby exercised through language. Consider the phrase, "Make America Great Again". Stripped of context, those four words seem reasonably benign, but the way the phrase was used by Ronald Reagan's campaign in 1980, and again in the presidential campaign of 2016, it has become laden with many overlapping, often competing meanings that are complex and continue to evolve. The pen, or the turn of phrase, is indeed mightier than the sword.

A **language** is a system of communication that persons within a community use to convey ideas and emotions. **Linguistics** is the study of language. Geolinguistics is a subfield in both geography and linguistics where the interests of both intersect. Most of the time, people who speak (or sign) the same language find it easy to communicate with each other. Chances are people who communicate easily with each other use a similar version of a language, known as a **dialect**. On the other hand, dialects within a single language can become so different from one other that people using different dialects find it impossible to understand one another. When that happens, **mutual intelligibility**, which is the ability for two or more people to understand one another, is no longer occurring. At that point, a dialect should be considered instead a separate language.

A breakdown of mutual intelligibility may qualify the Scottish dialect of English as a separate language called Scottish English. Certainly, many speakers of American English find that they cannot understand what Scottish people if they are from the working class or from rural districts in Scotland. Part of the problem is the difference in **accent**, or the way Scottish people pronounce common English words. For example, the Scottish "roll" their tongues when they pronounce words with the letter R in them and Americans do not. Americans also pronounce the word "to" like "tū" and the Scottish pronounce it like "tae". Not only is the Scottish dialect characterized by their accent, it features a different vocabulary, phrases and word preferences as well. So for example, a Scotsman might use the phrase "wee bairn" to describe a small child, where Americans might say "little kid" instead.

There are other forms and uses of language as well. In places where two or more languages are spoken, a **pidgin language** may develop. Pidgin languages are simplified versions of a language or several languages that help people communicate, especially in matters of trade or business. Lots of pidgin languages have formed around the world, especially in border areas and in places where colonial empires were built. It's easy to hear pidgin English spoken in the US among immigrants just learning the language, especially when immigrants with different home languages communicate in English. Some Hawaiians also speak a pidgin English. Sometimes a pidgin will become more complex and evolve into a language in its own right. Linguists call these formalized pidgins **creole languages**. Most creole languages remain unofficial, but a few, like Haitian Creole, a blend of French and West African languages, become official languages with rules about spelling and syntax, and formally taught in schools, and used by the government.

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# 5.2: World Languages

There are hundreds of languages around the world and many thousands more dialects. Often, linguists arrange the world's languages into a sort of family tree, with languages that share similarities occupying twigs on the same branch. Conversely, more distant linguistic relatives may share only a common **proto-language** that forms the trunk of the tree, much like distant grandparents who died thousands of years ago would on a human family tree. The major world language families are Indo-European, Sino-Tibetan, Afro-Asiatic and the Niger-Congo. The distribution is displayed on the map below.

## Chinese Languages




Figure 5-1: Alhambra, CA. This sign for a Baptist Church in an Asian ethnoburb of Los Angeles indicates that worship services are offered in English, Mandarin and Catonese weekly.

Nearly a billion people speak Mandarin Chinese, a Sino-Tibetan language, giving it the distinction of having more people speak it as their primary (home) language than any other in the world. Mandarin is just one of several dialects of Chinese, so you may find that people from Beijing have a hard time understanding their countrymen from Hong Kong in Southern China who speak a dialect known as Cantonese. Chinese has been translated into English using several different systems over the years, so you may find older Americans (or older maps) calling China's capital city things like Peiping or Peking. The Chinese use a character-based **orthography** or writing system that has a complex relationship to the spoken language. Chinese characters (logograms) have been adapted for use in Korea, Japan and Vietnam; even though those languages are not in the Sino-Tibetan language family. Because Chinese characters represent entire words, literate Chinese readers must know over 3,000 characters/words. This is true with for other East Asian languages as well. Developing computer software and hardware capable of functioning in East Asian languages presented an early barrier to the adoption of some technologies. The key problem were keyboards and cell phone screens that though well adapted to the alphabet-based systems used in the west, presented problems with East Asian logograms.

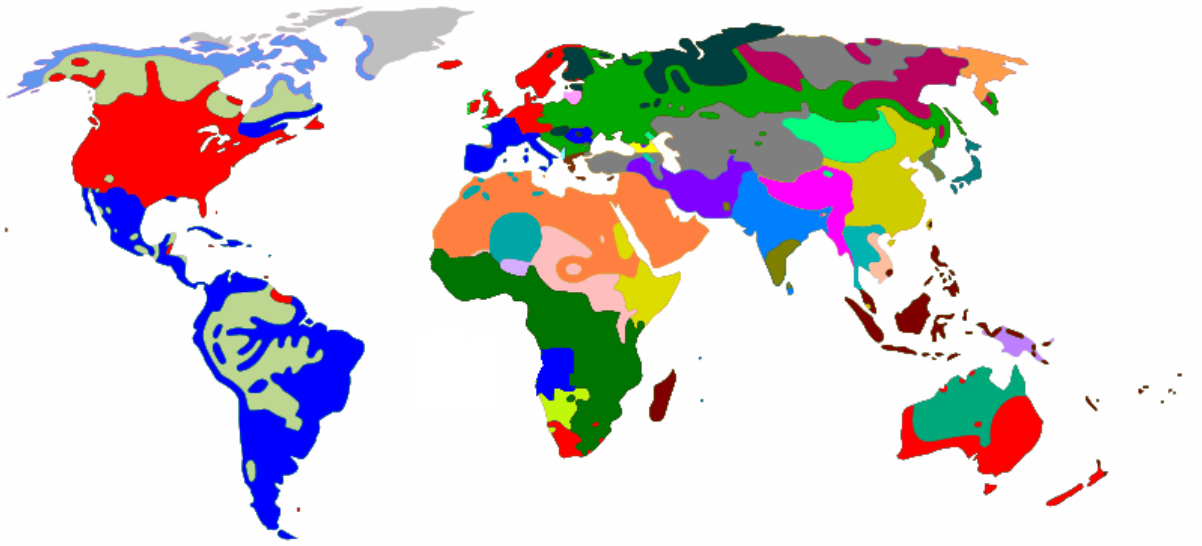


Figure 5-2: Map of Major World Language Families. Note that much of India and Southwest Asia share a common language with Europe. What does this suggest about ancient migration patterns? Why do you suppose the people of Madagascar speak a language related to Malaysia, rather than East Africa? Source: Wikimedia

## Indo European Languages

About 3.5 million people speak one of about 450 languages in the Indo European family of languages. In addition to the Romance, Germanic and Slavic language subfamilies that dominate the linguistic landscape of Europe and much of northern Asia; the Indo-European family includes a number of Indo-Iranian languages (Hindi, Bengali, Punjabi, Farsi) spoken by more than a billion people on the Indian Subcontinent as well as Iran. Mapping the diffusion of these languages offers a great deal of insight into the long and tangled history of the peoples who speak the languages in this massive linguistic family.

### Romance Languages

The world's second most commonly spoken home language is Spanish, one of the many Romance languages that evolved from a common Roman ancestor known as Vulgar Latin. While certainly there were swear words in Latin, "vulgar" in this instance refers to its use among the common people (unlike Classical Latin). Other Romance languages include, Portuguese, Italian, French and Romanian. There may be as many as two dozen additional Romance languages (Catalan, Romansh, Sicilian, etc.). Speakers of many of the less well-known members of the Romance family generally live in mountainous locations, on islands or in other isolated locations, providing an easy reminder of the role of geography on the formation and maintenance of languages. Each language in this language family features hundreds of words and linguistic structures that are similar, but they remain generally unintelligible to speakers of other languages within the language family.

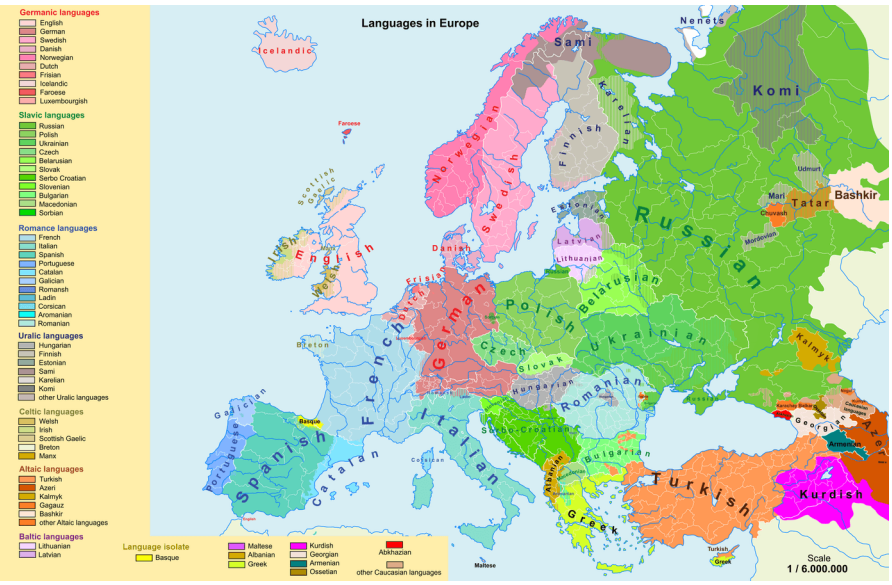



Figure 5-3: Map of Languages in Europe. This map displays many of the language boundaries of Europe. Note how often the boundaries follow physiographic features on the lands, such as mountains or water bodies. Source: Wikimedia

## Germanic Languages

Along with the Slavic languages of Eastern Europe, the other major linguistic family in Europe is Germanic, which dominates Northern Europe. English, German, Dutch as well as the languages of Scandinavia are all related. In addition, most locations that were once part of the British Empire also speak English, including most of North America.

More people speak English, often as a second language, than any other language in the world. It isn't because English is a particularly easy language to learn. It includes an enormous number of words adopted from other languages; and because of that, it has loads of irregular spellings and verbs. It's also awash in slang. English became the world's most common language largely because of the economic, cultural and military power of England and the United States. British naval power and their ambitious colonization program during the 18 and 19$^{th}$ centuries expanded the use of English around the globe. In fact, the map of world languages offers important clues into the military history of the world. Armies and navies always carry languages, as well as other elements of common culture, as they move. Conquered peoples are often forced to speak the language of those to whom they lost a war.

Still, English did not achieve its peculiar worldwide dominance until the British Empire was in retreat after World War II. Unlike the British, American English spread only to a couple of captured colonies. Instead, it was the United States' ascension into the realm of economic, cultural and technological superpower that elevated the status of English to a truly global language.

A good example of how this works is evident in the global airline industry. Pilots of international flights talk to air traffic controllers on the ground in English, even if neither the pilot, nor the ground control official is from an English speaking country. Why? Partly it's because the airplane was invented by Americans and partly because the British invented international commercial air travel. This process is similar to the **doctrine of first effective settlement**, discussed elsewhere in this text, but applied to technology and language. English speakers colonized the air first, so others who came later tend to follow the rules and tendencies created by the pioneers. Consider other technologies invented by Americans but now used worldwide (internet, personal computers, iphones, etc.). Many users of these technologies, especially the early adopters, find them easier to use if they know English. Certainly, the massive cultural influence of Hollywood, American pop music and the fashion industry has also helped spread English worldwide.




Figure 5-4: Bayreuth, Germany - Many fashion items for sale in Europe make vague, and sometime nearly random references to the United States using English words. Why is the imagery of America so powerful?

## Linguistic Isolation

Many of the world's least spoken languages are found in locations that are difficult for armies to invade and have few valuable resources. High mountains, islands, vast wastelands, tangled jungles and dangerous swamps have a tendency act as a barrier to the diffusion of languages. For example, Hungarians and Finns speak a language that is different than most of the rest of Europe partly because their territories were hard to invade. People on the islands of Corsica and Sardinia speak a similar language, but it's different from their neighbors in Italy. Others, like Armenian and Greek are very far removed from their "cousins" on the Indo-European family tree, and so are called **linguistic isolates**.

### Basque

Perhaps the best example of this process is evident in the eastern Pyrenees Mountains of Spain and France where many people speak Basque. This language is so unique, that it appears to be unrelated to any other in the world. There are theories that suggest the language is exceptionally old, perhaps dating back around 40,000 years, before the time that most European's ancestors migrated (with their proto-language) into Europe. Some genetic evidence suggests there has been less interbreeding between Basque people and their European neighbors, which may account for how this language survived when presumably other very old European languages went extinct. The rugged mountains where Basques have lived for thousands of years surely played a role in protecting their language and culture from invasion and succession. About 60,000 Basque-Americans live in the US, many in Central California.




Figure 5-5: San Miguel, California -Basque Restaurant. People from this unique linguistic minority came to the United States and largely settled in California where the landscape resembles their home territory in Spain.

## Language and War

Over the centuries, membership in a language or even a language family has proven critical in the fates of individuals, regions and nations. When a Slavic-speaking Bosnian Serb assassinated the German-speaking Archduke of Austria, Franz Ferdinand in Sarajevo, in 1914, World War I began. Though there were numerous additional reasons for the First World War, linguistic families created the basis of the first alliances. The Russians had agreed to aid their Slavic cousins in Serbia. Germany and Austro-Hungarian Empire allied with each other because they both spoke German.

The earliest rumblings of World War II in Europe also involved language. Adolph Hitler wanted to expand Germany's borders to include parts of neighboring countries where a significant population of German speakers lived. German speaking Austria became part of Germany in early 1938 in a process known as Anschluss. Nazi Germany later that year forcibly annexed parts of Czechoslovakia known as the Sudetenland because, in the logic of Hitler, their common language gave Germany the right to annex those areas. Later, all of the Czech speaking and Slovak speaking areas were taken as well. When Germany invaded Poland, to take land where the language was once primarily German, World War II began.

It's worth noting that many wars have been fought between people of similar linguistic heritage as well. However, the longstanding alliances between the U.S. and other English speaking nations of the world is no doubt a product of the way our common language has shaped a common core of values that bind us in ways that are especially strong.

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# 5.3: American Languages

English is the most common language spoken in the United States, and although it functions as the de facto official language, it is not the legally the official language. There is no official language in the United States. Socially conservative politicians have passed laws in many states making English the official state language. Sometimes these laws restricts the ability of local governments to provide services in other languages, and in other instances it simply makes it less likely that the government will provide services in other languages.

Americans speak and sign over 400 languages, and over 150 of those are indigenous to American soil. Spanish is spoken at home by about 12% of the US population, making it perhaps the second largest Spanish speaking country in the world. It's worth noting too that the oldest Spanish settlements in the US pre-dates the oldest English colony by over 40 years. Of course, the Spanish settlements were predated by Native Americans by millennia.

## Creole and Cajun French

The state of Louisiana has perhaps the most fascinating linguistic landscape in the US. The people of this region have been long able to resist full linguistic integration into the United States partly because of the isolation created by the swampiness of the region. Louisiana Creole, the creolized language of many people in south and southwestern Louisiana is spoken by people who call themselves Creoles. It, like the language of Haiti, is a hybrid of French and African languages, plus probably a healthy dose of Haitian Creole as well. Many other people in the region speak Cajun French, which is less a creolized language, than it is an isolated dialect of Canadian French. Linguistic differences among French speakers in South Louisiana are evident in the differences between Cajun and Zydeco musical styles, as well as ethnic identity in South Louisiana.

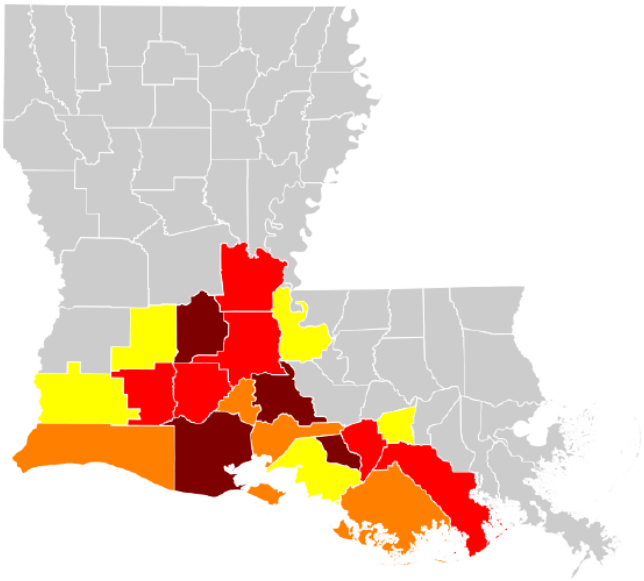


Figure 5-6: Linguistic Map of Louisiana – This map depicts the percent of persons speaking French at home. Yellow – 4-10%; Orange 10-15%; Red 15-20%; Dark Red: 20-30%. Sources: Wikimedia and Modern Language Association

## American Dialects

Your ability to communicate efficiently with other Americans may depend on where you (or perhaps your parents) grew up. People from the Midwest and West Coast tend to speak a kind of "ordinary" American English widely used by national television news anchors, and spokespersons for various products advertised on TV and radio. However, people living in isolated regions of the United States, and a few big cities often have very dialects that others find challenging to understand.




Figure 5-7: Philadelphia, PA - Menu Sign This menu sign from Jim's Steaks uses the word "Hoagie" to refer to the large bready sandwich, that most of the United States calls a "sub" sandwich. Can you think of other words for these sandwiches?

There are many dozens regional dialects in the United States. Some argue that multiple distinct dialects exist even within New York City. Some have argued that single cities, (e.g. Cincinnati, Ohio) have a dialect. Linguist Rick Aschmann has mapped North American dialects using YouTube videos to identify small differences in word choice and pronunciation (see Cool Link). However, the main dialect regions in the United States remain largely aligned to the main folk culture regions. In the northeastern states, the dialects are generally within the family of **Yankee dialects**. In much of the Mid-Atlantic and Midwest, people speak with a **Midland dialect**, and the South is broken into Upland (**Appalachian**) and Lowland Southern dialects.

## Mapping Dialects




Figure 5-8: Florence, Kentucky - Water Tower. This monumental sign welcomes motorists leaving "the North" into "the South" just below Cincinnati on Interstate 75. Why do you think the vernacular "Y'ALL" is included so prominently?

Maps of American dialects are fascinating. They generate a lot of laughs at the crazy things other Americans say; but keep in mind there are significant cultural differences frequently at play as well. There are several dialect survey tools online...take one and see the accompanying maps. Possibly the most entertaining dialect question for students is the “What do you call a soft drink?” question. Most Americans use the word “pop” or “soda”, but in much of the south, people say “Coke” to refer to any soft drink, even a Pepsi or a Dr. Pepper. This is funny to others, but you probably have said “Frisbee” to refer to a flying disc, or “Kleenex” to refer to a tissue.

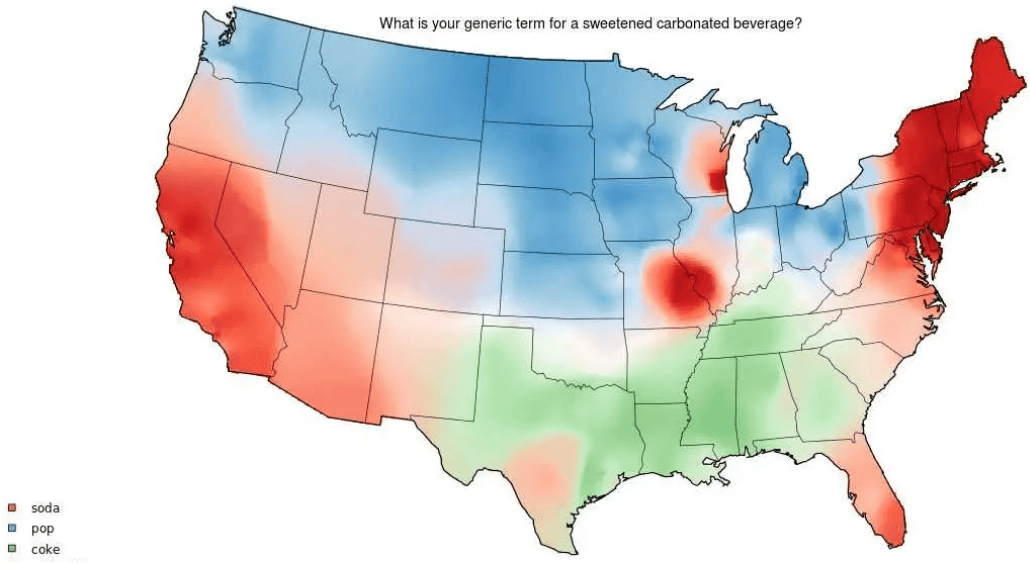



Figure 5-9: US Map - Dialects use different terms for sweetened carbonated beverages. Areas in the country in red say "soda"; blue areas say "pop" and green areas say "coke". Source: Joshua Katz and the Harvard Dialect Survey

## Why Omaha?

Omaha Nebraska has become one of the leading locations in the United States for the telecommunication industry because of its central location. During the Cold War, the US military placed the Strategic Air Command just outside Omaha. Its location made it harder for other countries to strike at this key element of the US's national defense system. Because the Strategic Air Command was nearby, Omaha benefitted from the nation's most advanced (and secure) telecommunications network. This high tech network permitted nearby businesses to experiment with toll free telephone call centers. Nebraska's location in the Central Time zone also made Omaha an ideal location for local telephone workers to make and receive calls from both coasts. The growth of the call center industry in Omaha spurred additional growth in telecommunications, high tech and other service industries. Perhaps most importantly, the local dialect in Omaha is probably the most easy-to-understand version of American Midland English in the US. Omaha's location on the plains, in the center of the continental United States, is a primary reason for its "neutral" accent? Had Omaha been isolated by mountains, or swamps; or if it was on the coast, not only would its dialect be quite different, but it is very likely that it would have a different economy, different politics and religion etc.

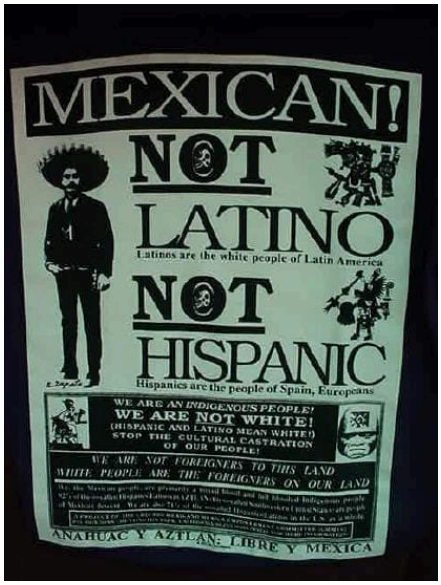



Figure 5-10: Los Angeles, CA - T shirt. Questions of which words are appropriately applied to ethnic groups represents a struggle for power. This t-shirt was for sale on Olvera Street a tourist destination. It's mostly printed in English.

Several places in the United States have site and/or situations that have contributed to significant linguistic differences from Omaha, Nebraska. Appalachian English, sometimes affectionately (sometimes derogatorily) referred to as a “Hillbilly Accent”, is commonly spoken by many people who live in the less accessible reaches of the Appalachian and Ozark Mountains. Many of the people who moved into these areas during the 18th and 19th century were from Scotland or Ireland. Their speech patterns, though certainly changed since those times, have perhaps undergone fewer changes than dialects in other parts of the US because the inaccessibility of the highlands discouraged in-migration from elsewhere. Because these locations have been spatially isolated, it stands to reason that dialect innovations made by people in these mountains spread throughout the neighboring communities, but rarely enter the speech patterns of the rest of the United States. Comparably isolated dialects can be found in other inaccessible locations in the US, such as on islands or in swampy areas.

Listen to the regional dialects found in some of the more geographically isolated locations in the United States. Think about the role of isolation on other cultural practices.

| | | | |
|---|---|---|---|
| YouTube Sea Islands, South Carolina | YouTube Tangiers Island, Virginia | YouTube South Louisiana | YouTube Outer Banks, North Carolina |

## Ethnicity and Dialect

Ethnicity is frequently expressed through dialect; and conversely a dialect may be a marker of ethnicity. Geographers contend that both are products of the peculiar spatial experience of each group. Each of the dialects spoken in the United States, or anywhere for that matter, bears the mark of the ethnicities and therefore source points of the people who once lived there. So for example, the dialects of New York City bear the imprint of the many thousands of Italian, Irish and other second-wave immigrants that moved there in the mid-19th century. They learned to speak American English, but retained some elements of the languages and dialects they brought across the Atlantic. Intermarriage and decades of living and working together no doubt created dialects that hybridized elements of speech into a new working whole. For many decades, speech patterns in regions of the US that border Mexico have reflected the influence of the many Spanish-speaking residents that live there, so that many places it is easy to find people speaking a hybridized dialect called Spanglish.

## Ebonics

African American Vernacular English, popularly known as Ebonics, demonstrates not only the power of place, but perhaps also the stubbornness of cultural change. Ebonics is a source of some controversy for several reasons. In 1996, the Oakland, California school board passed a resolution recognizing Ebonics as sort of language. This sparked outrage among socially conservative politicians and some pundits, many of whom characterized Ebonics as mostly lazy, street slang. The primary motivation of the Oakland School Board was to find additional funding to help black students in their district better master standard American English by tapping into funds used to teach English as a second language to students that spoke languages other than English at home. Linguists were generally sympathetic to the argument made by the Oakland School Board and weighed in with studies that show that a proper understanding student’s home dialect or language was useful to teachers.

The controversy in Oakland revealed several interesting issues for cultural geographers. First, language patterns demonstrate how some everyday practices exert a special resistance to cultural change. In this case, elements of African language systems appear, even after centuries, to remain lodged the modern speech patterns of many black Americans. Clearly, many African-Americans proudly seek to preserve speech patterns that help maintain a distinct ethnic identity. Second, the controversy highlighted the important roles space and place play in the maintenance and diffusion of dialects. The long history of social and spatial ghettoization of Blacks has helped preserve some relic speech patterns brought from Africa. The linguistic effects of isolation noticeable among people living on islands, mountains and in swamps was partially replicated within the African-American community through a variety of racist policies and cultural norms. It is also apparent to anyone who has listened to the speech of white southerners, or white people who live in predominantly Black regions, that speech patterns also easily transcend racial and ethnic lines. Finally, the Ebonics controversy of the mid-1990s, was depressing because of the rush to judgment by

those who knew nothing of linguistics. The vitriolic response in the media to a suggestion that a dialect might be given some of the same pedagogic considerations as a language was surprising. The dimensions of the controversy highlighted very clearly th importance of language in the creation and maintenance of identity, political and cultural order.

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# 5.4: Language on the Landscape




Figure 5-11: Oxnard, CA - Motel Sign. The sign above, once just off U.S. 101 made use of a font that conformed to the "western" theme used by the business to attract tourists.

Spoken languages, like songs, jokes and other intangible elements of culture are **mentifacts**, and while they may be audible, they are largely invisible on the landscape. However, written elements of language are quite common on the landscape in the form of signs. Signs are artifacts. Because signs generally have words on them, they provide an easy and fascinating opportunity to practice reading the landscape. Be careful though, because the words on the landscape do not always "tell" the same story as the landscape in which they are found. Consider for example, a sign commonly found near the entrances to college or high school campuses that reads, "This is a drug free campus". Do you believe that there are any college campuses completely free of drugs? Why do you think then, school administrators would place a sign like that on campus? Are they naïve? Are they making claims for political gain? Are they just trying to create a drug-free environment and believe that a sign will encourage students to abstain from using drugs? If you see a sign proclaiming something that is clearly false, or laughably untrue, and you realize that the location in which the sign is erected makes obvious the error or lie, then you are reading the landscape. As you drive around, note the names of apartment buildings in many large cities. Make a count of the references to exclusive locations (like Windsor Palace). Try reading the landscape of the house in the photo below.

Not only are words inscribed on signs occasionally misleading, but often they don't match the media or materials used in the sign. For example, a sign made of wood might be appropriate and effective for a restaurant specializing in Bar-B-Q ribs or cowboy boots, but would seem inappropriate and misleading for a store that sold laptop computers or high-definition televisions.




Figure 5-12: Bossier City, LA - The realty sign in the yard, notes “Good Neighbors”, which conflicts with another landscape message in the scene. See if you can spot the conflicting messages. (click photo to enlarge)

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# 5.5: Toponyms –Place Name Geography

Toponyms are the words we use to name places. Toponyms are applied to huge places, like “Russia”, and to small places like “Main Street”. Often, toponyms, if they are interpreted carefully, offer clues into the history of a location and the priorities of the people (or person) who named the place.

Many place names, including those applied to states, cities and towns, are compound words. These toponyms often combine a generic word and a specific word. For example, Charleston, Boston and Newton are all city names that have the “– ton” suffix, which is a short-hand way of writing “town”. So you could read “Charleston” as “Charles’ Town”, especially if in South Carolina. As you might guess the city was named after King Charles II of England. A more thoughtful analysis of Charleston would also suggest that: 1) The founders were English because they used the word “town” or “ton” 2) They liked this king, and 3) this city was founded well before the unrest that led to the American Revolution. Charleston, West Virginia, founded around the time American Revolution, was not named after any English King, but because its founders were English speaking, it makes use of the English generic suffix “ton”.




Figure 5-13: Chambersburg, PA. - Highway Sign. The use of "burg" in the toponyms on this road sign reminds passers-by of the strong Germanic herita the region.

The English were not the only folks who settled in the United States, so numerous other generic terms for “town” are scattered across the landscape. In those areas where German speakers settled in large numbers, town names have a tendency to use “-burg” as a generic suffix. Pennsylvania has many “burgs”, including Pittsburgh, Harrisburg and Gettysburg. Sometimes, as in the case of Pittsburgh, “burgh” appears to be a corruption of the word “borough”, an Anglo term for an administrative district in a town or rural township. The corruption may have come courtesy of the many Germans who settled in these areas. Because German and English are quite closely related, the evolution of town names was both easy and common. Other common markers of German settlement in the U.S. can be found in the numerous cities named in honor of German cities; including multiple places in the US named Hanover, Berlin or Hamburg.

Where the French settled in large numbers in North America, towns with the suffix “-ville”, as in Louisville, are common. Many of these are in Louisiana, where French speakers were once very dominant in the southern reaches of the state. Still, there are many dozens of other cities with French names as well, including Detroit, St. Louis and Des Moines.

Other immigrant groups, especially those that settled rural areas have left their mark on the landscape, even though many other cultural elements have disappeared. Russians, Poles, Italians, and others came later, so there are fewer toponyms associated with these groups. Africans were largely powerless upon their arrival, so almost no African toponyms are found in the United States. Far more common are cities that have names supplied by the American Indians, who were similarly powerless; but were already on the continent. Chicago, Milwaukee and Seattle are perhaps the best known Indian toponyms in the US, but thousands of physical features, like rivers, mountains and valleys bear the mark of Native American languages.

Sometimes, multiple ethnic groups share in the toponymy of a place. It's generally a sign of cultural hybridization. Consider Anaheim, California, home of Disneyland. This city's name combines a reference to Saint Anne (or St. Hannah who is revered particularly in Greek Orthodox and Islam). Spanish missionary Juniperro Serra named the area "Santa Ana". Later "Ana" part was adopted by German settlers who added "-heim" (home) to the name in order to indicate "home by the Santa Ana River". Today Anaheim has a diverse population and cultural background, much as the name suggests it should.

## Toponymy and Place Marketing




Figure 5-14: Agoura, California - Mall Sign. This sign made of materials, and engaging terminology that evokes exclusivity in attempt to generate 'snob appeal' for businesses here.

Toponyms are also used to great effect by real estate developers and business interests, who seek to convince potential customers of the value of many goods and services. One of the most common ways real estate people market land or even buildings is by making an "appeal to snobbery". It's a simple ploy that frequently uses a place reference associated with rich or powerful people. For example, an apartment complex on Maple Street, might be named "Chateau Des Maples", to make it sound French, and therefore more exotic. A gated community trying to appeal to upscale homebuyers might be dubbed "The Oaks at Hunter Crossing" in order to evoke imagery of large landed estates, where wealthy folks who engage in sports like fox hunting might live. The more comical efforts at leveraging snob appeal appear on the signs of liquor stores, or nightclubs in rundown neighborhoods. Casinos have employed this strategy for years, cashing in on the ability of the landscape to make people feel like "high rollers". It's really quite silly once you think about it; but clearly it is effective or it wouldn't be so very common place.

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# 5.6: Language and the Environment

The environment shapes language and in turn, attitudes about nature are shaped by language. There are the obvious things, like the large number of words in Castilian Spanish for rough, hilly terrain versus English. However, it is probably a myth to argue that Eskimos have 50 words for snow. The point is that people alter languages to the physical environment so that their speakers have a better chance of surviving.

A new line of research in linguistics finds that other elements in the environment may have an effect on the way language sounds. One anthropologist recently found that languages developed in high latitudes with “ejective sounds” using a burst of air are more common among cultures living at high altitudes.




Figure 5-15: West Texas –Road Sign. The word "draw" is a regional expression for a stream. In other parts of the US, you'll find locals use words like: river, creek, brook, wash, or run.

Another fascinating recent study of particular interest to geographers is from the world of cognitive psychology. Researchers have found that people spatial thinking (ability to navigate) is shaped by their language. For example, Australian Aboriginals who speak Kuuk Thaayorre, don’t have words for left and right, so in order to give people directions or even remark on something mundane, like “there’s a bug on your left leg”, they must reference cardinal directions (north, south, east and west). So, they would say, “There’s a bug on your north leg”. In order to do that, they and the person to whom they are speaking must know at all times where they are. If you were walking while having a conversation in Kuuk Thaayorre, and turned to the right, then they would have to say, “The bug is on your east leg”. For people born into languages that rely upon cardinal directions rather than terms “left” and “right”, their brains become hard wired like a GPS. These folks become acutely aware of where they are at all times, and researchers have found it difficult to disorient even small children by blindfolding them or placing them in windowless rooms, etc. These effects spill over into many other cognitive abilities as well, including how people experience time and how they see cause and effect. It’s just another example of what you know being shaped by how you know it. It reminds us to pause a moment before dismiss what others think of as “truth”.

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# 6: RELIGION

**Billions of people on the planet have some belief in supernatural events. Most consider those sacred. Those beliefs help people cope with the stresses and joys of life. In the past, those stresses and joys were very often a product of people's interaction with the natural environment. Today, religion continues to reflect and condition our interaction with the natural environment, as well as many other aspects of our daily lives.**

Religion comes in many forms. Most scholars characterize **religion** as a system of beliefs that connects humans to the supernatural. Religious beliefs and practices are generally considered sacred because practitioners believe these rules, rituals, and beliefs were conceived by a supernatural power, god(s) or person that has extraordinary power or insight. Religion is also generally practiced in a group setting, so those committed to a religion, known as **adherents**, are bound by beliefs and practices that become the basis for group and individual identities. Many religious beliefs and practices are a product of the natural and social environments from which they evolved, and in turn critically inform adherents in the ways they should think and act about a wide range of issues, from politics to economics to their interactions with the natural environment.




Figure 6-1: San Gabriel, CA - Mission Church. Mission church architecture was surely a tool to help Catholic missionaries attract local Indians who had no formal architectural traditions.

Religion in general is hard to characterize because it comes in so many different forms. Several daily rituals that one group might think of as "religious" might not seem religious to another person or group. One way of categorizing religions is to consider how a religion gets new members. Some religions actively recruit people into their faith. These are known as profile **proselytic faiths**. You may have had young men in white shirts and black ties come to your door to encourage you to join the Church of Jesus Christ of Latter Day Saints. These fellows are commonly known as Mormons, and because they have come to your door to recruit you to join their faith, they are also **missionaries**. Proselytic faiths also tend to be **universal religions** because anyone can join. Most Christians actively seek to convert others to Christianity, sometimes going to extraordinary lengths to welcome new members to the faith. Islam and Buddhism are the other major religions that seek converts. Other religions rarely proselytize. Closed religions are called **ethnic religions**, and generally you must be born into them to become part of that religious group. Judaism and Hinduism are the two best-known ethnic religions. It would be very rare to have a Jewish rabbi invite you to temple so that you might consider becoming Jewish.




Figure 6-2: Los Angeles, CA - Street Preacher. This man used a bullhorn and stood on a corner to send religious messages as a way of attracting converts.

Religions can also be lumped together on other criteria. For example, religions may be categorized by the number and the nature of their deities. Those focused on a single deity are called **monotheistic**. Islam, Christianity and Judaism consider themselves monotheistic religions. Other religions are called **polytheistic** because have multiple deities, with various responsibilities, personalities and capabilities. The religions of Ancient Greece and Rome are well-known polytheistic religions. Some religions are **pantheistic** in which the divine is everywhere and in everything. Practitioners of some religions are less focused on deities. Instead, individual adherents direct their energies inward to achieve an elevated state of mind, or to seek a beneficial afterlife through outward deeds or acts of devotion. Frequently these categories are messy and overlap in various fashions.

Some religions are easy to recognize for Americans. Most Christian groups are easy to recognize and count because they meet regularly as a group, known as a **congregation**, in a purpose-built structure called a church. Other religions and their adherents are harder to recognize and count. Some religious adherents may not meet regularly in church or building purposefully built for worship. Some many not meet regularly in a group.




Figure 6-3: Philadelphia, PA - This building is a Mason's lodge or temple in Philadelphia, an example of where secular and religious practices mimic one another.

On the other hand, some presumably profane or secular belief and behavioral systems exhibit characteristics of a religion. Some groups have texts that are treated as if they are sacred, or nearly sacred. Secular groups may have many followers who engage

in well-practiced rituals and they may even have holidays, and special clothes for priest-like figures who keep secret tidbits of knowledge and interpret special texts. Many of these groups even meet regularly in a specially constructed building. Sociologists have likened Fascism and Marxism to religions, though such ideas are certainly open to debate. Others might point to the fraternal organizations like the Freemasons or the Odd Fellows as taking on quasi-religious characteristics.

Within many religions, there are many sub-divisions, called **denominations**, and within those sub-divisions there may be additional sub-divisions. Even with a single small group of believers or within a congregation, individuals will interpret or understand religious doctrine or engage religious practices differently than fellow members. These numerous divisions within belief systems make it difficult to write definitive statements about specific religions.

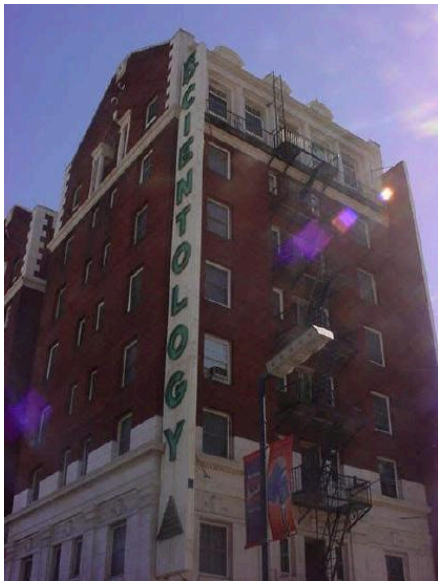



Figure 6-4: Hollywood, CA - The large scientology building on Hollywood Boulevard is suggestive of the attractiveness of alternative religions in a place like Hollywood.

Frequently, small religions, or denominations, within a religion are called **cults**. Among the general population, that word carries a derogatory connotation, but is not necessarily so among academics. Many conservative Christians characterize the Church of Jesus Christ of Latter-Day Saints as a “cult”. So, when Mitt Romney, a Mormon, ran for President in 2012, there was some consternation from some sectors. Of course, many of these same people believe that President Obama is/was a Muslim, so opinions about Romney’s religion may have had a negligible effect on the outcome of the election.

6.1: Religious Realms
6.2: Diffusion of Religion
6.3: The Landscapes of Religion
6.4: Shrines and other Sacred Spaces
6.5: Religious Holiday Space
6.6: Cemeteries
6.7: Cultural Ecology of Religion

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# 6.1: Religious Realms

Of the world's billions of followers of a religion, most belong to one of two major world religion families - Abrahamic or Indian. Each of the Abrahamic faiths (Christianity, Judaism and Islam) evolved in the Middle East, but today Jews, Christians and Muslims can be found in every part of the world. Indian Religions (Hinduism, Buddhism, Shinto, etc.) evolved on the Indian subcontinent and spread northeast across Asia. People who are not part of either of these grand traditions, may adhere to a local (or folk) religion, or may not practice any religion at all. The map below shows the distribution of the major world religions using national boundaries. Religions certainly cross boundaries, so this map is not as accurate as one might like, but it does provide a general picture of the distribution of world's faithful.

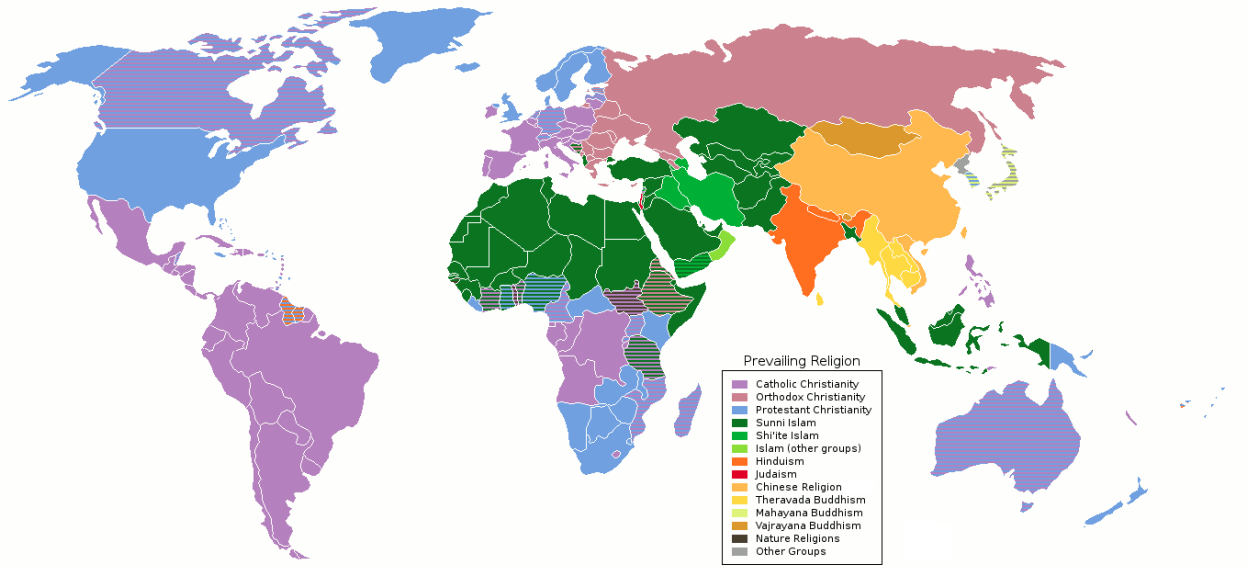



Figure 6-5: World Map. Qualitative color scheme on this map represent the majority religion in each country of the world. What flaws can you see in this map? Source: Wikimedia

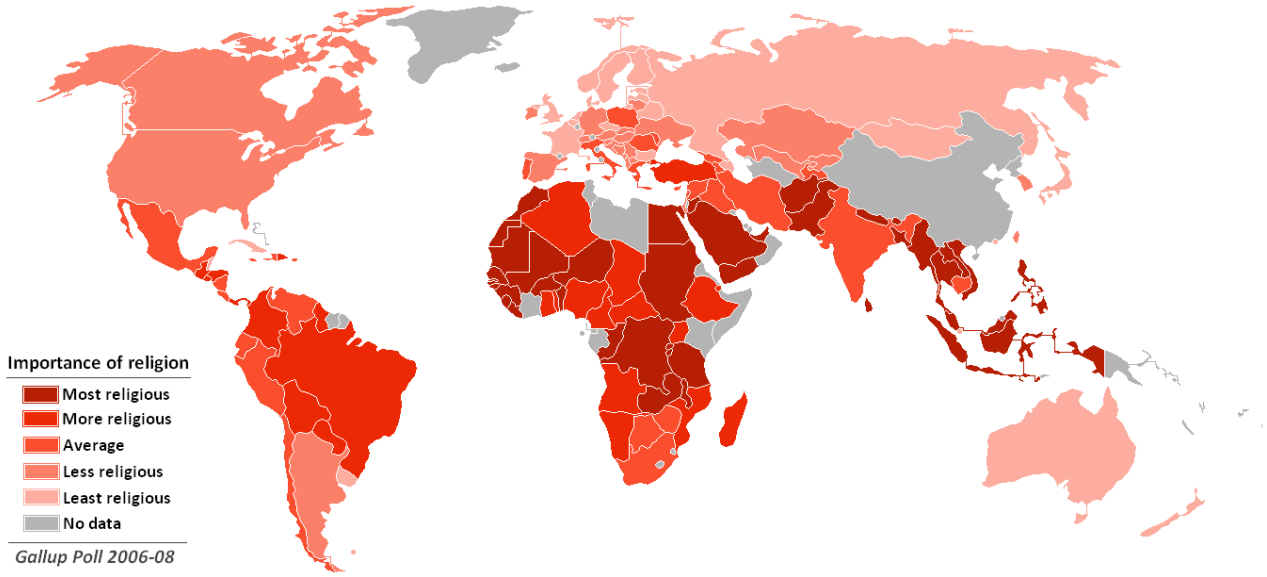



Figure 6-6: World Map depicting the importance of religion in people's daily lives (2005-2008) according to the Gallup Polling. Source: Gallup, Wikimedia.

In addition to the variety of world religions, there is wide variation in the religiosity of people who practice a faith. In some parts of the world, essentially every person's life is centered around their faith and religious practice. This is particularly true in the Muslim world, Sub-Saharan Africa and Southeast Asia. In much of the developed world, religious fervor is not as great. The United

States, contrary to what many people think,remains a relatively religious country; especially when compared to people living in other economically advanced countries.

## Christianity

With about 2.2 billion adherents, **Christianity**, is the world's largest religion, although many Christians in the developed world are not deeply committed to their faith. The erosion of involvement with religious activities and beliefs is called **secularization** and it would be fair to argue that many of Europe's Christians are secularized.



Figure 6-7: Brandon, MB - This vintage photo features a Ukrainian Orthodox church, with its distinctive onion domes and crosses.

Christians are also split into various, generally peaceful, factions. Centuries of infighting among factions within the Holy Roman Empire led to the Great Schism of 1054. Thereafter the Catholics were split into Eastern Catholics, or "Orthodox" Christians, headquartered in the Byzantine capital of Constantinople and the western branch, headquartered in Rome.

The Eastern Orthodox Catholic Church, today includes multiple, national Orthodox churches (Greek Orthodox, Russian Orthodox, Ukrainian Orthodox etc.). Many people of Southeastern and Eastern European areas are Orthodox Christians. Several million Americans are Orthodox as well. Eastern Orthodoxy has many similarities and a few important differences with Western Christianity, but generally the two groups get along well. On the landscape, you may recognize the distinctive onion domes or helmet cupolas on Orthodox churches that distinguish them from Western Christian churches that often have steeples or towers.

## Western Christianity

Western Christians were for many hundreds of years were exclusively members of the Roman Catholic Church, but it too broke into many smaller faiths during a period known as the Protestant Reformation which began in 1517. The Reformation happened when several highly religious Catholics began protesting various corrupt practices condoned by the Roman Church. The protestors demanded reforms and as a result became known as **Protestants**. They were upset about a lot of things, but key among their demands was an insistence that individuals be allowed to read and interpret Holy Bible without deference to the authority of the Pope. Because increasing numbers of Europeans could read, and many people fancied themselves capable of interpreting the Bible, many Protestants formed denominations of their own, splitting from one another like branches from a tree. A series of religious wars followed. Many people from northern Europe abandoned Catholicism altogether. Those who could not worship as they wished migrated or were forced to move to other locations.

The United States was a destination for many Europeans seeking freedom from religious persecution, but the road to religious freedom in North America was bloody. The Pilgrims of Plymouth Rock and their fellow colonists in New England, known as Puritans, are an important part of American history. Few Americans know the story of Fort Caroline, a settlement of French Huguenots, probably because they were slaughtered by Spanish Catholics over religious differences. Catholics were banned from living in Boston. Quakers could be hanged in the same city. It is one of the great American myths that religious refugees were

themselves tolerant of other religions once they arrived in the New World. Quite the opposite is true. It took nearly 200 years of European settlement in America before the US Constitution attempted to legally separate church and state, and since then there has been numerous incidents of religious intolerance. Catholics, Jews and Asians of many faiths have been targets of violence. Today, religious intolerance in America is mostly directed toward Muslims by Evangelical Christians.




Figure 6-8: Newport, RI - St. Lucy's Catholic Church in Rhode Island is a reminder of that state's long history of religious tolerance. Catholics, Quakers and Baptists – among others – were persecuted in neighboring colonies for generations.

## American Christianity

Though most Americans are Christians, there is significant variation within Christianity as it is practiced in the United States. The main differences appear in terms of religious denomination, but there are regional differences that are probably as important.

About 60 million Americans are Roman Catholic. They are the largest religious group in the country, and they are concentrated in New England, around the Great Lakes and along the southern US border from Louisiana to California. Massachusetts is about 50% Catholic, but several southern states are less than five percent Catholic. Many large cities, including those in the Midwest (e.g., St. Louis, Chicago, Cleveland, etc.) also have large percentages of Catholics. The pattern of Catholicism in reveals the effects of late 19$^{th}$ and early 20$^{th}$ century migration patterns from Europe.

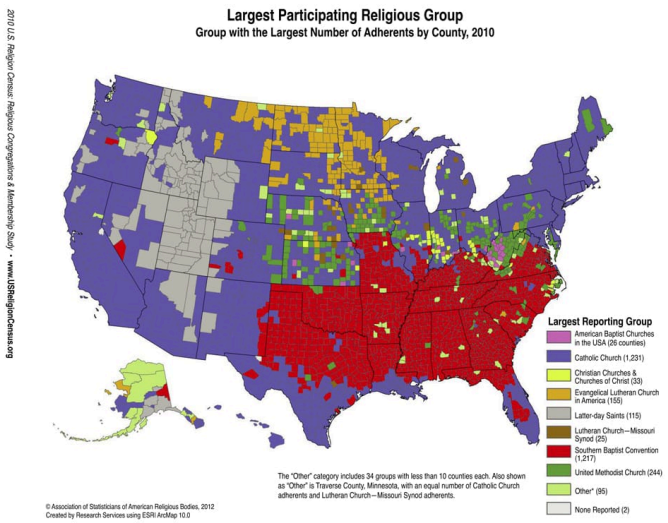



Figure 6-9: US Map by County. This map depicts the distribution of predominant religious affiliation by county. Baptist predominate the Old South, except Florida. Methodists and Lutherans dominate the Midwest. Catholics dominate the coastal regions and most urban areas regardless of region. Source: http://www.usreligioncensus.org/
ASARB

Evangelical Protestants as a group represent the second largest grouping of American Christians. Evangelicals emphasize a personal relationship with Jesus Christ, are generally more literal in their interpretation of the Bible and are often be highly motivated to spread their beliefs. Evangelical congregations are often led by charismatic preachers. There are about 50 million Evangelicals in the US, distributed among dozens of denominations. Evangelicals are dominant in the Deep South and Appalachia, mostly where Catholics do not live. However, large numbers of Evangelical Christians live in places like Los Angeles (nearly 1 million) and Chicago (.5 million).

The largest Evangelical denomination are Southern Baptists (20 million), but numerous Pentecostal churches; and a large number of so-called Non-Denominational churches together contribute another 20 million or more to the total number of Evangelicals.

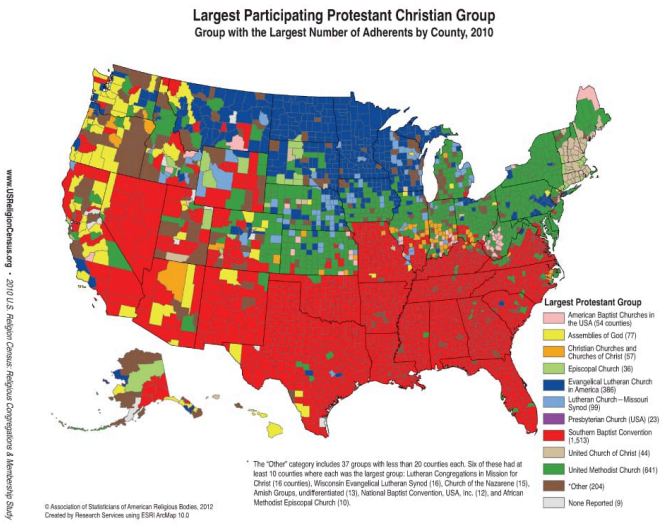



Figure 6-10: US Map by County - Predominant Protestant Christian denomination. Note the Baptist South, Methodist Midwest and Lutheran north central. Source: ASARB (Association of Statisticians of American Religious Bodies)

Mainline Protestants make up the other large category of Christians in the United States. These folks tend to be more progressive (or liberal) theologically, politically and socially than their Evangelical brethren. They are less likely to be Biblical literalists and less likely to knock on your door to get you to come to their church. Among the Mainline Protestant denominations, the Episcopalians, Methodists (10 million), Lutherans (6 million) and the Presbyterians are most numerous. As one might guess, the Mainline Protestants are found in the middle of the United States. Methodists are common in the Great Lakes/Midwestern states (Pennsylvania to Nebraska); Lutherans are dominant (or nearly so) in the Upper Midwest. The United Church of Christ, which is what the old New England Congregationalists have "become" are common in New England.

## Latter Day Saints



Figure 6-12: Salt Lake City, UT - The Great Temple in Salt Lake City is the heart of the Mormon cultural region and a symbol of the significant economic power of LDS members.

The other large Christian denomination in the US is the Church of Jesus Christ of Latter-day Saints (LDS) that claims about 6 million members, most of whom live in Utah. Popularly known as "Mormons", members of the Church of Latter-day Saints

are not Protestants because they don't trace their history to the reformation. Instead, this denomination originated in the early 19th century during a period of great religious fervor known as the Second Great Awakening. During this time, church membership flourished and many new religious denominations appeared. Joseph Smith Jr. founded the Latter-day Saint Church after translating an ancient religious text he found near his home in Upstate New York. Known today as the Book of Mormon, it tells the story of an extinct culture of people living in North America well before the time of Jesus Christ. Members of the Latter-day Saint Church were brutally persecuted during the 19th century, which caused them to flee into Utah, partly for safety. After renouncing polygamy in 1890, they gained a great deal more acceptance by fellow Christians. Like Evangelicals, they hold conservative cultural beliefs, have a strong focus on family life and hold tightly to religious convictions. In 2018, the Church suggested that the term "Mormon" be discontinued.

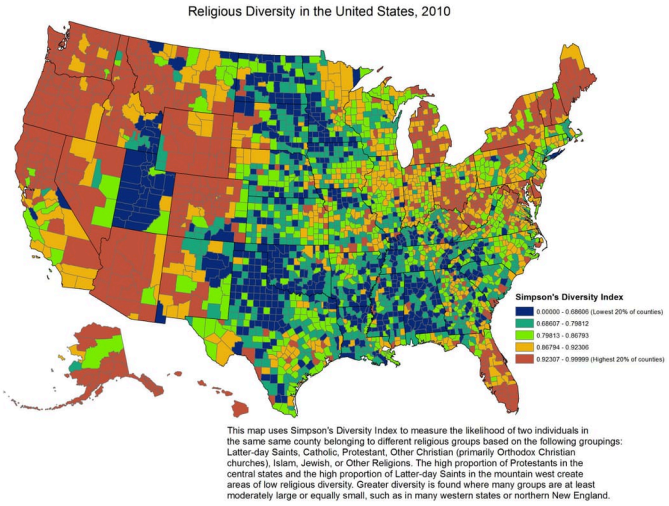



Figure 6-11: US Map by Counties - Some parts of the United States have a great mixture of religions, especially on the West Coast and New England. The Deep South and Utah have little religious diversity. Source: ASARB

## Secular America, Diverse America

In many parts of the US, particularly in the West (but not Utah), no single religion or denomination is in the majority. Instead, these regions have more religious diversity. The map above uses a diversity index to display the likelihood that two people in the same county will belong to different religious groups. You'll note that in parts of Alabama, Texas and Utah your neighbor is much more likely to go to the same church as you, than if you live in Oregon, Maine, Michigan or Ohio. The diversity of church membership seems to have a great number of implications for the politics and cultural life of these communities, especially in comparison to those regions where nearly everyone goes to the same church.

One of the clear implications is that in the most religiously diverse regions of the US, people stop going to church altogether. In parts of Oregon, Ohio, Michigan and Maine for example, less than 1/3rd of the population appears to belong to any faith. Whereas, in Utah, the Dakotas, and parts of Texas, places where religious diversity is low, over 75% attend church. Nationally, about 13% of Americans are agnostic. Note that in the map below, West Virginia also appears to have low rates of adherence; but this seems out of line with other cultural traits there. Can you guess why this map shows some very rural areas with low rates of adherence? Why might people in remote rural locations not belong to a church included in a national survey of church membership?

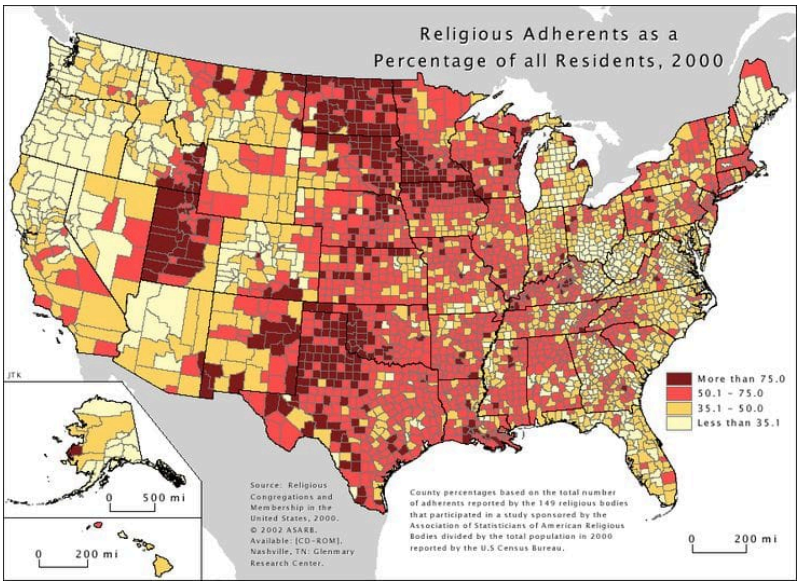



Figure 6-13 US Map by County - Rates of religious adherence vary greatly in the United States. The counties in the lightest color have rates of adherence sometimes below 35%. Utah and the Great Plains states have rates above 75%. Source: ASARB

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# 6.2: Diffusion of Religion

The United States offers a quality case study on religious diffusion. Most Americans don't choose their religion. Instead, people routinely adopt the faith of their parents. This process has been repeated over hundreds of generations, back until at some point in history, perhaps somewhere in Latin America, Europe or the Middle East, a conversion to a new religion occurred. For some, adopting a faith is a voluntary act, but for others conversion came at the blade of a sword. In fact, religious conversion was one of the driving forces behind the colonization of much of the world: it was the God part of the "Three G's" of the colonial age: God, Gold and Glory. Saving souls was a very real purpose for those who colonized the world as missionaries. Religion also helped to salve the conscious of those who recognized the crass, brutal economics of colonial expansion.

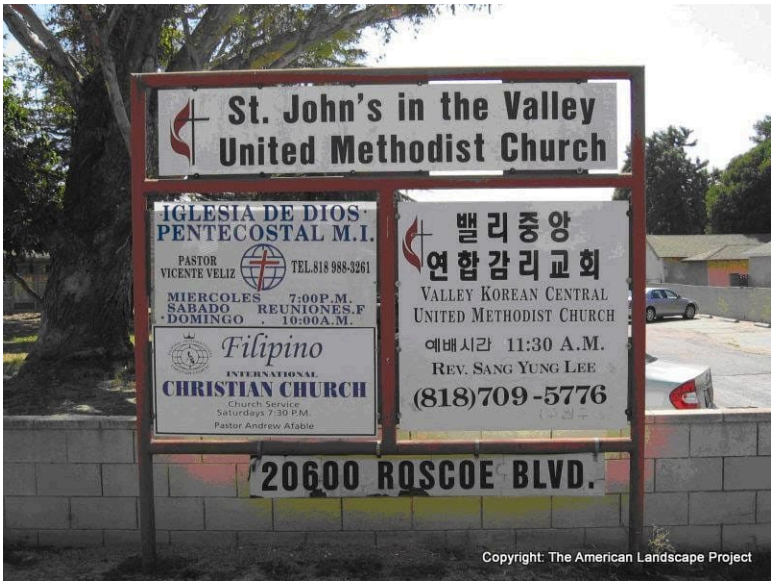



Figure 6-14: Canoga Park, CA - Church Sign. In ethnically diverse regions, religious and ethnic tolerance is evidenced by the tendency of multiple, diverse congregations to share the same sacred space.

The United States is largely Christian because most of the people who migrated here from Europe were Christians. Religious intolerance in Europe against religious minorities drove many Christians to migrate to the New World. Africans brought to the US as slaves, and many American Indians who were already here, were forced to convert to Christianity by militarily powerful, intolerant and often genuinely faithful Europeans. For many generations, Americans had little choice in terms of religion. There could be strong social and even legal sanctions against adopting new beliefs, even though the US Constitution guarantees the right to religious choice. For generations Americans knew little of other religions or practices. To them Christianity was the only choice available.




Figure 6-15: Shreveport, LA - Billboard. Evangelicals in many parts of the country exhort others to follow Christian religious doctrine. Some considered the message on this sign blasphemous because a person signed it as "God".

Religious affiliation changes slowly. Most people inherit their religious practices and ideas from their parents. Few consider adopting a new religion, or even new ideas, which inhibits rapid changes from one generation to the next. When people do adopt a different faith, or even when they diverge from strongly held familial practices, it often signals significant life changes for those making the change. Major events, like marriage to someone from a different faith, long distance migrations, wars, or some other major upheaval within a family count among the few forces powerful enough to seriously the disrupt the continuity of religious practice. Slow changes are the rule, especially in isolated regions protected from outside idea and practices.




Figure 6-16: San Gabriel, CA - Grape Vine. Spanish missionaries introduced viticulture in California. Today California remains largely Catholic and viticulture forms a significant part of California's agricultural economy.

The map of denominational affiliation is a little harder to explain. Some of the pattern can be explained by ethnicity. The Spanish converted many Indians living in what is now Latin America and the American Southwest. The fact that places like California already had many established Catholic churches, has surely been attractive to Catholics considering migrating to California over the years. Other largely Catholic areas of the US exist where Catholic immigrants to the US from Europe found jobs. If those already there were tolerant of the arriving Catholics, incoming Catholic migrants often became a majority, and in the process attracted additional Catholics through a process known as chain migration.

Lutherans, largely migrated from the Germanic countries of Northern Europe. It's hardly surprising that Germans and

Scandanavians found the colder climates of Minnesota, Wisconsin and the Dakotas much to their liking. When they migrated here, they brought their religion. So, at least for one group, **cultural preadaptation** to specific environmental conditions seems to have played a role in creating the religious landscape.

Baptists are clearly predominant in the US South, but they were not the first group to migrate into there. In fact, Baptists were rare in the South during the Colonial era. Their numbers grew as a result of their denomination's focus on spoken/oral religious services. This set them apart from the Anglican/Episcopal churches dominant in the South during the Colonial era. Because many of the later immigrants to the South could not read; and schooling was far less common in the southern US than elsewhere in the US, Baptists found the greatest appeal there. Therefore, ordinary people of the South became Baptists. Prior to the Civil War, American Baptists split into two large groups over the practice of slavery. **The Southern Baptist Convention** favored slavery and increased in popularity in the South.




Figure 6-17: Winter Haven, FL: This large modern church attests to the popularity of religion in the Deep South, where much of the population belongs to a Baptist congregation.

Most blacks at that time attended the same church as whites, so today still many black families belong to some version of the Baptist faith, including he **National Baptist Convention**, which has about 7 million African-American members.

The Church of Jesus Christ of Latter Day Saints is predominant in the Intermontane West because this was a safe place for the followers of this faith to practice their religion in the 1800s. Latter-day Saints found themselves the victims of extreme religious intolerance in Missouri and Illinois where they had hoped to settle and build their community. After the founder of the church, Joseph Smith, was murdered in 1844, the Latter-day Saints moved to what is now Utah in search of a place isolated from persecution. Although there was a short "war" between Latter-day Saint (Mormon) settlers and the US Army largely over the degree of sovereignty the Utah territory had over its own affairs, the isolation of Utah and Idaho helped these people build and maintain a reasonably unique cultural realm.




Figure 6-18: Salt Lake City, UT - Highway Sign. The beehive symbolizes the exceptional work ethic of Utahans, nearly 75% of whom are Mormons.

While religious persecution may have driven early Latter-day Saints into some of the most desolate, isolated lands in the United States, religious intolerance, and the fear of it violence, keeps other religious minorities in large cities. Jews, Muslims, Hindus and Buddhists in the United States tend to be found in many of the same large urban areas. This trend is partly explained by the patterns of economic opportunity and migration. On the positive side, it is easier for those who want to find people of their own religion and culture in a large city than in a small town or rural area. On the darker side, there is also an argument to be made that there is safety in the numbers afforded minority communities in large cities where a critical mass of defensive support can be mustered against discriminatory practices and/or violence. There also tends to be a sort of apathy, or more hopefully, tolerance, in large cities. Big City people are used to diversity and feel little threatened by people different from themselves.

A final spatial pattern discernible in the US is found in the pattern of particularly unusual or novel religious practices, like snake handling in Appalachia. Though similar in outcome to the search for isolation practiced by Mormons; remoteness itself seems capable of fostering innovation in religious practice or doctrinal interpretation. The American West, which at one time featured thousands of isolated towns and villages attracted dozens of Christian splinter groups and fostered, via isolation, the creation of dozens more. Mt. Shasta in northern California, for example, is home to several “new age” cults (or religions).




Figure 6-19: Slab City, CA - Salvation Mountain. This folk-art monument, built in an anarchic settlement in the California’s low desert evokes the strong desire of some Christians to build monuments to their faith.

# Islam

**Islam** is the world's second largest religion with over 1.8 billion adherents and it's growing rapidly. Like Christianity, Islam is not monolithic. There are two major subgroups. About 80% of all Muslims are Sunni and they live mostly in Asia and North Africa. The other twenty percent of Muslims are Shia, (Shi'ite) living mostly in Iran and Iraq. There are numerous smaller sects as well, such as the Alawites of Syria. Many other factions exist within the two main groups as well. Americans tend to think that all, or most, Muslims live in the Southwest Asia and North Africa (the "Middle East"), but far more Muslims live in Asia. Muslims in Indonesia (229 million), Pakistan (200 million), Bangladesh (100 million), and India (200 million) easily outnumber the populations in the arid lands of the Middle East. Even Nigeria, in Sub-Saharan Africa, has 100 million Muslims roughly equal to the number living in Egypt, which is the most populous Muslim country in the Middle East. There are even 2.6 million Muslims living in the United States. About 50,000 African-American Muslims belong to the Nation of Islam (NOI), a somewhat controversial group, which rose to national prominence during the Civil Rights era under the leadership of Malcom X. Members of the Nation of Islam remain visible in America's largest black communities, easily recognizable by their characteristic suits and bow ties.

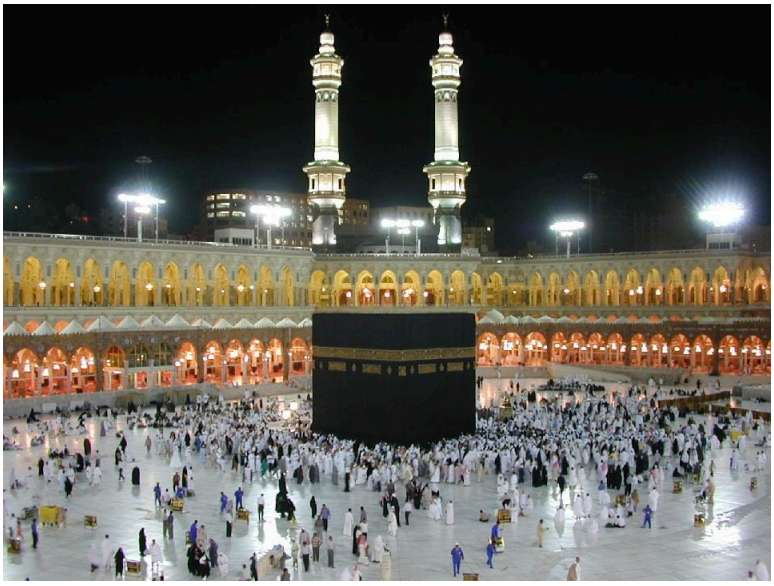


Figure 6-20: Mecca, Saudi Arabia - The Kaaba is the holiest location in Islam. It is the destination for millions of Muslims from around the world participating in the Hajj, the holy pilgrimage. Source: Wikimedia.

Despite the outsized attention the Islamic world has in the imagination of Americans, many in the US are largely ignorant about Muslims and their faith. Their holy text is the Qur'an (or Koran - there are various spellings of many Arabic words) and within in it, you will find a large number of commonalities with Christianity and Judaism. In fact, Muslims believe that all three faiths are simply variations of the same religion. Muslims recognize Abraham, Moses, and Jesus as early prophets. According to Muslims, the original teachings that form the basis of all three religions were corrupted, and the misinterpretations of Islam evolved into Judaism and Christianity. To Muslims, the Qur'an is the uncorrupted, properly written, version of the same universal truths originally revealed by Allah to Jesus and Abraham, but as it was revealed to the last and true prophet Muhammad it has not been since altered.



Figure 6-21: Los Angeles - Members of the Nation of Islam sell bean pies to the public on Crenshaw Blvd, a long-standing tradition in South Los Angeles.

## Five Pillars of Islam

Islam is strictly monotheistic. To them (and Jews), the Christian's doctrine of the Holy Trinity (Father, Son, Holy Spirit) is not strictly monotheistic. Observant Muslims must adhere to an expansive set of Islamic laws covering many aspects of daily life, so it a discussion of that would be unwieldly, but non-Muslims should be familiar at least with the Five Pillars, which represent the core religious duties for observant Muslims.

First, Muslims must "take the Shahada", meaning they must recite an oath as a basic profession of faith to become a Muslim. The Sunni version of the Shahada translates roughly thus: "There is no God but Allah and Muhammad is the prophet of Allah". The Shahada is repeated many times, frequently as part of the second pillar, called Salat, which the act of praying five times daily. Prayers are often recited at a mosque, where Muslims worship, but any place will suffice when it is time to pray. The third pillar is alms giving, or donating to money to help the poor and other people in need. It's not exactly charity, because Muslims who can afford it are obliged to give a certain percentage of their wealth as zakat. Pooled together these monetary obligations made by Muslim likely exceed all other sources of aid to the needy worldwide. The fast (sawm) of Ramadan is the fourth pillar and it requires Muslims of faith and good health to fast (no food or water) from sunrise to sunset for the entire month of Ramadan. There is good food and fellowship at sunset each day during the fast, and a holiday, Eid al-Fitr, marking the end of the fast of Ramadan. Some Muslims observe a shortened work day during Ramadan, but basketball fans may recall Muslim NBA players Hakeem Olajuwon and Kareem Abdul Jabbar who played exceptionally well during the fast. The final pillar is the Hajj a pilgrimage to Mecca, Islam's holiest city. All Muslims, if they are able, must travel at least once in their lifetime to Mecca at a specific time of year and engage in a series of rituals alongside as many as three million other Muslims. Clearly, it is one of the world's greatest spectacles, but the size of the crowds in recent years has challenged Saudi authorities to ensure the safety of pilgrims. Interestingly, the Arba'een Pilgrimage in Iraq attracts as many as 20 million Shia Muslims, but for various reasons is largely unknown in the United States.

# Judaism

The oldest of the Abrahamic religions is Judaism. It is monotheistic, rooted in the Middle East, text-based and fragmented like Christianity and Islam, but unlike it Abrahamic cousins, it is not a universalizing religion, so Jews don't try to convert people to Judaism for the most part. The Jewish faith is broken into several sub-groups, which are in turn also broken into sub-groups. In the most basic sense, one can divide Jews into three broad categories based on their interpretation of Jewish Law. There are the very conservative, Orthodox Jews, a less conservative group and a more liberal or Reform group. It's also plausible to add a fourth group: those who are only culturally Jewish, meaning those who engage in many practices common among Jewish people but without actively practicing the religion. Anywhere from about 11 to 15 million people in the world call themselves Jewish. About 40% live in the United States, mostly in New York, Miami, L.A. and other select large cities, and about 40% of Jews live in Israel, the historic Jewish homeland. Jewish people make up a little less than 2% of all Americans, but they have had an outsized effect on American culture. Largely safe from persecution in the US, Jews have thrived here thanks in part to their emphasis on

education and career success. Jewish people have for the most part become part of the American mainstream, assimilating to the point of disappearing in some communities. Intermarriage with non-Jewish people, and a low birth rate has contributed to the assimilation process. Some Orthodox communities have remained separate from the mainstream of American life, living for the most part in select neighborhoods in urban areas.




Figure 6-22: Natchez, MS – This abandoned synagogue in Mississippi speaks to the migration of Jews from the Deep South to urban areas elsewhere during the Jim Crow era.

About 10% of Jews live in Europe. Jews who identify as having a relatively recent European ancestry are often called Ashkenazi, and they are by far the most numerous. The other large group of Jews that are defined geographically are those that identify with a Middle Eastern or Mediterranean heritage. They are called Sephardic Jews ; though it should be pointed out that these categories can be slippery and so there is considerable debate about each category.

## Hinduism

There are probably around one billion Hindus in the world, making it the third largest religion. Most Hindus live in India, and Nepal, but there are well over a million living in the United States, mainly in large urban areas like Los Angeles and New York City. Hinduism is the oldest of the major faiths and probably has more branches and versions of any as well, making it challenging to describe Hinduism concisely. The Indian Supreme Court has even challenged its description as a “religion”, arguing that Hinduism should be considered simply a way of life rather than a faith. Still, most westerners have trouble understanding Hinduism without framing it within our existing notions of religion. For example, Hinduism doesn’t have people who get kicked out of the faith for having alternative beliefs; there are no heresies. Therefore, some Hindus are monotheistic, some polytheistic, some pantheistic and others still are atheists.




Figure 6-23: Malibu, CA - Hindu Temple. Extraordinary architectural elements mark this Hindu temple near Los Angeles. Architecture is a common means by which religions communicate their commitment to their faith.

There are some ideas and practices in Hinduism that college-educated Americans ought to know a little bit about, especially since we have incorporated some of these notions into our own vocabulary. You've no doubt heard people say something like, "bad karma", if they witness someone doing something mean-spirited. This is a Hindu notion that people get, eventually, the life they deserve, but with a twist on the common American understanding – the good or bad you do in this life may carry over to the next life in a process called **reincarnation**. People who can adhere to their dharma, or achieve a sort of harmony with an ideal lifestyle (righteousness), may eventually experience nirvana, a state of blissful enlightenment that is the goal for many Hindus. Yoga, what many Americans think of as simply a set of stretching and breathing exercises, is actually a set of practices that Hindus use to help achieve spiritual goals. There are numerous Yogas, each with different elements, but for the most part, they are paths to spiritual well-being, not just physical well-being.

Hindus have loads of holidays, some public and some more private. They have a host of rituals as well. In contrast with Christians, burial is not common, but rather Hindus generally practice ritual cremation. Vast numbers of Hindus make pilgrimages as well. The most famous pilgrimage is by Shakti Hindus to the Ganges River in the holy city of Varanasi, where they believe the water absolves sin. Many Hindus go to Varanasi to die for this reason.

## Buddhism

Siddhartha Guatama, more commonly known as Buddha, lived somewhere in India around five centuries ago. Unsettled by the abuses and the injustices within Hinduism, Siddhartha set out to create a new path to spiritual enlightenment. It's not surprising then that Buddhism, the practice he invented, shares many characteristics with Hinduism, including the notions of Dharma, reincarnation, karma, etc. There are many differences as well. A core element of Buddhism is the Four Noble Truths, which explain why people have trouble achieving an enlightened lifestyle. Essentially, the Four Truths are as follows: 1) We suffer greatly from many things; 2) Our suffering is a result of our ignorance and desires; 3) To cease our suffering we must eliminate our ignorance and desires 4) There is an eight-fold path to achieving liberation from our ignorance and desires.

Buddhism spread out of India and is the dominant belief system in much of East and Southeast Asia, plus Sri Lanka, Bali and Kalmykia in Russia. There are several schools (rather than sects) within Buddhism. The Theravada Buddhists are dominant in Southeast Asia, where a great percentage of the people actively participate in Buddhist practice. In China, Korea and Japan, Mahayana Buddhism is more popular, but the rates of adherence are lower, and Buddhism is heavily interwoven with other local traditions, like Confucianism in China or Shinto in Japan. Tibetan Buddhism is found in Tibet, Nepal and Mongolia, and it is perhaps the best-known version in the US because of the popularity of the Dalai Lama, the best known of all Buddhist leaders.




Figure 6-24: Los Angeles, CA - The Thien Hau Temple near downtown LA functions as a religious temple for the Vietnamese and Chinese communities in Los Angeles is officially a Taoist shrine, but associations with Buddhism and local religions are evident. Source: Wikimedia

In the US, Buddhists live mostly in California and in big cities in the East, where Asian-Americans have migrated. However, because Buddhists don't "belong" to congregations like Christians, their numbers are hard to discern.

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# 6.3: The Landscapes of Religion

Religious practice shapes the landscape in myriad fashion. The landscape can reveal a great deal about the belief systems and values both dominant and minority religious groups. In turn the religious landscape affects the beliefs and religious practices of the adherents.




Figure 6-25: Ruston, LA - Small white Baptist churches like this one dot the rural landscape of the Deep South. They are iconic of a lifestyle and a specific belief system in the rural South.

Christian churches are the most obvious part of the religious landscape of the United States. Sacred architecture may be grandiose, like many Catholic Churches, or simple like the buildings used by the Amish. Though both groups use the same basic religious text, their various interpretations of the Christian Bible have led different groups to conclude that worship services should be conducted in very different buildings. Many religions have temples, shrines and other houses of worship that pass unrecognized as sacred spaces by Christians. Dozens of other places on the landscape are believed to have special sacred functions or meanings, including cemeteries, certain mountains, rivers, etc.

The architecture of churches and temples often reflect the desire of religious people to glorify their God(s). Worshippers attempt to create, as best they can, a monument worthy of their religion. Catholic churches are frequently monumental because many Catholics think of churches as the “House of God”. Inspiring architecture may also help people feel the presence of the supernatural, and motivate them to behave in accordance to religious guidelines. Architecture sometimes is educational too. This was especially true when literacy was rare. The magnificent stained-glass artwork of many churches was used to teach many of the stories from the Bible. Architecture may be used to recruit new converts. Consider the impact of even the modest mission churches of California upon prospective converts in the late 18$^{th}$ century. To Californians today, mission chapels may seem mundane, but to the Native Californians in the late 1700s, they may have seemed the most amazing buildings they had ever seen. Architecture, and landscape in general, can be a very powerful media for communicating ideas and emotions.



Figure 6-26: Prague, Czech Republic - Massive cathedrals are important markers of the prestige of many cities with large Catholic populations. The grandeur of these buildings reflects specific denominational beliefs about architecture.

Approaching in size and grandeur of Catholic churches are many megachurches, which have become popular in the United States among Evangelical Christians. These churches, which are sometimes mockingly called “Six Flags Over Jesus” by the local towns people, may feature multiple buildings: gymnasiums, classrooms, coffee shops, and bookstores, in addition to the more common chapels and rectories. Megachurches offer a variety of services for the convenience of their congregations, and function as great recruiting tools for congregations seeking to grow. Some claim that because these buildings bring people to the faith, they are worth the cost and effort. Still, the extravagance of the building programs has created some controversy. Some argue that spending millions of dollars on extravagant buildings, rather than the needs of the poor, is a sinful waste of money. Some also worry mega-churches threaten to shut down smaller churches without the money to compete for the favor of adherents. Government officials and businesses have also occasionally questioned the tax-exempt status of churches that appear to operate in successful business enterprises or are overly active in politics.

Elaborate church buildings also draw the scorn of those who believe that Christian doctrine calls the faithful to “humble yourself before the Lord” in all areas of life. The Amish and certain orders of the Mennonites are the two groups in the US that best embody these ideas. Some of the more conservative Amish groups do not build church buildings at all, but instead gather to worship in private homes because they choose to focus on a passage in the Bible that notes that God “does not dwell in temples made with hands”.

Other congregations also prefer simple church architecture. Some of the oldest churches in America, like those built by Puritans in New England, adhere to strict rules regarding simplicity and humility. Puritans built churches without stained glass, crucifixes, statues, or other kinds of artwork. The buildings were also often square, to help enforce notions of communalism that characterized their political, social and economic life. These buildings also functioned as a civic center as well because the idea of separating church and state had not yet occurred to these Americans. Many other congregations have carried forth the tradition of very simple churches, out of a desire to spend precious church monies on things other than buildings.




Figure 6-27: West Monroe, LA. This mega church had parking areas so vast, lots were numbered like they are at amusement parks. These massive churches threaten the existence of smaller, "hard pew" churches like the one pictured above.

Of course, impoverished congregations lack funds to build elaborate churches, so they may seek out buildings designed for purposes other than sacred activity. The adaptive reuse of secular spaces into sacred spaces may be unacceptable to some, but for academics, it invites questions about the process by which a place become sacred. What process, for example, transforms abandoned gas stations or convenience stores into churches? Can any place be a “House of God” or are certain places unacceptable for religious services?




Figure 6-29: Los Angeles, CA - This house in a residential neighborhood also serves as a temple for these Buddhists who are celebrating the end of a fasting period. It also violates several zoning laws.

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# 6.4: Shrines and other Sacred Spaces

The practice of turning profane, secular, or ordinary locations into sacred spaces where worship activities may transpire is commonplace. The process by which a location becomes sanctified or ordinary spaces become hallowed or holy is not as easy to understand. Holy persons, such as priests, may perform a **consecration** ceremony upon buildings or grounds. Buildings or spaces can also be deconsecrated through a ritual. The aggressive destruction of a holy or sacred site by vandals, or sometimes by rival religious groups, is known as desecration.



Figure 6-30: Troy, NY - Home-made folk shrines such as this stone grotto in Upstate New York are common in areas with large Catholic populations.

Clearly though, there are many sacred sites that have become holy through a less formal process. In areas where Catholicism is prevalent, small folk-art shrines, generally dedicated to the Virgin Mary, and enclosed in an artificial grotto are easily spotted. These shrines are sometimes fashioned out of old bathtubs, prompting some to humorously label such a shrine a "Bathtub Mary", or a "Madonna on the Half Shell". Similar are the impromptu, and frequently temporary, shrines erected to victims of car crashes or other accidents. Mourners often place candles, crosses, crudely painted bicycles (ghost bikes) and other memorabilia at the site of an accident, temporarily creating a sacred space for mourners who may have known the victim.

Occasionally, the site of a particularly public tragedy will be treated as sacred space; inviting religious-like pilgrimage and even **dark tourism**. The ground zero location in New York City, Dealey Plaza in Dallas and Ford's Theater in Washington, D.C. may be considered sacred space by some because people come to remember, grieve and ponder metaphysical questions. Behavior in such locations often approximates that which is regularly observed in formally recognized sacred spaces. For example, people tend to talk in hushed tones, they walk and gesture slowly etc. Some monuments that are ostensibly sacred, like the Lincoln Memorial in Washington D.C., also (almost imperceptibly) invite visitors to treat the space as sacred.

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# 6.5: Religious Holiday Space

Religious holidays often transform public space into quasi-religious space. Most of it is rather mundane, and quite removed from any sort of actual religious doctrine or practice. In the US, during the period leading up to the Christmas holiday, many profane spaces (shopping malls, or even roadsides) become quasi-religious space. Therefore, even though Santa Claus and Saint Nick are obviously tied to the Christian tradition, they are also widely embraced as symbols of a public holiday that is celebrated enthusiastically by non-Christians and even in non-Christian nations, like Japan. More controversial though is the use of more purely public space, like courthouses or parks, for the display of clearly religious nativity scenes and menorahs during the holiday season. Judges frequently must decide exactly when and how religious people can use public space to promote or celebrate religious holidays or events.




Figure 6-32: Chicago, IL - The Saint Patrick's Day Parade mixes ethnic, religion and civic functions into a single event, blurring the lines between church and state; public and sacred space.

Other examples of the uneasy intersection of church and state occur when public funds are used to promote, organize or otherwise regulate large religious festivals. Mardi Gras, a celebration preceding the start of the Catholic Lenten fasting season, attracts huge crowds, many of whom are tourists, to New Orleans each year. Many other towns in the Gulf Coast regions have public celebrations, frequently including a parade that costs taxpayers a great deal of money. St. Patrick's Day parades, Halloween festivals and many other such celebrations require significant public endorsement, but seem to pass without controversy.

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# 6.6: Cemeteries

Cemeteries are common landscapes that function often as religious or sacred space, though they too are often regulated and maintained by the public. How a society treats corpses, and how they treat the places where the dead are buried (if they bury their dead) may reveal a great deal about the religion of the people who build them.

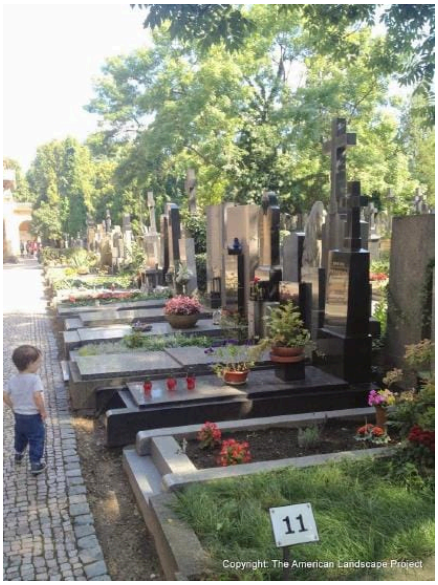



Figure 6-33: Prague, CZ: Very old cities, like Prague, struggle with how to balance religious practice with pressing needs for living space.

The Abrahamic faiths generally have a similar set of beliefs about the “end of time” in which humans, and the remains of humans, shall reconcile with the divine. For this reason, it is tradition for people in these religions to bury their dead so that the remains of the deceased may be brought back to life, or resurrected in some form at the end of time. Muslims tend to bury their dead facing their holiest city, Mecca. Christians tend to bury people facing east, so that the dead may rise to face Christ on Judgment Day. Burying millions of people in perpetuity has multiple implications for geographers, not the least of which is the amount of territory given over storing the remains of the dead, especially in large cities like New York; or very old cities like Cairo. Some cultures hold these grounds inviolable. Other traditions are more flexible, allowing for the removal of remains from gravesites so that the space may be re-used or recycled. Some burial sites may add new corpses to existing mausoleums, or crypts; particularly when a family “owns” a particular site.

Before the 20$^{th}$ century, it was common practice in many parts of the United States to bury loved ones somewhere on a family’s property. Backyard cemeteries may have made sense generations ago, but are generally forbidden today for a variety of reasons, not the least of which is the fate of cemeteries upon the sale of a property. Backyard cemeteries tell us a great deal about how our cultural practices have changed along with our attitudes toward the dead (and dying), as well as property. Many Americans find cemeteries “creepy”, so having a number of unknown people buried in your backyard would be even more so. It’s certainly enough to inspire movies, like Poltergeist, among others. Among people 100 years ago or more, people got sick and died among the living – not in a hospital or nursing home geographically isolated from the houses or homes. Therefore, in generations past, cemeteries and dead people were far less frightening.




Figure 6-34: Dubach, LA - Stone markers indicate a family cemetery plot, just behind the house of a 19th century homestead. How have attitudes changed toward death and burial? Would you like this in your yard?

Americans' attitudes toward cemeteries have evolved. The Puritans of New England paid little attention to matters of cemeteries and gravestones. Most were buried without much ceremony in a common plot, often without permanent markers. Later, New Englanders marked burial plots with morbid-looking winged death heads and skull and crossbones imagery to remind the living of their own mortality. Later, as religious practice evolved, so did the nature and variety of grave markers; as well as the function of cemeteries. For some time during the 19th century, cemeteries were treated much like parks are treated today, a place where death and dying could be encountered in a pleasant, tranquil setting; a place for a stroll or a picnic. In a large city, like Los Angeles, where there are numerous immigrants from different parts of the world, it remains easy to witness immigrant families having a picnic or a relaxing day in the cemetery – near the gravesite of a recently deceased grandparent or relative. The behaviors of immigrants in cemeteries suggest that their native cultures remain reasonably comfortable – not creeped out – by death and burial.




Figure 6-35: Boston, MA - Colonial era grave markers in New England often feature "winged death heads", presumably a warning to the living to lead virtuous lives.

The design aesthetics of 19th century cemeteries influenced the development of park space in the United States. Traditional monumental cemeteries are costly and difficult to maintain. Headstones marking the location of burial sites erode, crack and break. Wealthier families, especially generations ago, commonly built large monuments in an attempt to raise the stature of the

deceased. Overtime elaborate monuments and mausoleum deteriorate and become hazards. The cost of simply trimming grass has led to the popularization of memorial gardens, or lawn cemeteries with flat grave markers that permit lawn tractors to mow grass quickly and efficiently. The sight of heavy machinery passing over the remains of loved ones may violate the sense of propriety for some. The other problem with lawn-style cemeteries is the uniformity of the gravestones. Many people dislike the thought of commemorating a loved one with a generic marker. More recently, the costs associated with burials have invited an increasing number of people to consider cremation, or natural burial to mitigate the numerous environmental consequences of conventional burial in a vault with headstones, etc.

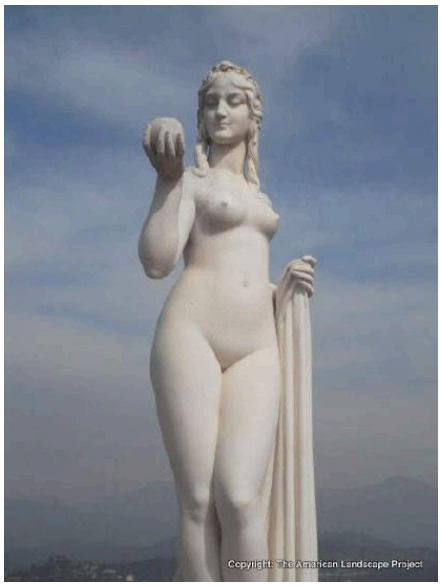



Figure 6-36: Glendale, CA - Cemeteries were for a time designed to be park-like museum spaces where people could engage in activities beyond mourning.

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# 6.7: Cultural Ecology of Religion

Religion interacts with a great number of things within any culture. Economic activity, politics, ethnicity, language, and the environment all interact with religion in complex and compelling ways. The vast extent of the interactions can't be fully explored here, but a few examples will suffice to introduce you some ways of thinking about how religion (or any other cultural practice) interacts with other elements of culture.

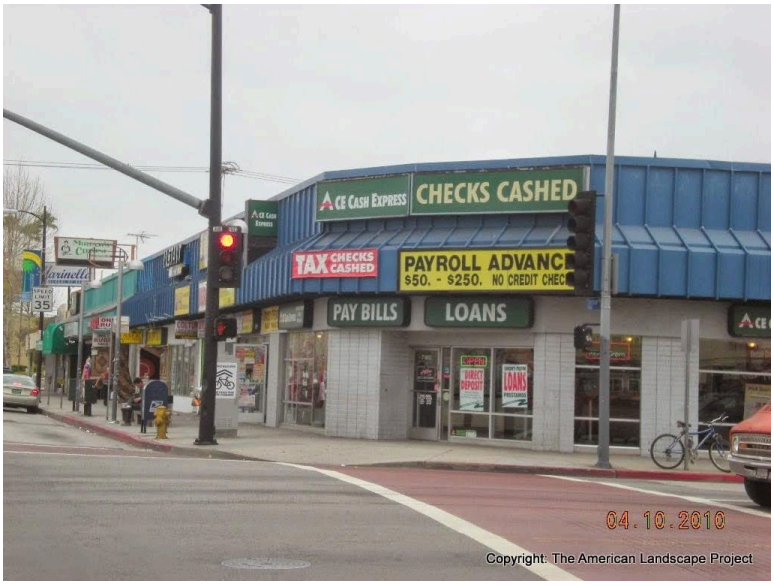



Figure 6-37: Reseda, CA - Payday Lender Storefront. Usury was once considered a very serious sin, undermining the banking and lending industry. In recent years, deregulation of usury laws have resulted in the proliferation of high interest rate loans, even in the most religious regions.

## Religion and Politics

In the United States, as is the case elsewhere, religious affiliation is a good predictor of political behavior. In the US, Evangelical Christians and Mormons rank among the most politically conservative voters in the US year after year. For nearly 100 years after the Civil War, many Southern Baptists were fervent supporters of the Democratic Party (Abraham Lincoln was a Republican). The so-called "Reagan Revolution" of the 1980 created a much-energized alliance between Republicans and conservative Christians. Certainly, part of the switch was motivated by the Democrats' support of Civil Rights for African-Americans, but hot-button religious issues, particularly abortion, drove many Evangelicals to the Right (Republican). Leading the charge were several high-profile television ministers, such as Jerry Falwell and Pat Robertson. The new alliances, particularly with the pro-business/anti-taxation element of the Republican Party forged during the Reagan era have caused some Evangelical Christians some discomfort however. The numerous Biblical restrictions on usury, for example, have made it difficult for some Evangelicals to fully support Republican policies calling for de-regulation caps on the interest rates charged to people taking out loans.

## Religion and Economics

Religious beliefs affect numerous economic activities. For example, many religions condemn charging interest on loans. So, few people would loan money in many parts of the world for many centuries. Jewish people, who faced few religious restrictions on usury, faced little competition in the banking industry until Christian doctrine on usury began to change following the Reformation. This explains in part why Jewish people have a long-standing involvement with the banking and jewelry industries. In a very similar fashion, many Evangelical Christians and Mormons expressly forbid the consumption of alcohol. It is therefore not surprising that few wineries exist in Utah or Alabama. On the other hand, California's long association with Catholicism has helped advance the very profitable viticulture industry in that state. Muslims and Jews (and some Christians) abstain from eating pork because of religious restrictions; therefore pig farming is an industry largely absent from Israel or the Muslim world. Many parts of India abstain from eating any meat, so animal husbandry would be an unlikely career path in many parts of the Hindu world.

# Religion and the Environment

Religious beliefs also influence people's interaction with the natural environment. Certainly, Christian attitudes about nature, especially in terms of exploiting natural resources has had fascinating consequences in American history. The Puritans of New England, having fled Europe during a period when many people continued to practice rituals tied to pre-Christian nature religions, held a pretty dim view of the great forests of New England. To them, the city was where Christians could find orderliness, a trait they considered evidence of God's plan. Puritans considered Boston, a city upon a hill, a holy beacon for the rest of the world to watch for moral guidance. Farming landscapes were good too, because they were free from the chaos that characterized the wild places on earth where Satan was influential. Great examples of these views are found in the literary works of 18th century authors, like Nathaniel Hawthorne (e.g., The Scarlett Letter), but the notion that the wilderness is a chaotic place for sinfulness can be found today in numerous slasher films, frequently set in a forest, at a summer camp, where teenagers abandon godly morals – and meet a brutal punishment. The NHL ice hockey team, the New Jersey Devils, derives its name ultimately from this same Christian fear of forests and untamed wilderness.

In the 19th century, American attitudes began to change toward wilderness. Where once the wilderness was considered a place of chaos and moral confusion, a place where people become "bewildered"; people like John Muir began to argue that the wilderness was instead where people could commune with all that was spiritualty good. As the Industrial Revolution and modern capitalism wrought massive changes to society, religious folks began to rethink old Puritanical ideas. Today, many consider cities as locus of moral degradation and spiritual corruption, and instead think of wilderness areas as sites of largely free from the sinfulness of the city; or "God's Country" in the words of many.

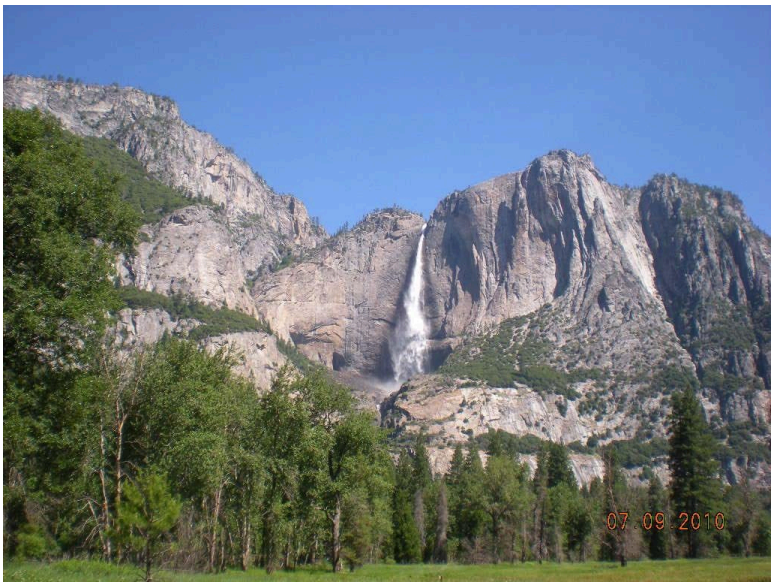



Figure 6-39: Yosemite National Park, CA - Yosemite Falls. The preservation of this landscape for recreation and conservation reflects a significant cha religious-spiritual attitudes toward nature in the mid-19th century.

Those two philosophical positions still battle for supremacy and geographers have found that religious affiliation has a great deal of influence over what people think about things like climate change or deforestation. If your religion commands you to be a good steward of the natural environment, you are likely to have a positive view of environmentalism. If on the other hand, you think that the earth is provided by God for humankind to use as humans see fit, then perhaps coal mining or pipelines won't bother you. The latter belief is more common among religious conservatives in the United States. Some Christian Fundamentalists take it even further, believing that ecological catastrophes, like global climate change, are a sign of the approaching Apocalypse, or "Rapture", and therefore a welcome sign of the end-of-days.

## ADDITIONAL LINKS

Dawn.
Ramazan in the Arctic – How do you break a fast at sundown if the sun doesn't set?

https://www.dawn.com/news/1194079/ra...sun-doesnt-set

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# 7: POLITICS AND POWER

**Politics is not just the process of choosing political leaders and the distribution of power in a system of governance. Politics includes a variety of elements that many folks think simply of as "culture" – the rules that unofficially govern our everyday lives. Geographers are interested in the spatial behavior of the political process – whether the governance is official (congress, etc.) or unofficial cultural politics.**

In the most basic sense, politics is a struggle for power over the rules (written and unwritten) that control people in a specific location or space. This chapter explores how people, in the United States and elsewhere govern and are governed by this struggle for control. Political spaces exist at multiple scales, from a kid's bedroom to the entire planet. At each location, somebody, or some group(s),seek(s) to establish rules governing what happens in that space, how power is shared (or not), and who even has the right to access those spaces.



Figure 7-1: East Los Angeles - Competing gangs use graffiti to mark and/or dispute territorial boundaries.

Most of the written and unwritten rules that govern our lives are established by those with whom we share a common territory and identity. The United States of America is a country. Technically, it is a state, but that term applies in the US to our sub-national provinces as well, so be careful when you hear or read "state". This text will use the word "country" to refer to the highest level of government organization. The US is defined by its borders. Most residents within those borders claim "American" as an important part of their identity; therefore, the United States can be considered, for the most part, a nation, and "American" is our nationality. A nation can include millions of individuals, or it can include far fewer – maybe only hundreds, but very small groups with a shared identity are often called ethnic groups (see chapter 9). Because Americans control the territory that is the United States, we live in a special kind of country called a nation-state. France and Japan are even better examples of nation-states because almost of their residents are either French or Japanese respectively.




Figure 7-2: Tijuana, Mexico - Children pose at the border marking the boundary between the US and Mexico. Very real differences exist on either side of the paint marking the boundary but the most important differences are legal and political.

Some nations are stateless. Stateless nations are groups of people who share a common identity and history, but who have no parcel of land that they fully control. The Palestinians are perhaps the world's best-known stateless nation, owing to their long struggle with Israeli Jews – who, until 1948, belonged to the previously best-known nation without a state. Many American Indian groups in the United States are also considered stateless nations. The Kurds (see below) are another stateless nation frequently in the news in the last decade.

The idea of nationhood, like many other elements of identity, is a social construct. How do people living in a region develop a sense of identity associated with that land? This identity can be so powerful that people have repeatedly killed or killed others in defense of this identity? There are some who think the idea is ancient, perhaps even a basic component of human psychology. Others suggest that nationhood is an invention of Enlightenment-era political elites who sought a mechanism to advance capitalistic and imperialistic agendas. It can be argued that the proliferation of maps and cartographic science during the enlightenment era made people far more aware of boundaries than they had been during the Middle Ages, and thus advances in mapping gave rise to the idea of the nation. Nations may be, as Benedict Anderson has argued, imagined communities, the product of the emotional and psychological desires of people who constitute any nation to belong to a group. Imagined or not, the idea of nation functions often in very real terms. People root for ball teams, swear allegiance to flags or rulers, and will even fight to the death to preserve and/or honor an imaginary sense of identity. Some people within nations fight to restrict admission to their group or land as well. Most countries govern who cross boundaries, as well as the degree to which individuals may participate in life of the country, and/or who can become citizens, a legal status that permits one to be legally part of the group.

7.1: Federalism vs. the Unitary State
7.2: Separatist Movements
7.3: Political Cultures
7.4: Electoral Politics -Boundary Drawing
7.5: Electoral Cartography
7.6: Political Landscapes

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# 7.1: Federalism vs. the Unitary State

Because the degree to which people living within the borders of countries feel included as part of the nation varies, a variety of political systems have evolved to ensure some measure of stability in a variety of settings. In places like Egypt, France, and Japan, where nationalist feelings are strong, and a common national identity is very widely accepted by citizens, a unitary state generally develops. Unitary state systems generally work best where there is no strong opposition to central control. Therefore, the political elite in the capital city (like Paris or Tokyo) frequently have outsized power over the rest of the country. People living in outlying areas generally acquiesce to the power of the central authority. Fighting between central government and local governments is minimal and the power of local (provincial) governments is relatively weak in unitary systems.

On the other hand, countries that contain multiple national identities, or a weakly developed national identity, are likely to employ a federalist style of government in which power is geographically distributed among multiple subnational units. This style of governance makes sense when a country is "young" and still in the process of nation-building, the name given to the process of developing a strong, singular identity necessary to the creation of a unified nationality that marks fully evolved nation-states.

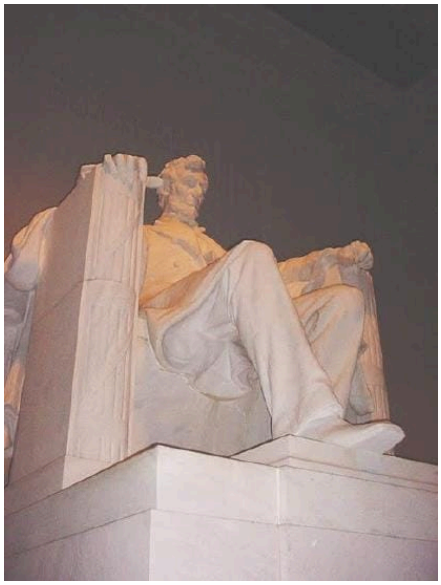


Figure 7-3: Washington DC. A statue of Abraham Lincoln sits inside a memorial building dedicated to his presidency, and his role in forcing the country to adopt a more centralized government.

Federations, as these kinds of governments are called, may also work best when the country is multi-ethnic or multi-national in nature. Rather than split a country into multiple nation-states, a country's leadership can give each of its ethnicities, or nationalities,some measure of political autonomy. So, if regional ethnic groups want to speak their own language or to teach their specific religion in the local schools, the central government allows local people to make those decisions. The central government in federal-style systems focus on things like national defense, managing interstate transportation, regulating a common currency, and promoting a common economy. The US began as a federalist system but has evolved into more of a unitary system, with numerous federal-style functions still in place.

Occasionally, a troublesome provincial region or ethnicity will demand special treatment, even in a unitary system. For example, China has a unitary system, but Hong Kong, a province, operates under a different set of rules than other provinces within China. In the United States, Puerto Rico has such a similar status and is labeled semi-autonomous. There are many dozens of other similarly self-governing regions and territories around the globe.

The United States has had an exceptionally difficult time resolving conflicts between those who preferred a federal-style and those who preferred a unitary-style government. This question was perhaps the central political issue in the US during its colonial era. Originally, the United States were organized as a confederation – an allied group of independent states united in a common goal to defeat the British. Operating under the Articles of Confederation from roughly 1776-1789, the new and decentralized US found itself challenged to wage war against the British, collect taxes, sign treaties with foreign countries, or even use a common currency because the central government (congress) was so weak. The Constitution we use today was adopted in 1789 to help create

a balance of powers between the central government headquartered in Washington DC, and the multiple state governments. Initially, states continued to operate essentially as separate countries. This is why in the United States, the word state is used to designate major subnational governmental units, rather than the word province or department, as is common in much of the world. In our early history, Americans of themselves as living in “The United Countries of America”, so to speak.




Figure 7-4- Ruston, LA - Bumper stickers on this truck read "Shooting Yankees" and "Dead Yankees Tell No Tales", indicating in part the lingering antipathy of Southerners for centralized government.

People in the United States have never been able to agree on how power should be shared between the central government and the various state and local governments. This was true especially in the early 1800s while slavery was still legal in some locations. Southern states, which clearly relied on a slave economy, preferred a weak central government. Northerners preferred a stronger central government, one that could override some state’s rights, and in the process, outlaw slavery nation-wide. The inability of the Constitution and the courts to settle this disagreement led to a horrific resolution of the issue on the battlefield. Some argue that following the Civil War, Americans began thinking of the country as a unitary system. Historian Shelby Foote put it best in the documentary series The Civil War:

Before the war, it was said, "the United States are." Grammatically, it was spoken that way and thought of as a collection of independent states. And after the war, it was always "the United States is," as we say today without being self-conscious at all. And that sums up what the war accomplished. It made us an "is." (Source: Wikiquote)



Figure 7-5: Washington DC. The statue of General Grant, leader of the Union Army in the Civil War is a monument to the defeat of a separatist "rebel" army that also functions to help the process of nation-building through statuary art.

Though our nationality may have been solidified during the Civil War, questions surrounding the degree to which state's rights still exist has remained stubbornly at the center of many political controversies (civil rights, environmental regulation, guns, etc.). In 2014, one of the common markers of difference between political liberals and conservatives is their opinion about state's rights, at least in principle. Social conservatives generally argue for greater local control because the constitution allows it, and common sense dictates that locals should run their own affairs. Liberals worry that when the central government gives too much control to local authorities, there has been a tendency of locals to their power. The fight over school desegregation in the South is a classic example of this debate. Southern governors and mayors, unwilling to allow black schoolchildren to attend all-white schools during the Civil Rights era always claimed publicly that they were fighting for "states' rights", not against the rights of minority children. Today "state's rights" remains a rallying cry for those who disagree with national authorities on a host of other issues (gays, guns, environmental regulations, etc.).




Figure 7-6: Las Vegas, NV - Nevada's economy is dependent on the maintenance of liberal morality laws made possible by a defense of states' rights.

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# 7.2: Separatist Movements

Occasionally, people within a country find themselves unable to agree about the rules with which they can all live peacefully. When this happens, a separatist movement is likely to evolve. Often separatist movements arise in regions where people are demanding local control over religious practices, language or other cultural practices that mark ethnic/national identity. Minority groups living in peripheral regions of countries are often rebellious, demanding a break from the power of a majority group living in the country's hearth or core region. Thousands of separatist movements have marked world history, hundreds of separatist groups remain active today. Even within prosperous Europe today, dozens of separatist ethnic groups demand autonomy or freedom to establish their own nation-state.




Figure 7-7: Map of potential separatist regions in Europe. Source: European Free Alliance

## Scotland

Scotland, part of the United Kingdom (England, Wales, Northern Ireland, Scotland) recently voted in a referendum to determine whether they would remain a part of the UK or secede. Scottish people, many of whom are resentful of the dominance of the English in the British parliament held a vote in late 2014 to decide the question "Should Scotland be an independent country?" Ultimately, the Scots voted to stay part of the United Kingdom, but to keep Scotland in the United Kingdom, the English gave into several demands by Scottish separatists for additional autonomy from the British (English) control. The UK's 2016 vote to leave the European Union (Brexit) has prompted renewed calls for Scottish independence.




Figure 7-8: Wales, UK - Wales, along with Scotland and Ireland all have separatist movements that threaten the integrity of the United Kingdom.

## Quebec

The Quebecois of Canada, like the Scots, have also held referenda on independence. Fearing the gradual loss of their language, culture and religious identity, many Francophone residents of Quebec think the only way to preserve their identity is to break away from the rest of Anglophone Canada. The people of Quebec voted in 1980, and again in 1995 in referenda on remaining. On both occasions, they opted to stay in Canada, but the second referendum was close. As a result, the government of Canada guaranteed cultural protections to the Quebecois to ease their worries about cultural preservation.

## Self-Determination

These referenda represent the robust displays of the power and logic of democracy, and naturally, the United States fully supported both the Scots and the Quebecois' right to decide their fates, though the US officially campaigned against independence in both cases. Rarely do separatist movements proceed in an orderly and democratic fashion. Often it's difficult to ascertain exactly when a group has a legitimate claim to exercise exclusive rights over territory. In principle, Americans (and American foreign policy) support the right to self-determination, which is defined as the right of each ethnicity or nationality to control the political system within the territory where they live. Indeed, the United States itself was born of a rebellion by separatists living in a peripheral region of the British Empire. American colonists' rallying cry for self-determination was "no taxation without representation". Just as the War for Independence reminds Americans why we should support the right to self-determination, the Civil War reminds us that we have had our own problems with separatist movements. The American Civil War was essentially an effort by separatists in the slaveholding southern states to break from the northern states. Unionists in the North sometimes called the conflict, "The War to Preserve the Union". Some southerners were apt to call it, "The War of Northern Aggression".



Figure 7-9: Montreal, Canada. The French-only stop sign is evidence of Francophone nationalism among the Quebecois who fear Anglicization of their culture.

## Constructed Identities

Separatist movements do not always arise from perceived differences in identity. Often the driving force behind separatist movements are economic, but those who would lead a group to rebel rarely admit this basic fact. The American Civil War was less a fight over identity as it was over the control over rules governing economics, slavery, and cultural norms. Both sides of the conflict identified as American, but Southerners believed control should be local, and most Northerners believed that some of control over some issues (e.g., slavery) should be centralized.

Perhaps the most interesting thing about civil wars and separatist movements is that often those who suffer the most, gain the least once the fighting breaks out. As was the case in the American Civil War, the vast majority of soldiers from the South owned no slaves, and actually stood to gain from wage competition in the labor market upon emancipation. It was the elite Southerners who needed slavery to maintain their power. So why do people without much to fight for become willing to die for a cause that harms their personal interest?

Perhaps the answer lies in the ability of people in power to effectively manipulate the thoughts and emotions of certain segments of a population. Populist politicians (TV & radio personalities, newspaper columnists, etc.) often convince aggrieved people that their suffering has been caused by unfair treatment by another group. Sometimes, these arguments are legitimate and can be supported by fact. Sometimes there is insufficient evidence to justify nationalist aggrievement, rebellion or secession.

It is often nearly impossible to determine exactly whose interests a secessionist group represents. Sometimes, secession movements are led by a small political elite that claims the right to represent a larger majority. However, the elite may not be representative of the majority of the people, and their motives may be strictly personal (wealth, power). This is why the United States' foreign policy experts find questions of self-determination especially perplexing. Our government has yet to embrace a consistent response to the demands of groups who desire to control their own territory. In some cases, the US has supported the rights of subnational groups to create a new country. For example, the Clinton administration largely supported the dissolution of Yugoslavia into multiple new countries. Each of the seven new countries is probably worse off today than they would be had they just worked out their differences and continued to live together peacefully. However, in the 1990s, driven by nationalist fervor, age-old ethnic animosities were dug up by power-crazed politicians, war broke out and Yugoslavia broke apart.




Figure 7-10: Static Map of Yugoslavia in 1989. Click to see animated loop of the dissolution of the country over a period of 20 years. Source:

Wikimedia

The region where Yugoslavia once existed is known as the Balkan Peninsula. The mountainous terrain, and legacy of repeated, but incomplete invasions have left the region a patchwork of national identities based on a myriad of religious, linguistic and ethnic/racialized identities. So frequent have been nationalist conflicts in this region that political geographers use the derogatory term **Balkanization** to refer to the process of territorial fragmentation of a region into multiple hostile micro-national states.

The fear of Balkanization seems to prompt leaders in the US to occasionally work against separatist efforts. Take for example, the Kurdish people, an ethnic minority living in Syria, Iraq, Turkey, and Iran. The Kurds have a language, history, and identity separate from the Iraqis, Iranians and the Turks with whom they share space. Kurdish nationalists argue that there should be a new nation-state called Kurdistan. It would seem the Kurds have a legitimate argument, and there have been numerous Kurdish insurrections over the years. Each time though, Kurdish rebellions have been met with violence by the governments of Syria, Turkey, Iraq, or Iran. The US government supported some degree of Kurdish autonomy in Iraq, particularly in the wake of the Gulf and Iraq Wars fought between the US and Iraq, but the support has been inconsistent. The US has not supported Kurdish rights for those living in Turkey, presumably because Turkey is a strategic ally of the US. In 2019, Donald Trump withdrew support for Kurdish troops fighting in Syria in yet another display of inconsistent support for Kurdish interests in the region.

Secessionist movements have also cropped up from time to time within US states, particularly geographically expansive ones. California has reputedly been the subject of over 200 proposals, several of them serious, to divide it into multiple new states. The most persistent calls for secession come from the northernmost counties of California who feel politically isolated and culturally different from other Californians, especially the urban, diverse, and politically liberal people of Los Angeles, San Francisco, and Sacramento. Some people living near the California-Oregon border want to break away and form a new state to be Jefferson.




Figure 7-11: Map depicting one of several proposals to render California into multiple states. Source: Wikimedia.

Generally, secession movements are fraught with danger for the secessionists. In most cases, a break-away unit of territory would result in a smaller economic base. Small countries often suffer from smaller economies of scale as well as a host of associated issues, not the least of which is a lack of local control in the face of the economic competition of the country from whom "independence" was won.

There are others who might argue that secession benefits an especially productive or efficient local economy. Several separatist groups in Northern Italy argue that the rest of Italy is a burdensome drag on the local resources and industry. They may have a case. Economists disagreed about the economic prospects for an independent Quebec and Scotland. For some, however, economic loss may be a welcome cost to bear in exchange for freedom from religious or ethnic oppression.

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# 7.3: Political Cultures

Separatist movements are sometimes fueled by differences in political culture. Political beliefs are a bit like religion because most people inherit their political attitudes from parents and from the community in which they live. Certainly, there are individuals who think for themselves or rebel against their parents and/or community, but for the most part, regions rarely change their political orientations. For example, the Lowland South region of the US has been politically conservative for the last 200 years. San Francisco has been politically progressive from its birth during the Gold Rush. How a region develops its political culture is very interesting to geographers, but it is difficult to determine the origins of political culture.

Sometimes, it is difficult to even categorize a region's political culture accurately. Some of the blame for this difficulty can be placed with the news media because it does a poor job of accurately characterizing political beliefs in the US. The US news media tends to only use "liberal" and "conservative" to describe political beliefs in the US, but those terms inadequately describe even the most basic elements of the American political spectrum. Also, politicians and media pundits have overloaded those terms with conflicting meanings making them difficult to use in an academic setting where precision is important. This text uses more useful, alternative, spatially-sensitive set of terminology.

## Western Libertarians

Americans who have strong opinions about personal liberty are best characterized as **libertarians**. So, if you are a fan of Las Vegas, with its very relaxed regulation of gambling, prostitution, and alcohol, you probably think government has no business regulating your personal behaviors. Staunch libertarians also think the government should take little from you in the way of taxes, minimally regulate economic and business activity, and provide little assistance to individuals (welfare, college tuition, free highways, and free beaches). Libertarians most often vote for Republicans, which prompts the news media to refer to them simply as "conservatives", which is a misleading oversimplification.




Figure 7-12: Slab City, CA. This building, formerly a sentry station marks the entrance to Slab City, a nearly anarchist community living in the Low Desert of California. Few laws regulate behavior or ensure a quality of life here.

Libertarians argue that the government should be as small as possible; interfering and intervening in the lives of individuals as infrequently as possible. Personal responsibility and low taxes are central themes of libertarian doctrine. Distrust of the government is high among libertarians, and they think dependency on government programs is a widespread social-ill. The right to own guns and low taxes are rallying cries in this philosophy. Libertarians generally cling to a **classical economic theory** calling for very low taxes and minimal regulation on private enterprise and property. Libertarians also dislike government intervention in environmental matters. Ironically, in this region, many people make their living by drilling for oil, ranching and cutting timber on government-owned lands. Many of those who exploit government lands, pay far less for the use of government-owned land than they would in a truly free-market environment.

There are some serious libertarians in the US, but they probably are not a majority in any region of the United States. The Mountain West, where cultural diversity and population densities are both low is probably the region of the US where libertarians are most numerous. Recall from the Agriculture chapter how lands in this region of the US are completely divided according to the Township and Range cadastral system, which seems to encourage a sense of individualism and undermine collective social action.

## Southern Traditionalists

In the Upland and Lowland South, there lives another group of mislabeled "conservatives". These conservatives should be considered political traditionalists instead. Sometimes, traditionalists are called **social conservatives** or "the Religious Right" by the media, which is more accurate. Traditionalists seek to maintain a traditional value system they consider necessary for the continuance of traditional cultural practices.



Figure 7-13: Vernon, LA - This abandoned nightclub offers a landscape clue into the evolving role of religion in the maintenance of moral law. Alcohol was illegal in the county in the foreground, so those wishing to drink had to cross County Line Road to visit this establishment. The club went out of business when beer was legalized in both counties.

Traditionalists frequently say they oppose "big government", and there is has been true for policies involving civil rights are concerned. However, traditionalists have also advanced a great number of laws that regulate even highly personal behaviors of individuals. Abortion is the most well-known issue motivating traditionalists, but they also strongly favor laws promoting prayer-in-school, laws banning alcohol consumption, and some laws that undermine the civil rights of specific groups (gays, minorities, women, etc.).

For a century following the Civil War, the states of the former Confederacy were referred to as "the Solid South" because of their unwavering support for the Democratic Party. For many decades after the Civil War, Southern animosity lingered for Republican Party (Abraham Lincoln was a Republican). In the years after the Great Depression, Southerners embraced the progressive economic programs of the Democrats that helped the poor, especially during the presidency of Franklin D.

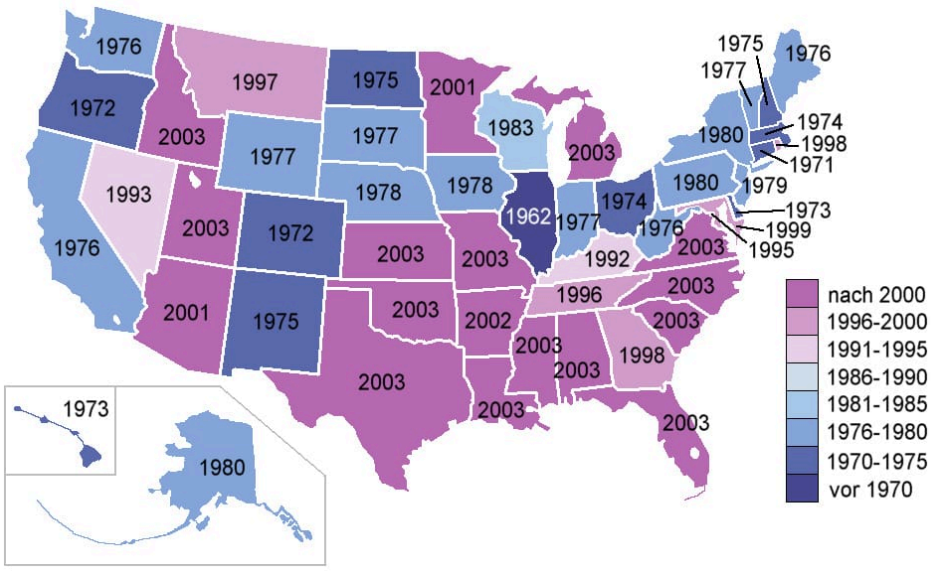



Figure 7-14: Map of Sexual Privacy in the United States. States in blue overturned sodomy laws earlier than purple states. The map demonstrates that Social Conservatives embrace "big government" when it suits their cultural values. Wikimedia

Roosevelt. They even called themselves “Boll Weevil Democrats”, referencing insects that infested cotton plants.

Southern traditionalists first began leaving the Democratic party in the 1950s when northern Democrats pushed hard on their Southern partners to grant more Civil Rights to African-Americans in the South. Battles over abortion laws, women’s rights, prayer in school and other hot-button issues continued to alienate southern Democrats from their northern allies until 1980, when Republican Ronald Regan managed to get Southern Democrats to leave the party to join forces with pro-business Republicans, a feat now known as the Regan Revolution.

Though traditionalists have overwhelmingly voted for Republicans since the 1980s, they occasionally find themselves at odds with the Western libertarians within the Republican Party. A great example is evident in the significant difference in the way libertarians and traditionalists seek to govern sexual privacy. Libertarians would argue that the government has absolutely no right to govern sexual activity among consenting (especially married) adults. Traditionalists, on the other hand have regularly passed laws regulating the sexual behavior of married couples. As recently as the year 2000, the Louisiana Supreme Court found that the right to privacy within the bedroom was not guaranteed in instances where the state’s legislature had chosen to regulate sexual behavior of married adults. In 2003, the US Supreme Court invalidated the so-called “sodomy laws” in all states, but in Baton Rouge Louisiana, the Sherriff’s continued to arrest gay men for agreeing to engage in “unnatural acts” with undercover police officers, even though court authorities refused to prosecute the cases. Several states have refused to remove these bans. Texas’ Governor Rick Perry even called for the US Congress to remove such cases from the jurisdiction of the US Supreme Court so that local Texas courts could decide such matters.




Figure 7-15: Chillicothe, OH. Patriotism and politics mix quite easily in the United States, despite an official separation of church and state. Some regions more actively seek to infuse religion into political policy. Others suggest politics is degrading to true faith.

## New England Progressives

Sharply contrasting with both traditionalists and libertarians are the beliefs of **progressive-moralists** who dominate the politics of New England, the Pacific Northwest, and various, scattered urban areas. Progressive-moralists place a high value on social equality, economic and environmental justice, and they are confident that collective social action, carried out by the government, is both an effective and rational means to meet their goals. The media sloppily labels this group liberals, but the term "liberal" has become so corrupted by multiple and often contradictory layers of meaning that to use the term in a college course often clouds understanding of the term more than it clarifies it.

Progressive moralist ideas have a very long history in New England. Early Puritans sought to improve the quality of life of the entire community through collective, or government, action. **Village Greens** are common landscape features of New England towns that geographers immediately recognize as evidence of the long-standing Yankee commitment to communal action. Early New Englanders often built these grassy areas in the center of towns where villagers, most of whom were also farmers, could corral and graze livestock, especially at night. These green spaces were sometimes called "cow commons". These prime pieces of downtown real-estate were held in common by all the residents of each village. Cow Commons were open to abuse by any farmer who fed too many of his/her own cattle on the common pasture. They might over use the common field to preserve, or even plow, their privately-owned pastures. When individuals abuse or over-use commonly held goods/services like pastures, parks, or even free napkins at McDonald's, they undermine the long-term success of the resource for their personal gain. This behavior leads to what is called **the tragedy of the commons**. Fear of and anger about the abuse of common resources is a central theme in American politics, one that divides progressives who are willing to risk abuses for the greater good, from libertarians who are not willing to risk sharing resources that might support abusers. The free-rider problem presented in the chapter on health geography similarly describes a situation where people benefit from the contributions of others around them.



Figure 7-16: Salem, MA. This village green is a landscape that evokes the community spirit of cooperation and collective political action that still characterizes much of New England.

New Englanders are generally willing to risk the abuse of government goods and services by individuals and are willing to share more of their personal wealth in order to create what they consider a better society for all. Taxes are higher in regions dominated by progressive moralists. Massachusetts, a state dominated by progressive-moralists, is often mocked as "Taxachusetts" by anti-tax libertarians. Progressive moralists tend to embrace Keynesian economics, an economic philosophy that calls for higher taxes, especially on the wealthy, to properly fund public services like education, parks and health care systems. Keynesian economics also encourages government intervention to ensure robust wages for the working people, so worker's rights, minimum wage laws, and worker unions are welcomed by progressive-moralists. The environment is another concern for progressive moralists, who are willing to regulate industries in order to reduce pollution. The stricter regulations on economic policy and industrial pollution, along with higher taxes scare some industries away. The higher standard of living often evident in these regions, on the other hand, attracts industries that seek well-educated workers and high living standards for employees and executives. This effect is discussed at greater length in the economic geography chapter.

In addition to most of New England, people living in coastal Washington, Oregon, and California, along with those in Minnesota, tend to favor progressive-moralism. The cities of the Northwest and California were common destinations for migrants from New England in the 18$^{th}$ and 19$^{th}$ centuries, who established a political culture that subsequent generations have adopted. Minnesota's collectivist traditions were probably established by the numerous immigrants to that region from Sweden, Norway, and Denmark. Scandinavian created a political-economic system called, the Nordic Model. It's a system considered by many progressive moralists as the international ideal for government. Scandinavian countries have, by most measures, the best standard of living of countries on earth.

## Centrists

Often situated in the middle of all these political philosophies are the people of the Midwest who seem to find some value in many of the political philosophies favored elsewhere. Midwesterners cling to traditional values, not unlike Southerners, but they are far less willing to deny political rights to individuals on religious grounds or historical customs. Midwesterners seem to prefer small government but are not particularly distrustful of it like libertarians.

The geography of the Midwest is critical in creating this situation. Part of the reason for the centrist beliefs of Midwesterners stems from the historical pattern of domestic migration to this region. The first Midwesterners started arriving in the early 1800s from New England, the Mid-Atlantic and the Upland South. International migrants came from all over Europe for generations afterward. Together, those migrants brought with them a vibrant array of political ideas from Colonial America and the Old World. Political compromise and open-mindedness became necessary in this heterogeneous society.

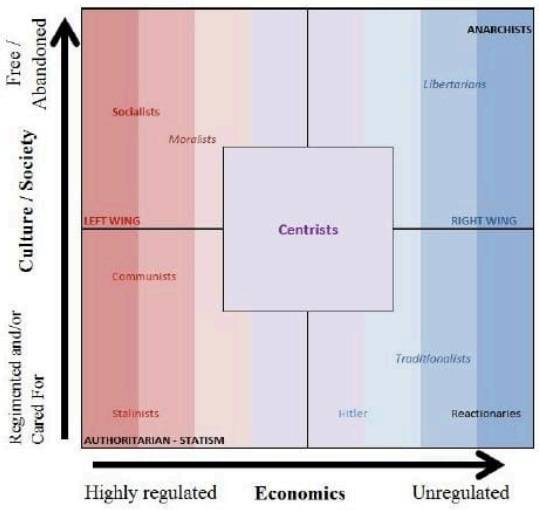



Figure 7-18: Infographic - Political philosophies in the US tend to be toward the center of this diagram, and despite the US two-party system, Amer political values fall into all four

There is some measure of variability in political philosophies within the Midwest, some significant differences can be found even within Midwestern states. Ohio is a classic example of an intra-state left-right-center battlefield, making it the classic Swing State.

Ohio is located geographically between several of America's political traditions. Kentucky, on Ohio's southern border, tends to be socially conservative, but New York isn't far away. To Ohio's west are vast stretches of lonely farmlands that seem to produce more libertarians.

Because Ohio is populous and contains a relatively even number of voters favoring elements of each of the major political orientations, it has been for many decades critical in deciding presidential elections. Columbus, in the middle of the state, is moderate, a bit more conservative in the suburbs than it is in the inner city or around Ohio State's campus region. Cleveland, in the northern part of the state, is more progressive; thanks in part to its Yankee heritage and a strong history of unionization. Cincinnatians, on the other hand, act more like people from southern cities. They are socially conservative and resentful of government intrusions, perhaps more like their neighbor in Kentucky just across the Ohio River than their fellow Buckeyes across the state.

## Origins of Political Orientation

How and why these political regions developed are questions that have prompted geographers to offer several theories. Some would point to historical migration patterns from Europe, alluded to earlier in this chapter, as the principle driving force behind American political culture. The excellent volume Albion's Seed suggests that even the earliest waves of English colonists arriving nearly simultaneously in Massachusetts and Virginia brought radically different political philosophies with them from different parts of England. The collectivist, Puritanical Pilgrims who landed at Plymouth Rock were very, very different from the colonists who established a class-conscious, commercial colony at Jamestown, Virginia.



Figure 7-19: Vietnam Memorial, Washington D.C. (1982) Consider how differently this monument commemorates war than the statuary in the images above. What does it say about contemporary nation-building process in the United States?

The various cadastral systems used in the United States also may have contributed to the development of differing ideas about the rights and responsibilities of individuals and the communities in which they live. See the Agriculture chapter for an extended discussion of cadastral systems.

The contrasts between the political philosophy within the United States sometimes make the country hard to govern, especially in recent years when the influence of gerrymandering has exacerbated the inflexibility of elected representatives. Americans think their political differences are vast, but compared to the political heterogeneity found in many parts of the world, we are rather homogenous and generally centrist. Europeans suggest that American politicians all seem just right of center; only as dissimilar as Pepsi and Coke. The European style parliamentary systems provide space for a far wider spectrum of political parties and philosophies than the American two-party system.

## Environmental Roots of Political Difference

Other geographers would point to the varying environmental conditions in the United States as significant factors in the evolution of American political traditions. In New England, naturally occurring waterfalls provided locals with a great source of inanimate power to drive textile mills. Here factory-style industrialization occurred much earlier than elsewhere in the US. It is probable that a more progressive, socially inclusive political philosophy developed to deal with the rapid changes brought on by industrialization, urbanization and the massive influx of European immigrants.

In the South, where poor soils and the lack of a viable coastal source of industrial energy undermined widespread industrialization for many generations, large-scale plantation-style agriculture developed instead, alongside a rigid, race-based class system. Lacking a significant industrial, middle class and job-seeking immigrants, but faced with a large, potentially dangerous racial underclass, the agricultural south adopted a conservative, faith-based political philosophy to maintain the precarious status quo.

In the wide-open spaces of the Plains and the Mountain West, the sparse population invested (attracted?) people with a sense of individualism that grew far stronger than elsewhere in the country. Ranchers and homesteaders on isolated farms created an insular society, where neighbors might live a mile or more apart from each other. Unlike New England, where “all for one and one for all” collective action was the rule, in parts of the Midwest and West, people adopted a more “every man for himself” attitude. This is not to say that farmers and ranchers are/were incapable of caring deeply for their neighbors on a personal level, but rather that it is evident they prefer the government not to involve itself in negotiating how the relationship between neighbors in a community plays out.

It’s important not to take these nature-based arguments too far lest you fall into the trap of environmental determinist thinking. Still, it’s impossible to deny the role of soil, water, and climate on the evolution of political thinking in the United States. A reasonable approach to understanding why regions cling to a specific political order is to consider a host of causal variables, such as ethnicity, religion, economics and the environment.

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# 7.4: Electoral Politics -Boundary Drawing

In a democracy, most governments draw up functional regions called electoral districts (or voting districts) to determine who may vote for whom, which areas are represented by a specific government office (mayor, senator, governor, etc.) and which laws govern the actions of which regions. The smallest American electoral region is the precinct, which, at least in urban areas, is approximately the equivalent of a "neighborhood", consisting usually of a few city blocks. You may vote only in the precinct assigned to your home address, and this precinct is typically part of multiple, larger, nested electoral districts, including wards, townships, counties, congressional districts, and states.

By law, electoral districts must have roughly the same number of people in each equivalent district. So, for example, in 2011, each of California's 80 State Assembly Districts had between 461,000 and 470,000 people. Over time, however, people move into or out of districts. In order to ensure that each district has nearly the same population, district boundaries must be regularly redrawn to ensure even representation and avoid over or underrepresentation called malapportionment. The US Constitution (and other state constitutions, etc.) require district boundaries to be redrawn after each decennial US Census is completed.

This process, known as political redistricting, involves a great deal of geographic strategizing, and the outcome of this process fundamentally shapes American politics. In most US states, the state legislature controls the redistricting process, and this fact opens the process to a whole number of unfair political shenanigans. The reason why the political redistricting process is so important is that elections are heavily influenced by the way the boundaries of electoral districts are drawn. Political groups that control the placement of boundaries are far more likely to control who gets elected, and therefore which laws get passed and how tax money is collected and spent

## Gerrymandering

Each redistricting cycle, politicians in many locations are accused of purposefully constructing political district boundaries to favor one group (e.g., Democrats, Latinos, labor unions, gun advocates) over another. The construction of unfair districts is called Gerrymandering. The odd term, "Gerrymander" comes from a newspaper story that characterized an unfair redistricting map for South Essex County in Massachusetts in 1812. The map of the redrawn districts strongly favored Massachusetts' governor at the time, Elbridge Gerry. The shape of one district was so distorted that pundits suggested it looked like a salamander, thus providing the two words that became the halves of the portmanteau used today to describe the process of creating unfair political districts.

There are several different strategies that politicians use to gerrymander districts. When there is little cooperation between political parties (or other interest groups), politicians may pursue strategies that aggressively seek to limit the political influence of opposition groups. Sometimes, when the opposition (or ethnic minority) party is small enough, the controlling group may draw lines through the minority areas, minimizing the opposition's ability to influence the outcome of elections in as many regions as possible. This process, called cracking, has commonly been used to divide inner-city ethnic minority groups into multiple districts each numerically dominated by whites.

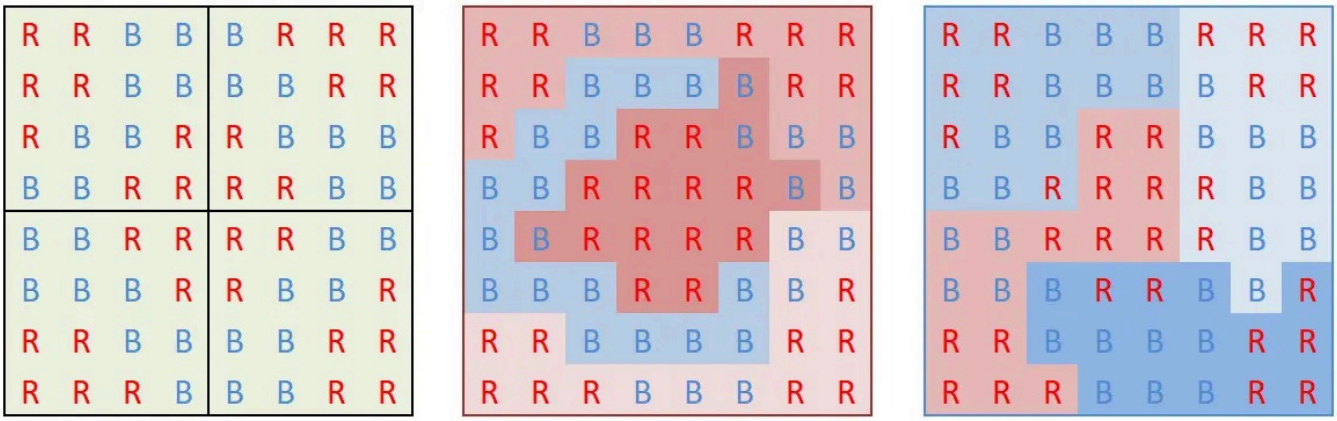



Figure 7-20: Diagrams of political districts with 64 precincts. The left diagram represents competitively drawn districts. The middle diagram demonstrates the packing technique and the rightmost diagram demonstrates the cracking technique.

If the opposition grows too numerous to split via cracking, then the group controlling the redistricting process may draw district lines so that the opposition is dominant in a few districts, or even a single district, to minimize the overall power of the opposition in the overall system. That strategy is called packing. Even a statistical minority can control power by carefully packing a majority group into cleverly drawn district boundaries. Often packing creates a controversial type of district based on race, known as a minority-majority district. Minority-majority districts ensure at least some political representation by a candidate from an ethnic or racial minority, but they may also dilute the overall power of the same racial or ethnic majority.

There are dozens of other techniques by which one group can control the political power of others through manipulating election boundaries. However, it is likely that the most common type of unfairly drawn electoral district is the so-called **sweetheart gerrymander** drawn up cooperatively by incumbents from opposing political parties in order to help maintain the status quo. Generally, this involves drawing up safe districts, that clearly favor the re-election of incumbents, ensure the maintenance of the status quo and nearly guaranteeing non-competitive general elections. In safe districts, the primary elections may remain competitive, but the competition is between candidates of the same party.

Gerrymandering has been cited by political observers as one of the most serious problems crippling American politics. Thanks to advanced data collection, management and analysis made possible with GIS, politicians and political interest groups may carefully design districts that strongly favor candidates and/or specific constituencies. Gerrymandered districts greatly diminish the incentive for politicians running for office to appeal to broad constituencies. Because politicians running for office in safe districts rarely need to consider opposing viewpoints, they are free to be extreme in their views and less likely to compromise with politicians from opposing parties.

When political districts are gerrymandered into numerous safe districts, the results of general elections held in November are rarely in doubt. Incumbents with favorably drawn districts know that the only challenge to getting re-elected is likely to come from within their own party during the primary elections. Because voter turnout in primary elections is usually small, and often limited to people with strong or even extreme political opinions, candidates appealing to extreme political viewpoints tend to advance to the general election in the fall more often where a district gerrymandered. When too many extremists get elected from opposing parties, they tend to be unwilling to make political compromises and as a result, few laws or regulations are passed. The recent 113$^{th}$ Congress of the United States (2013-2015) included many congresspersons from gerrymandered districts, and perhaps as a result, it was unproductive in terms of legislative activity. Of course, some would say, “The less they do the better!”, while others would suggest that inaction during a period of a national economic crisis (The Great Recession) was an abdication of duty to the country.




Figure 7-21: Los Angeles, CA. Multi-lingual sign at a polling place indicates local commitment to encouraging broad participation in elections.

There are several solutions to gerrymandering. One strategy in some states is to hold open primaries elections which allow any person, regardless of their political affiliation or party, to vote for any candidate. Traditionally, primaries are closed, meaning that only voters who are registered as Republican can vote for Republican candidates; registered Democrats can only vote for Democrats, etc. There are some potential benefits and some potential pitfalls (party raiding) with the open primary system, but many think them worth the risk. In 2013, only about 13 states still have fully closed primaries. The remainder of states

have adopted some strategy to replace the closed primary system in order to promote greater voter turnout during the primary elections, and more centrist candidates, but if districts are extremely gerrymandered, open primaries have little effect on the competitiveness of races in the fall.




Figure 7-22: Infographic: The 113th Congress passed only 165 pieces of legislation a historic low in the post-WWII era. Gerrymandering has created a shortage of competitive congressional districts and this may be a spatial reason for gridlock in Washington. Source: http://washingtonexaminer.com/ The 115th (Trump) may be even less productive.

The other strategy to combat gerrymandering adopted by several states, including California, has been to remove the power to draw district boundaries from politicians. In California, an independent citizen's commission now draws political district boundaries. The idea behind this commission was a conviction by citizens of California that non-politicians would create competitive electoral districts that would combat political extremism. In California, there was stiff opposition from some political groups to the district maps drawn by the commission, but most independent political analysts argue that the new maps are what voters want. In the San Fernando Valley, the district maps drawn by the new commission forced two long-serving incumbent Democrats (both white and Jewish) to face off against one another. The beneficiary of the redistricting may have been Latino voters, who though numerically dominant in the eastern San Fernando Valley, were not represented by a Latino representative in Washington DC until after 2010 when Tony Cardenas won the office.

One of the great challenges facing even the most impartial of mapmakers charged with drawing district boundaries is the difficulty in ensuring that a group with similar political interests or needs is represented without simply drawing a district around them (packing), or splitting them across multiple districts (cracking). Called a **community of interest** by judges who have ruled in court cases on gerrymandering, they have been found worthy of consideration for exemptions to the normal prohibitions that prevent gerrymandering for political parties. However, the definition of exactly what constitutes a community of interest is vague enough that almost any group with something in common could claim to be a "community of interest". The fact that many communities of interest (ethnic groups, religious groups, etc.) often align neatly with political affiliation also complicates efforts to prevent partisan gerrymandering.




7-24: Congressional Districts of Southern California - prior to the ' redistricting commission. Note the irregularity of district 27, 40 among others.




Figure 7-24: Congressional Districts of Southern California - const by the citizens' redistricting commission. Note the more regular shapesthan the map on the left.

Take for example residents who live along California's central coast. The beach communities that stretch from Oxnard to San Luis Obispo share concerns about issues like tourism, viticulture, oceanic pollution, beach erosion, etc. These common concerns would seem to qualify the people as a "community of interest." Those communities also happen to be liberal and solidly Democratic. So when the 23rd congressional district was drawn after the 2000 Census, it included only a narrow stretch of beach communities from Ventura, Santa Barbara, and San Luis Obispo counties. The inland reaches of those counties were split between Districts 24 and 22 (both Republican in 2010). The peculiar shape of District 23 prompted some political observers to label this district the "Ribbon of Shame". It certainly created a safe district for Democratic congressional representative Lois Capps, but the 23rd district also seemed to a logical way to ensure that beach cities along the central coast were cohesively represented in Washington DC. One could also argue that Democrats were losers in a packing scheme, hatched by Republicans, because Democrat voters were concentrated into this single district, thereby allowing Republicans to easily win elections in two neighboring congressional districts. Examine the evidence for yourself, analyze the situation and speculate who benefitted from the map of District 23. The district looks much different after the 2010 redistricting maps were drawn.

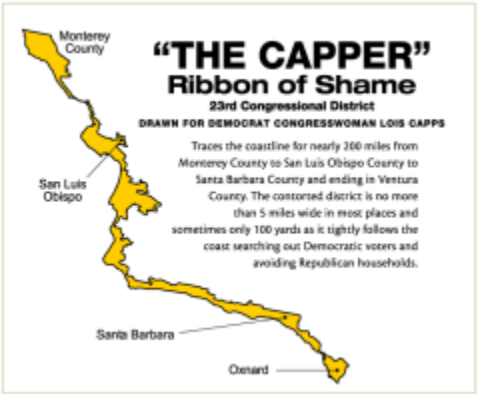



Figure 7-25: A map found on a partisan website denouncing what appears to be blatant gerrymandering in California.

Source: http://xrlq.com/2005/07/10/challenge...ify-this/(DEAD LINK 2019)

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# 7.5: Electoral Cartography

Political geography gets a great deal of national attention every four years when Americans chose a President. Since 2000, news media outlets on TV and the internet have frequently used the so-called red-states-blue states map to predict or explain Electoral College votes that determine the outcome of the presidential election.

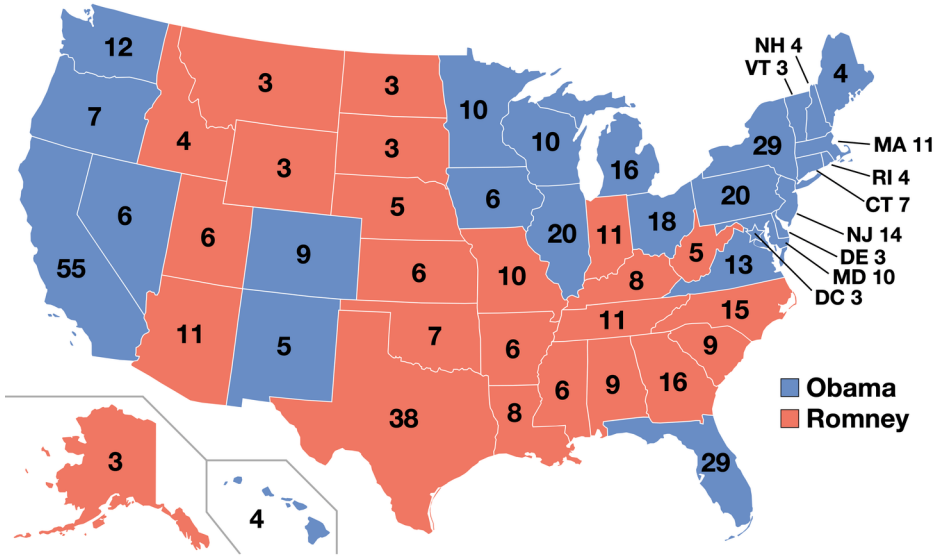



Figure 7-26: The Red-Blue Electoral College map displaying the outcome of the 2012 Presidential Election. Blue state votes went to Obama. Source: Wikimedia

Geographers have been frustrated by this famous map for several reasons. First, the colors are reversed. Until recently, it was nearly universally accepted that the color red was reserved for revolutionary, radical or even progressive or left-leaning political parties. Communists always use red in their flags and symbols. That's why they are called Reds and those who sympathized with communists, socialists or even left-leaning Democrats have been occasionally called pinkos. Conservative movements, on the other hand, have historically chosen the color blue in contradistinction. How the colors got flipped is unclear.

Secondly, the map does a poor job of showing the relative influence of each state in the outcome of the election. States like Montana and Wyoming, because of their very small population, have little impact on the outcome of the Presidential election because they have so few Electoral College votes (three each). Maryland alone has more than double the number of votes as Montana and Wyoming, but it is barely visible on the map. One means to overcome the distortion caused by the mismatch between areal size and voting power is a cartogram, a special type of map that attempts to minimize this effect by altering the size of states based on their number of electoral votes.

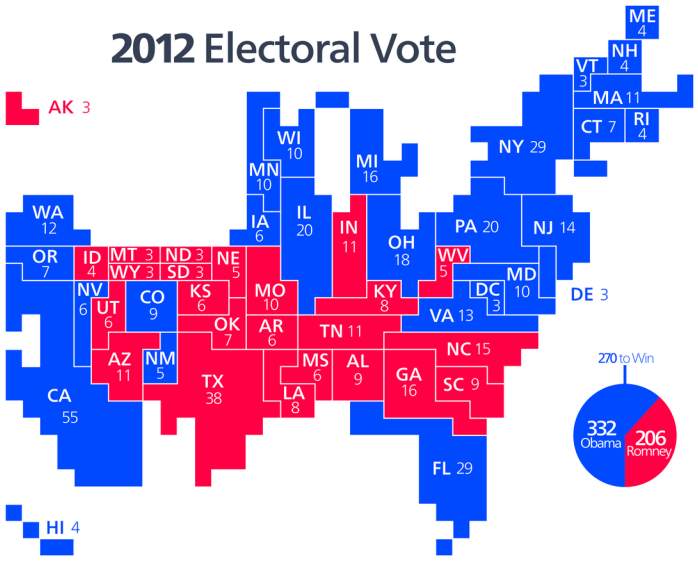
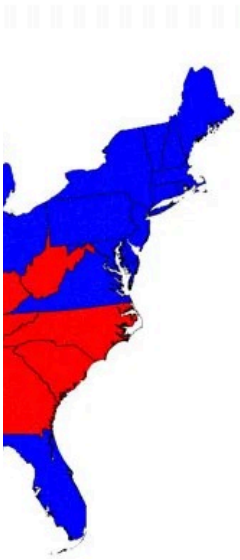


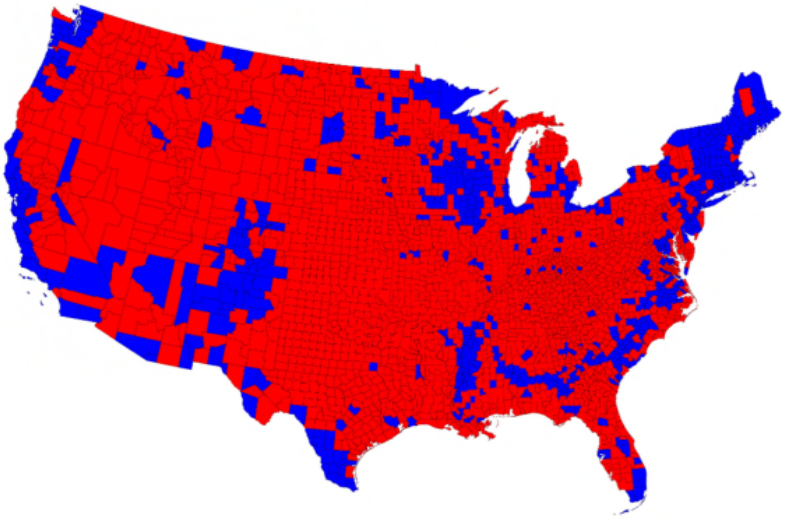

Figure 7-27: Cartogram of electoral votes by state using a bivariate color scheme for the 2012 US presidential election. Note how the size

Another serious flaw in the states-only map is that it fails to show the significant intrastate variation in voting and fails to show the massive contribution of urban areas to the outcome of major elections. Most of the land area of the United States is rural but sparsely populated. Over 75% of Americans live in cities, but cities are hardly noticeable in the standard red-states-blue-states maps. The inability of state-level choropleth maps to communicate these realities invites viewers to commit the ecological fallacy.

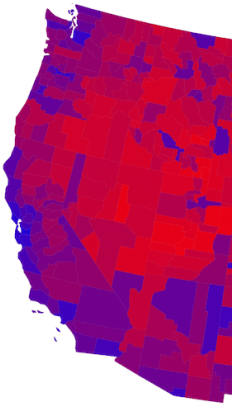
The last major problem is that this map is widely misinterpreted because it strongly suggests that the United States is polarized politically on a state-by-state basis, when in fact most states are divided between Republicans and Democrats. Cartographers have suggested that a “purple states vs. violet states” map is more appropriate for mapping the popular vote. For the winner-take-all Electoral College votes, the red-vs-blue map remains most accurate.

2012 Presidential Election Maps
Source: Mark Newman, University of Michigan

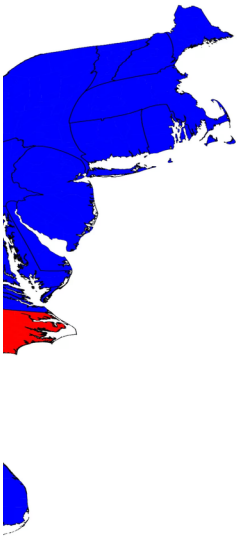




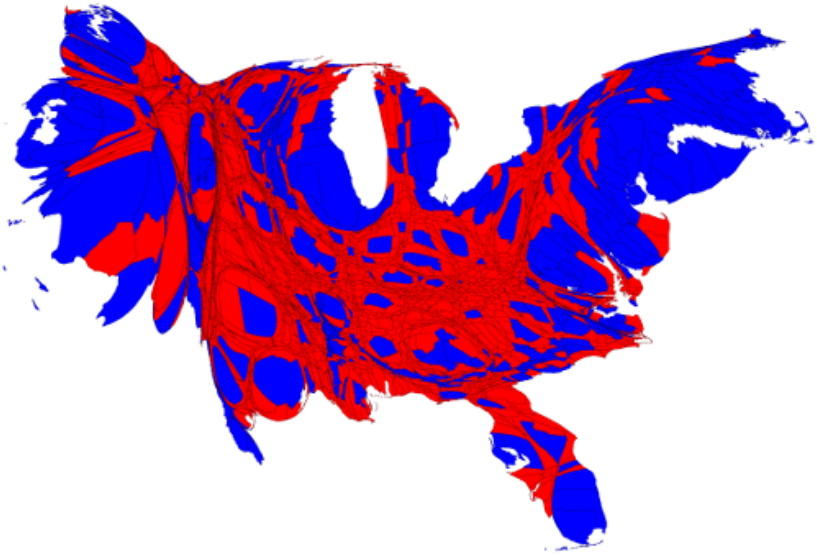
Election results by county demonstrates intra state variance using a two-color palette



County level electoral res



-color palette



Cartogram results by county - intrastate variance and voter numbers by party

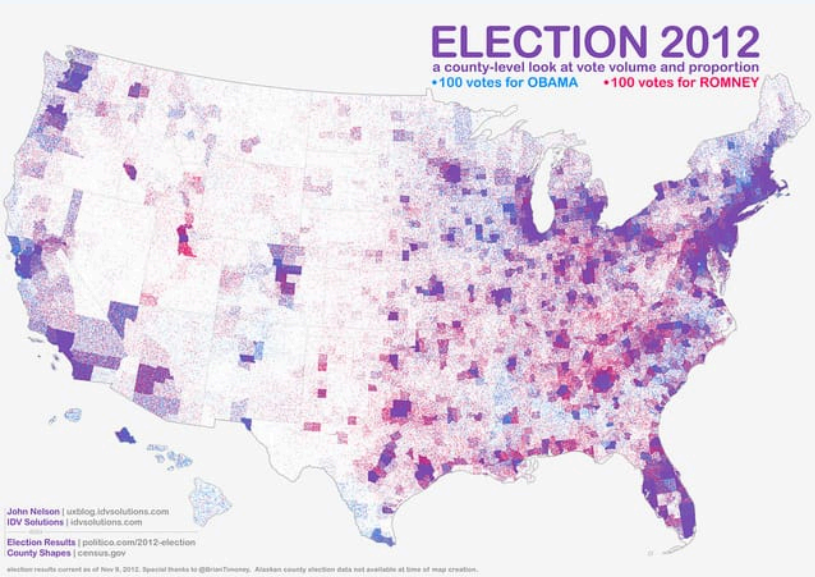


County level cartogram u

Additional Election Maps



h voter numbers.
erwatch, Chris Howard




This is a dot density map. Each dot on the map represents 100 votes for either presidential candidate. Areas in white have fewer voters. Source: IDV Solutions



This is a 3D map of the 2
by population. Note the o
Washington Post

ed versions of electoral




Animated .gif file from Princeton University showing county level election returns from 1960 -2012, including third party votes in green. Source: Robert Vanderbei




Animated dot density ma
2008, including third par

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# 7.6: Political Landscapes

Political landscapes are probably the most ubiquitous of all landscapes in the United States because the government, in one way or another, shapes nearly every square foot of the land. Some political landscapes are obvious, like courthouses, capitol buildings. Others slightly less so, like streets, bridges, telephone pools, schools or firehouses. Still other landscapes, like forests, rivers, beaches or farmlands appear to be unrelated to politics or government, but even those can be read as the product of government policies such as the Clean Water Act, laws regulating endangered species or a succession of congressional farm bills. Even the seat you are sitting in, the carpet or tile under your feet and the air you're breathing has probably been regulated, safety tested or taxed by the government. For the purposes of this discussion, however, most of the discussion will focus on the more obvious governmental landscapes, and the more accessible "cultural wars" that shape the political environment we navigate daily.



Figure 7-28: Washington DC: The Capitol building is most famous example of Classical Revival architecture in the US, an obvious reference to the political ideals of the Romans and Greeks.

## Our Greek Love Affair

The United States declared its independence from Great Britain in 1776, and after a struggle of nearly ten years, the former colonists could begin the long task of completing the radical political transformation known today as the American Revolution. Though clearly revolutionary for the time, many of the ideas associated with this grand upheaval were borrowed from Europe's enlightenment and classical periods. Though clearly English, French, and some Roman ideas were incorporated into American political culture Americans were clearly inspired by the Ancient Greeks. Towns and cities were also named for locations in Greece and Italy (Sparta, Athens, Rome, Cincinnati, etc. –see Chapter 2), but it is architecture that most clearly expresses early American political thinking.

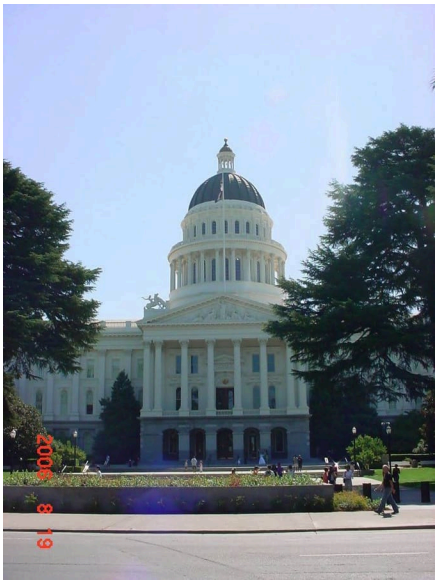


Figure 7-29: Sacramento, CA. Many state capitol buildings mimic the look and message of the capital building in Washington, DC.

In the decades following American independence, the country grew rapidly and many government buildings were erected to meet the needs of efficient governance. Given the deep respect Americans had for Greek democracy, it is unsurprising that for much of the 19th century, virtually all government buildings of consequence incorporated Greek Revival (or Classical Revival) style elements Certainly, the Georgian Style, which was also popular at the time for domestic construction, but since it was intimately associated with the English monarchy, it would have been inappropriate for the government that had recently rebelled against that monarchy. The US Capitol building is a great example, but also state capitols, small-town courthouses, and non-governmental buildings began aping the Greek look.



Figure 7-30: Winchester, VA: Thousands of courthouses across the US also adopted Greek Revival stylings. This one, once part of the confederacy perhaps sent a mixed message about democracy.

So popular was the Greek Revival style during the 19th Century, that it was adopted as for use on commercial, residential and religious buildings. The symbolic value of Greek Revival architecture was appropriated or perhaps misappropriated. Eventually, Greek Revival architecture took on new layers of meaning which had little to do with democracy. Architects began designing banks and homes in the Greek Revival style by the 1820s. Bankers and homeowners both sought to use architecture to convey a message of power and stability to those who would look upon their buildings. Banks, which were for many years highly unstable, occasionally losing all the depositors' money,sought to evoke a sense of stability and responsibility. For them, architecture that projected stability was thought to inspire depositors and to help prevent "bank runs", the panicked withdrawal of deposits that

frequently caused banks to fail. The message conveyed by Greek Revival stylings became convoluted and arguably misapplied.



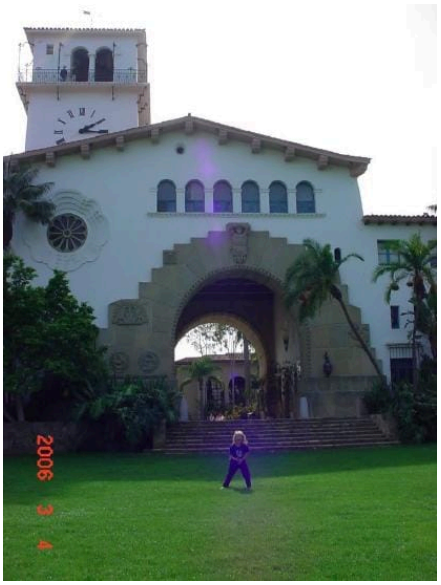

Figure 7-31: Fort Worth, TX. This sign, embedded into the sidewalk, was an attempt generate business for the nearby bank by assuring depositors that their savings would be safe. Most banks used Greek Revival architecture to promote the same message.

Wealthy homeowners appropriated the symbolism of Greek Revival to remind people of their power and prestige. Plantation homes in parts of the Antebellum South were almost exclusively Greek Revival. The symbolism originally associated with this architectural style was ironically misused by slavers who crafted a system of government diametrically opposed to the system of governance that inspired the adoption of Greek Revival!



Figure 7-32: White Castle, LA: Nottoway Plantation, like many dozens of other homes of wealthy planters in the South appropriated parts of the symbolism of Greek Revival and in the process altering part of the symbolic value of this style to include slavery.

Consider how the adoption of this Greek Revival by non-governmental institutions (like slave owners and bankers) affects the way we "read" Greek Revival architecture today. Consider how a black man, perhaps a descendant of slaves, walking past a Greek Revival courthouse in 1920 (or 2017) in Mississippi might read the symbolism of the building. What would Greek Revival "say" about his chances for justice should ever find himself inside that courthouse? If he were in Boston, would the building evoke a different meaning?



Consider the symbolic qualities of the courthouses in Las Vegas and Santa Barbara, California (left and center). What ethnic group might not value the symbolic quality of Mission Revival architecture used in Santa Barbara? Try to read the symbolic landscape surrounding a Greek Revival church on the right in West Monroe, Louisiana? How might African-Americans from Louisiana read Greek Revival in the Confederate South differently than they do in the Midwest?

This is to remind you that architecture and other elements of the built landscape are not passive. Landscapes affect us all. It conditions what we think and how we act. We, in turn, affect the meanings associated with every item on the landscape. The cultural landscape is ever-changing, and our society is responsible for collectively creating meanings around the things we see. It changes us and we change it.

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# 8: CRIME AND PUNISHMENT

**Where people violate the rules and norms of society and how they are punished is a matter of significant interest to geographers. Spatial perspectives and a variety of tools used by geographers are successfully applied to the study of crime, advancing both public safety and our understanding of the myriad effects of the criminal justice system.**

The criminal justice system in the United States is massive. Since the 1980s, "get tough on crime" programs have caused prison and jail populations to explode. In 2017, more than two million people are locked up in the United States. This is easily the highest number in the world. At around one percent of all Americans, our incarceration rate is also one of the world's highest. An additional 5 million people are on parole. America's criminal justice system is also heavily burdened by a history of racism. Criminal activity, and how we deal with, it presents a massive challenge that we seem unable to address.

Crime is a huge industry. According to the US Bureau of Labor Statistics, around three million Americans work in police and sheriff's departments, the penal system, as security guards, in parking enforcement and other related protective service occupations. An additional one million work in legal occupations (judges, lawyers, clerks, etc.). About 100,000 people are probation officers. Nearly 20,000 teach others about the criminal justice system.

Geography offers some answers that other disciplines do not when it comes to crime. The spatial patterns of crime, victimization, laws, and punishment/rehabilitation strategies vary wildly across the United States. Analyzing these patterns from a spatial perspective offers forceful insight into why crime is such a problem. Criminal justice issues simultaneously provide a rich environment in which to apply epistemological and methodological approaches favored by geographers. This chapter, therefore, is shorter and focuses on applied geography in a specific subfield of geography.




Figure 8-1: Angola, LA - The infamous Louisiana State Penitentiary, located in a swampy bend of the Mississippi River has a notorious past and a poor record of rehabilitation.

8.1: Spatial Patterns of Crime

8.2: Geography of Punishment

8.3: Illegal Substances

8.4: CrimeMapping and Analysis

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# 8.1: Spatial Patterns of Crime

Crime rates vary wildly by location. Some neighborhoods suffer little from crime, while others are plagued by it. These patterns repeat themselves at a variety of scales from the street corner to entire countries. According to the United Nations, Latin America and Africa were the two most dangerous regions on earth in recent years. Europe and East Asia, on the other hand, have very low homicide rates. The United States is somewhere in the middle.

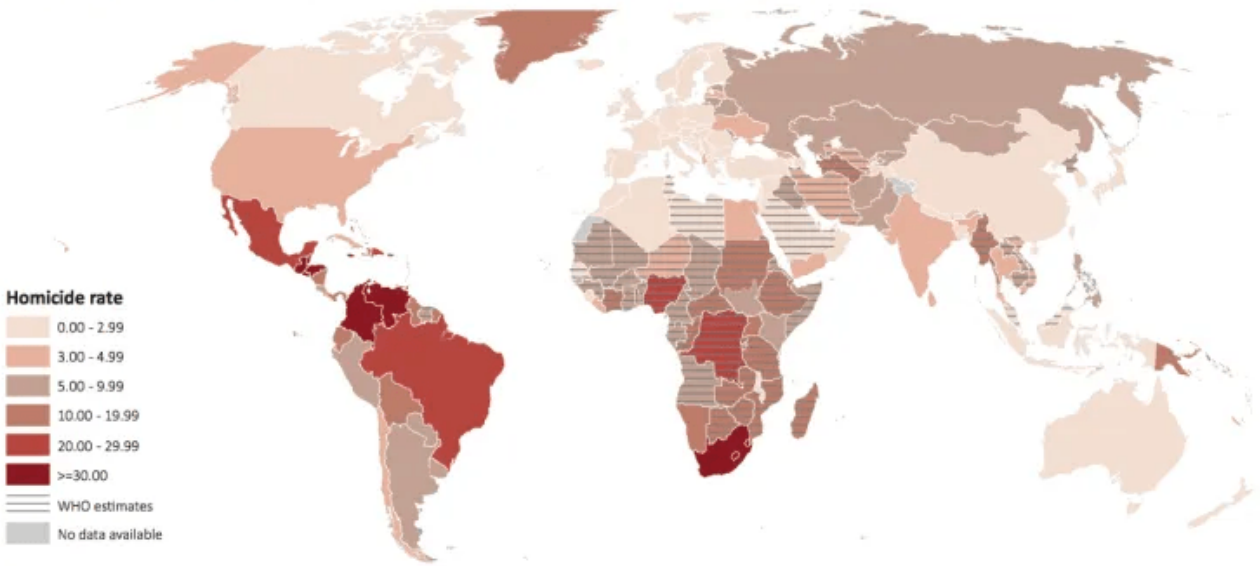



Figure 8-2: World Map – Homicide Rate or Murders per 100,000 people (2013). Latin America and Sub-Saharan Africa have the highest murder rates in the world, in some places 10 times the rates found elsewhere. Source: United Nations

A good deal of the elevated murder and crime rates worldwide can be attributed to gangs or organized crime syndicates, especially where the production and transportation of illegal drugs is concerned. The illegal drug trade is in turn fueled by the opportunity to make vast sums of money, or in many cases, a meager sum of money where economic opportunities are few. Proximity to the massive drug markets in the United States and Europe, as well as the spatial logics of agricultural production also encourages the drug trade.

In the United States, the old "Yankee" region seems to be the safest place to live, while the Deep South is most dangerous. For example, the murder rate is nearly five times higher in Louisiana than it is in Vermont and Iowa. Of course, not all parts of Louisiana are equally as dangerous. Within each state, crime rates vary greatly as well. For example, in Louisiana where the murder rate is very high, of the nearly 500 murders committed in 2013, more than 90% were in cities. In Los Angeles, neighborhoods with the most violent crime experience around four times as much as the statewide average, but hundreds of times more crime than the safest neighborhoods in other parts of the city.

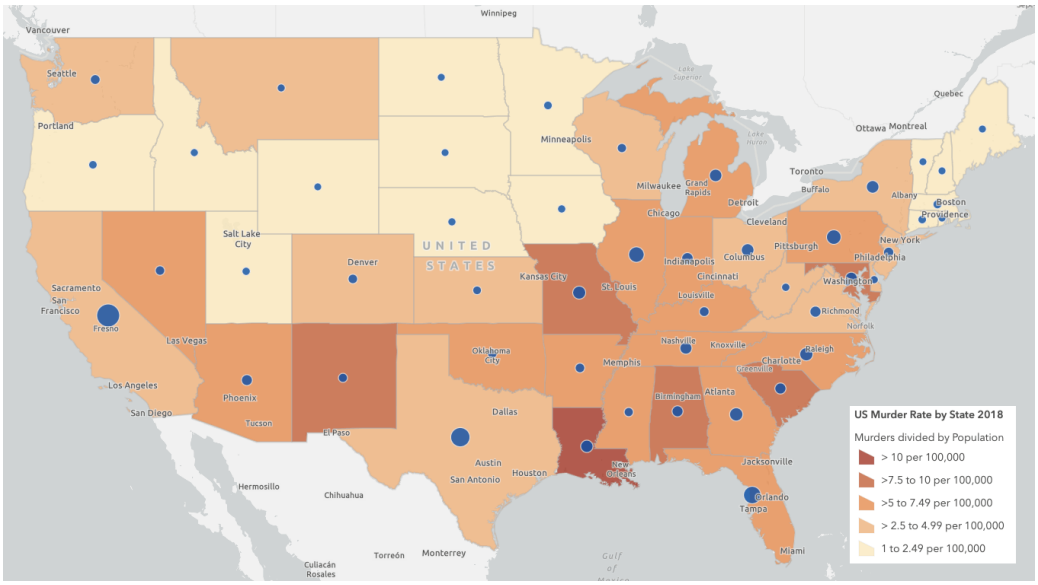



Figure 8-3: US Map - Homicide Rate by States. According to the government, states in the Deep South have the highest murder rate. Interactive Map. Data: FBI.

The rate of property crime also varies greatly through space. You are more likely to have your car or truck stolen if you live in California or Washington than if you live in New York or Wisconsin (see map).

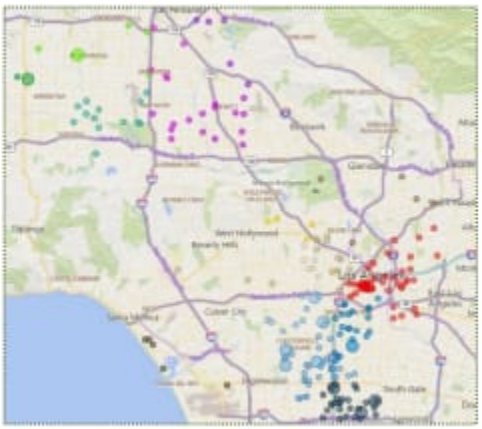


Figure 8-4: Los Angeles, CA: Homicides in Los Angeles are concentrated near downtown and in South LA. The map indicates how very important the scale of analysis with crime data. Interactive Map. Data: LAPD

What accounts for the amazing variability in crime on the map? Most of it can be traced to the likely suspects: income inequality, lack of opportunity, racism, poverty, poor schools, gang activity, drug, and alcohol abuse.

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# 8.2: Geography of Punishment

Crime prevention is the goal of law enforcement agencies. There are several strategies for preventing crime, but in the United States, the favored method is punishment. Americans favor the idea that putting criminals in jail not only punishes the criminal but also offers them a chance for rehabilitation. Americans also cling closely to the idea that jail time serves as an effective deterrent to those considering crime. It's a questionable philosophy.

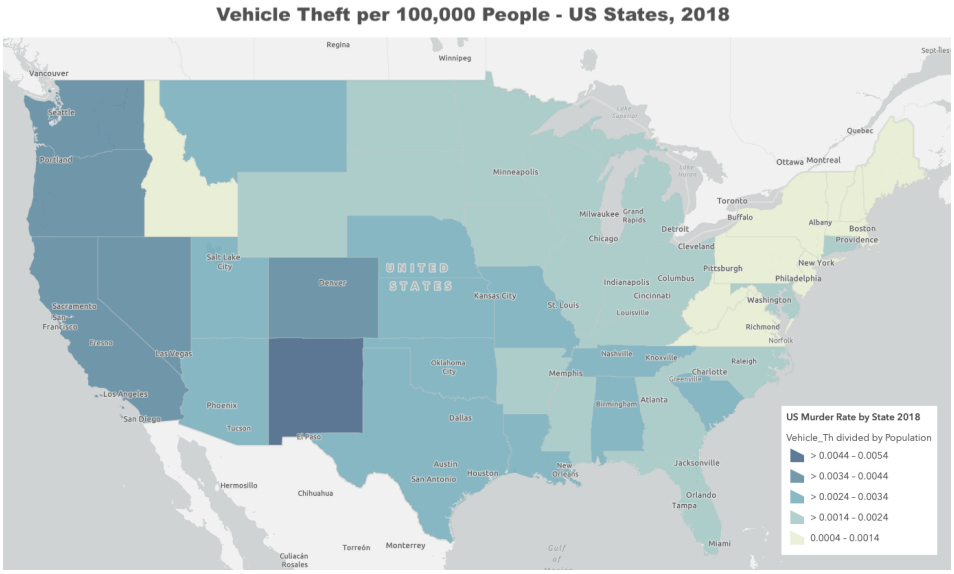



Figure 8-5: US Map - Auto Theft Rates by States. People steal cars at a much higher rate in California than they do in the state of New York. Why might this pattern occur? Interactive Map. Data: FBI

The United States has the highest incarceration rate in the world at over 700 persons per 100,000. Although Americans constitute only about 5% of the world's population, about one-in-four imprisoned persons are in American jails. England, Germany, and Japan, as well as many other highly industrialized nations, have much lower incarceration rates, ranging between 50 and 100 persons per 100,000. Americans could learn from the beliefs and practices of other countries, but we stubbornly refuse to learn from other countries when it comes to some issues. Crime is one of those issues.

From an international perspective, the American criminal justice system, which relies on mass incarceration as the principal crime prevention tool, is a terrific failure. People go to prison for offenses that generally would not warrant jail time in other countries, like passing bad checks or possessing small amounts of marijuana. American criminals go to prison a lot longer as well. The rate at which people go to jail in the US and many European countries is nearly equal, but American prisoners stay jailed twice or three times longer than their European counterparts. Part of the disparity in sentence length is attributable to the disparity in crime type. The non-violent crime rate and the simple assault rate in the United States are similar to those in Europe. However, very violent crimes are committed much more frequently in the United States. It appears that Americans' exceptionally easy access to firearms creates far more opportunities for Americans to use a weapon in a crime. Because gun-related crimes receive far longer sentences than those without guns, American criminals wind up serving much longer prison sentences than criminals elsewhere.

Another significant component of America's love affair with prisons is attributable to the cultural politics of the United States. Americans decided to fight the "war on drugs" primarily through imprisonment rather than through drug-addiction treatment or by investing in effective drug prevention programs. In the 1970s, a cultural backlash against a perceived level of cultural permissiveness led to a "get tough on crime" political populism, called law and order politics. Because the United States' judicial system is one of the few in the world that allows citizens to elect judges, law enforcement leaders(Sheriffs), and prosecutors, candidates for these positions worked hard to prove they were "tough on crime". Rarely do candidates for these positions campaign on being the smartest on crime. As a result, prison populations exploded since about 1970. Some states also turned to corporations that run private prisons to help house inmates, and by doing so created an economic incentive to those in that industry to maintain high crime rates, incarceration rates, and recidivism rates.



Figure 8-6: San Quentin, CA - This prison, like many far exceeds its designed capacity. Officials have turned to private corporations or early parole to cope. Source: Wikimedia.

Officials in the US also execute those convicted of particularly heinous crimes more frequently than is the case in most of the world. Internationally, locations with a devout religious population (e.g., Iraq, Iran, Saudi Arabia, and Pakistan) and China execute more people at a greater rate than the US. The Chinese execute far more than any other country. However, China's executions seem focused on political crimes. The death penalty is not used in Europe, Canada, or Mexico. After a hiatus of almost 20 years, the Trump administration resumed Federal executions in 2020.

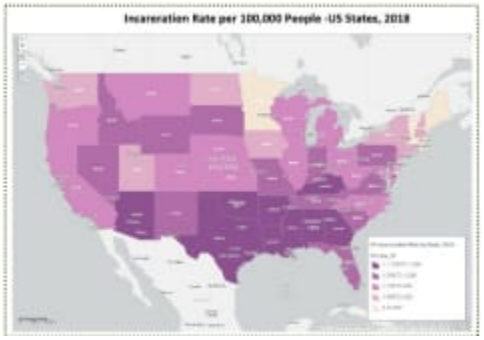



Figure 8-7: US Map: Incarceration Rates -2016. Some states have pursued mass incarceration more fiercely than others, but the efficacy of this strategy is in question. Source: BJS. Interactive Map

Americans' opinions on the Death Penalty have swung back and forth. During the Great Depression, nearly 200 people per year were executed in the US. After World War II, it became far less common and for much of the 1970s, there were none because the US Supreme Court found execution to be cruel and unusual punishment, and therefore unconstitutional. But, law and order politics caught up to the justice system and after 1977, executions resumed in some states. By 1998, executions reached a post-moratorium peak of 98 Americans per year, about half the peak number in the 1930s. That number has fallen since partly because DNA evidence showed that some death row inmates were innocent leading some states to abolish the practice. In 2019, 22 Americans were executed.

Executions are far more likely in some parts of the US than in others. They are most common in places where Americans favor a Biblical "eye-for-an-eye" type justice, and/or where there is a long-standing legacy of violent racism. States from the former Confederacy, led by Texas (40%), account for roughly 85% of all executions since 1976. In fact, over half of the death penalty cases in the US come from just a few counties in the country. Duval County, Florida (Jacksonville) is one of those counties that jurors and/or judges regularly condemn prisoners to death. Critics of the practice are quick to point out that frequent death sentences in Duval County have not resulted in a significant reduction in crime there. California has over 700 prisoners on Death Row, but none are likely to be executed because of the numerous court cases challenging the death penalty. Perhaps, it's not surprising that several studies point to very disturbing trends indicating differential treatment for people of color when it comes to death penalty cases.

Proponents of harsh penalties for crime argue that “getting tough on crime” has worked. Indeed, crime rates have fallen in the United States since the 1980s. In 2016, the violent crime rate in the US was about half of what it was in 1993. However, crime rates in the US have not fallen evenly, nor does there appear to be a significant correlation between states with high rates of incarceration and declining crime rates. New research suggests that locking up the worst offenders is effective at reducing specific types of crime, but long-term imprisonment for lesser crimes does little to reduce overall crime rates.

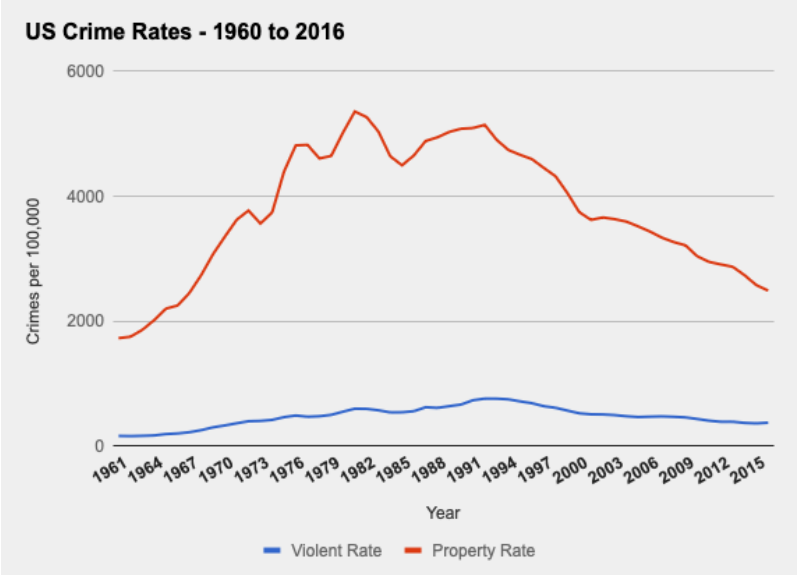



Figure 8-8: Rates for violent and property crimes have fallen dramatically in recent years. Dataset. Source: UCR

By looking only at national statistics, one could still make an argument that mass incarceration is an effective strategy. However, by examining trends internationally, or even just looking at Canada’s experience, it’s easy to see that crime rates are dropping worldwide; including in those countries, like Canada that have never used mass incarceration as a crime prevention strategy. Some criminologists have pointed to demographic changes accompanying the maturation of the post-war baby boomers as the main reason for falling crime rates across the US, Canada, and Europe. As populations age, the number of people in the prime criminal age-cohort (15-30 years old) has fallen dramatically.

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# 8.3: Illegal Substances

The production, consumption, and transportation of illegal drugs and alcohol constitute, by far, the largest arena of criminal activity in the United States and elsewhere. Thousands of other crimes, from murder and robbery to burglary and petty thefts are also directly linked to both abusive and recreational uses of legal and illegal substances. Drugs and alcohol function as both a cause and an effect of crime. Their production and consumption exhibit interesting geographic patterns, and these patterns help answer many societal problems.

## Temperance Movements

Various states, counties, cities, and even townships have passed laws to restrict or prohibit the production and sale of alcohol, with varied success,since before the American Revolution. Religious conservatives and women's groups started several temperance movements during the 19th century. They had little success. The alcohol industry was important almost everywhere. Almost every small town in American had a locally operated brewery, winery, or distillery. During this time, alcohol taxes were also an important source of tax revenue for various levels of government, especially during wartime. During the 19th century, millions of immigrants streamed into the US, bringing with them a variety of European cultural traditions, some of which involved copious consumption of wine, beer, or spirits. Some argued that there was a strong association between heavy drinking and a variety of social ills, many of which were pronounced within immigrant communities. In the aftermath of World War I, the politics of booze changed. The political power of beer/wine drinking German-Americans was greatly diminished, while women's political power greatly increased. Safe drinking water became widely available, and income taxes capable of offsetting the loss of alcohol taxes were in place. These factors permitted the temperance movement to surge forward, and the 18th Amendment passed outlawing the production of most types of alcohol in the United States.



Figure 8-15: New York City:- Men pour a barrel of alcohol into a sewer while law enforcement officials look on during the prohibition era. Source: Wikimedia.

This grand legal experiment, known today as Prohibition lasted 13 years (1920-1933) and it is widely considered a failure today. During Prohibition, Americans could not legally sell, produce, import, or transport alcohol. Overall, the consumption of alcohol fell, and so too did the overall crime rate, but enforcing Prohibition quickly became a massive problem. Because there was still a large demand for booze, the illegal transport and sale of alcohol, known as Bootlegging, began almost immediately. Widespread violation of Prohibition occurred because many Americans thought outlawing alcohol was unjust and beyond the authority of the government. Enforcing prohibition quickly overwhelmed the police, the courts, and the penal system. Corruption among the police was rife. Canada and Mexico had no similar laws, so they became major production centers for booze that was smuggled into the United States. Owners of shuttered breweries, wineries, and distilleries took up the cause to repeal the 18th Amendment. Even doctors, many of whom relied upon alcohol to concoct medicinal liquors (cough syrup, etc.) wanted to repeal the law. After more

than a decade, the balance of evidence seemed to suggest that Prohibition had failed. The law did not fit the prevailing sentiment on alcohol. It is from this experiment that the expression, “You can’t legislate morality” emerged. Still, lawmakers in many parts of the US continue to try to do just that.




Figure 8-16: Promotional Poster 1873 - This poster featuring both German and English proclaims the virtue of wine as a component of a happy married life. It stakes a claim to the moral legitimacy of German-American values. Source: Wikimedia.

## White Lightning

During Prohibition, the illegal production of a potent corn liquor, known as moonshine flourished, especially in Appalachia. This powerful clear alcohol gets its interesting name from the tendency of those who produce and transport this liquor to work at night to avoid detection. To aid in their clandestine operations, moonshiners tended to distill their liquor in geographically remote locations, far from the prying eyes of law enforcement. Decades ago, cars used to transport moonshine were reputedly modified, or to help bootleggers evade law enforcement officials. Cars were “souped-up” to make them go faster and equipped with heavy-duty springs to better hold heavier cargo. Legend holds that this led to the evolution of stock car racing in the Upland South. The legend is probably embellished.

Although it has been nearly a century since national prohibition elapsed, moonshining continues apace in parts of Appalachia. Several reasons, rooted in the geography of the Upland South, can be identified. First, there is a long history of corn liquor production in Appalachia. The Scottish and Irish that constitute a significant part of the ethnic heritage of Appalachia, brought the practice to the region hundreds of years ago. Perhaps more importantly, local versions of Prohibition continue in many parts of the South to this day. Many people in the South and Appalachia live within dry counties, meaning the sale of alcohol, or at least some types of alcohol, is illegal in those counties. Oftentimes, only portions of a county are dry, or there are exceptions for specific locations or events. In any case, banning the sale of booze in these regions encourages the production of moonshine. Where alcohol is permitted, often taxes on it are very high to discourage its consumption. These laws and the associated sin taxes remain in place in the South largely because conservative, anti-liquor Baptists, Pentecostals, and Methodists are politically dominant. Ironically, because the production of moonshine can be very profitable for its producers, both the bootleggers and Baptists favor the maintenance of laws that have evaporated elsewhere in the country. It is a longstanding and ironic political, and economic relationship that favors the status quo.

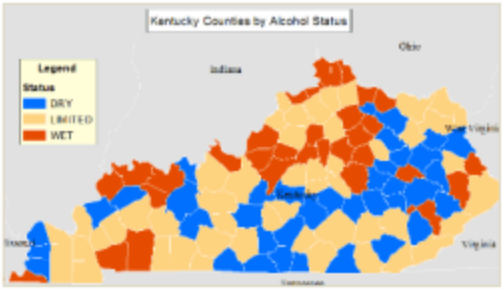



Figure 8-17: Map - Kentucky counties by legality of alcohol. Data Source: Kentucky Alcohol Beverage Control

Geography presents another set of factors favoring the production of moonshine in the Upland South. The mountainous terrain and geographic isolation of the region prevent Appalachian farmers from cheaply producing and transporting grain crops to populous urban markets. Transportation costs encourage farmers in remote locations to turn to the production of alternative "agricultural goods" capable of turning a profit despite the added transportation costs (see Von Thunen Model – Agriculture Chapter). Because transportation costs associated with corn liquor are far lower per unit of product than corn itself, especially in Appalachia, there is a strong economic logic incentivizing alcohol production there. In recent years, larger operations have been known to yield thousands of gallons, allowing moonshiners to make thousands of dollars per week locations with few well-paying, legal, employment options. Marijuana production occurs under similar conditions.

In a few locations within Appalachia, especially the karst regions of Kentucky and Tennessee, groundwater sources are often naturally filtered through layers of limestone bedrock, changing the chemistry of the spring water in a way that is ideal for the production of high-quality whiskey and bourbon production. As a result, several best-selling brands of whiskey in the United States are distilled there. Not surprisingly, some of these distilleries are in dry counties. Take, for example, Lynchburg, Tennessee, where the world-famous Jack Daniels whiskey is distilled. It's in a dry county. Over 10 million cases of Jack Daniels are bottled in Lynchburg every year, but you can't buy a shot of it there.

## Marijuana

Perhaps the most widely broken law(s) in the United States over the last 40 years are those associated with the production and consumption of cannabis, better known as marijuana. Most people get away with breaking marijuana laws for sure, but according to the FBI, each year police arrested around 1.5 million people for various drug abuse violations. Marijuana-related offenses are easily the most numerous of those crimes, though arrests for the manufacture of marijuana has fallen as legalization and decriminalization progresses.




Figure 8-18: Woodland Hills, CA - The city of Los Angeles legalized medical marijuana and hundreds of dispensaries opened across the city in a matter of months. Many businesses used outlandish colors and language to market their product.

The prohibition against marijuana dates to the early 1900s, and it parallels in some ways the prohibition of alcohol. Americans disagree about the dangers and morality of using marijuana, and millions ignore marijuana laws. Law enforcement efforts vary wildly across the United States and have varied through time. Some US Presidents have pushed federal policy toward jailing all drug offenders; others are less enthusiastic about it. Several politically progressive states have sought to decriminalize or even make marijuana legal in recent years. Oregon and Colorado were the first to make recreational use legal.

The production of marijuana is an important agricultural activity in many parts of the United States. Marijuana production hotspots have a lot in common with moonshining regions. Both tend to occur in isolated areas, especially in mountainous regions. Good soils and rainfall favor some locations more than others. In those locations, a lack of viable industrial or agricultural alternatives seems to be a key factor promoting marijuana production. Appalachian states are important suppliers of domestically grown pot in the U.S. Tennessee and Kentucky rank high for both the production of plants and the value per acre. Hawaii is also a major producer, partly because it has a great climate and superb soils, but also because it has little competition from outside. California, particularly the Emerald Triangle region in the northwestern corner of the state far out-produces the rest of the country. Like Appalachia, the remoteness of northwestern California makes it difficult for law enforcement to easily find illegal fields of cannabis. In locations where pot production is an important economic activity, law enforcement may have little incentive to aggressively police the activity, especially where law enforcement agencies' budgets are heavily reliant on taxes raised indirectly from the pot industry.

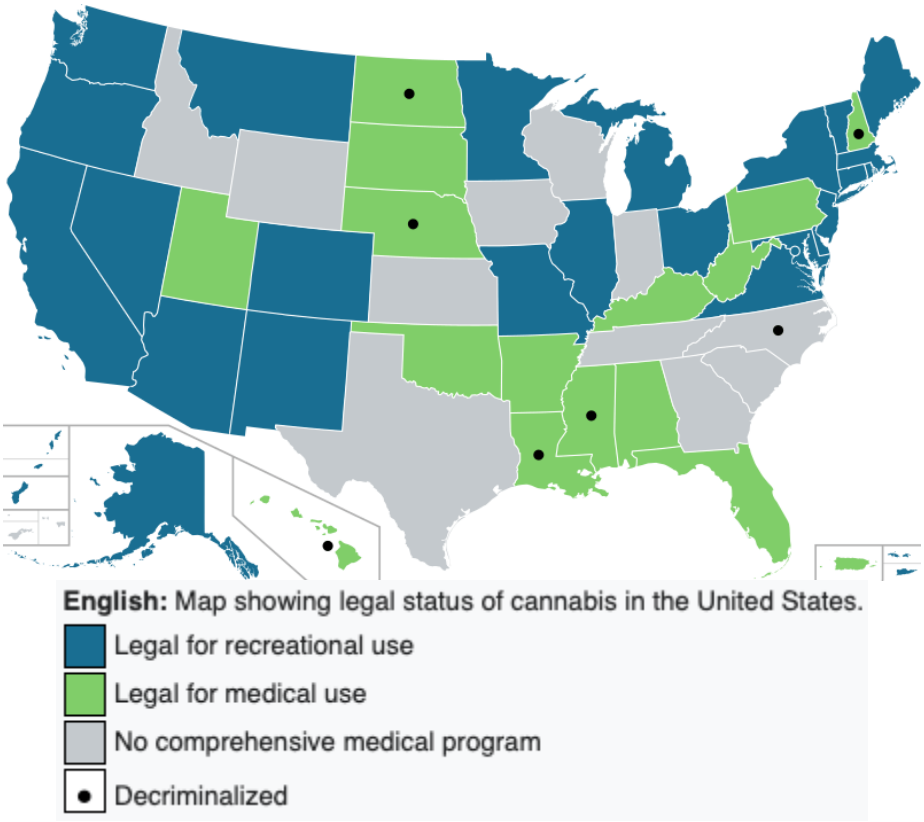



Figure 8-19: Map - States in New England and the West Coast have moved to decriminalize marijuana in recent years. Source: Wikimedia

There is also a cultural-political variable driving California's pot industry. Many of the people who established the pot industry in the Emerald Triangle were "hippies" who moved from the Bay Area in the 1970s the "war on drugs" forced production into hidden locations. Over the years, the economy of northwestern California has become reliant on the marijuana crop. It is the leading industry there and the primary source of basic income for the region. The creeping legalization of marijuana production across the United States represents a significant threat to the economic lifeblood of the region. Not only would growers from other locations, who live closer to the major markets, be able to undercut growers in the Emerald Triangle via lower transportation costs, but more importantly the explosion of competitors (supply) would drastically lower demand and therefore lower the price of marijuana. Legal pot could be an economic disaster for the places that depend on bootlegging marijuana. Because the Emerald Triangle is essentially a monocropping agricultural zone, much like those places that rely solely on coffee or bananas, expanded competition can be ruinous (see Agriculture Chapter 3). If marijuana becomes completely legal in the US, growers in the Emerald Triangle may need to market their product differently. Marijuana producers in the Emerald Triangle may find themselves using the same marketing techniques used by vintners in Napa Valley, touting the quality of the local soils, climate, and the skill of their

master cultivators.

## Medical Marijuana

Perhaps no place in the country witnessed a more spectacular response to the legalization of marijuana than Los Angeles. When medical marijuana was legalized in 2004, hundreds of marijuana retailers, or dispensaries, opened within a few months. Some estimates put the number at around 600. Dispensaries outnumbered mainstream pharmacies by a wide margin. By mapping dispensaries, while using pharmacies as a control variable, several interesting questions could be answered about marijuana sales in LA. For example, what does the map of dispensaries tell us about who is using marijuana for medicinal purposes? For recreational purposes? One could assume that if marijuana was sold primarily for medicinal purposes, then the distribution of dispensaries should be very similar to the distribution of pharmacies. Instead, the map reveals dense clusters of dispensaries in specific neighborhoods (e.g., near college campuses) suggesting that marijuana is probably sold more for recreational purposes than for medical ones. California legalized recreational marijuana in 2016, once again changing the legal environment in which this industry operates, and those changes are bringing shifts in the landscapes of cannabis.

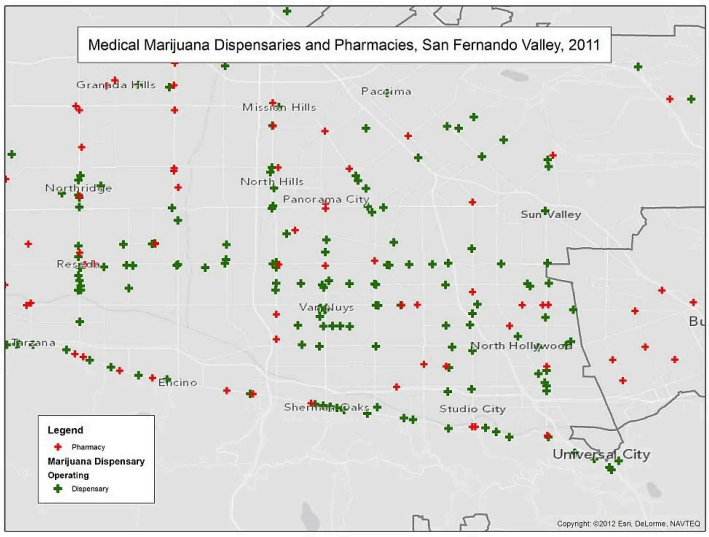



Figure 8-20: Map - The eastern San Fernando Valley had an unusual number of marijuana dispensaries, especially compared to standard pharmacies. Discrepancies such this suggest that recreational users fueled the expansion of the industry. Sources: ESRI, WeedMaps

## Opioid Crisis

The legalization of marijuana invites many questions about how legalization affects addiction to more lethal drugs, like heroin. After all, the recent spike in heroin abuse in the US evolved from the legal distribution of opioid pain medications. In the 1990s, millions of Americans were newly diagnosed with chronic pain. Doctors treated as over 100 million people with a variety of painkillers, including Percocet, Vicodin, Oxycodone, and other opioid- based pain management drugs.

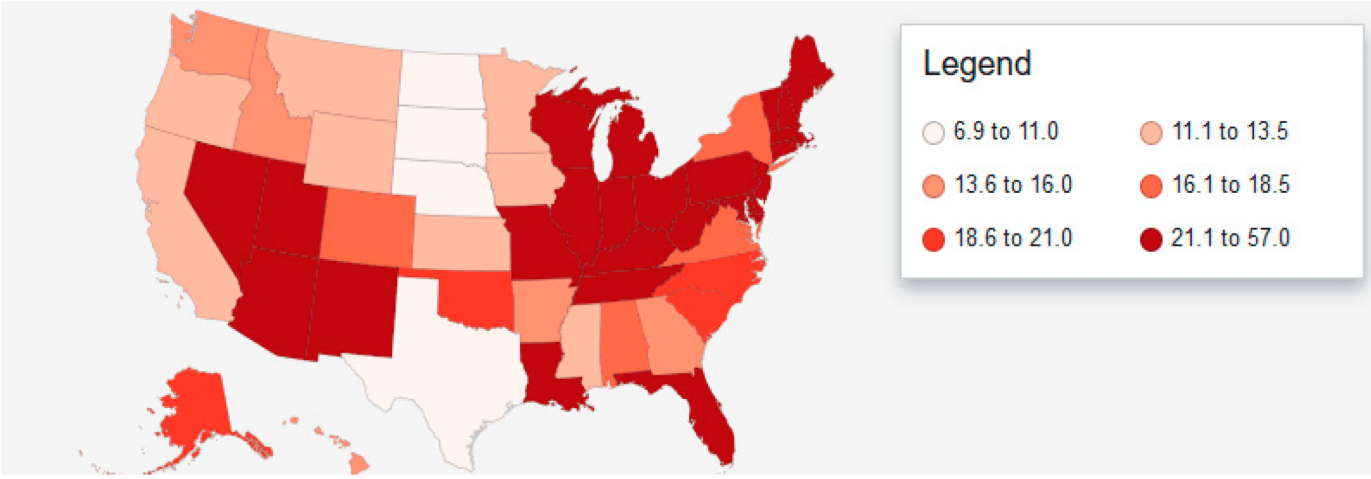



Figure 8-21: US - The rate of drug overdoses by state shows a reasonably strong correlation with the rate of prescription making. West Virginia is a well-known terminus of the OxyContin Express. Source: CDC. Interactive Map

In Florida, where many elderly people with age-related chronic pain live, became the pain medicine capital of the US during the 1990s. The huge number of elderly patients in Florida provided masked the fact that hundreds of unscrupulous doctors and pharmacists were making huge profits by over-prescribing opioid drugs to drug dealers who posed as chronic pain patients. By 2009, doctors in Florida were prescribing ten times the number of Oxycodone or "Oxycotin" pills than doctors in the rest of the country combined. Drug dealers from all over the eastern half of the United States were making regular trips to Florida to visit dozens of pain clinics where they would pick up dozens of fraudulent prescriptions, many of which were filled by pharmacists in the doctor's office. These opioid drugs bought in Florida were later sold on the streets and abused by people taking them without a prescription. As a result, several transportation routes to Florida's pill mills, including air routes and Interstate 75 were dubbed, "The OxyContin Express".

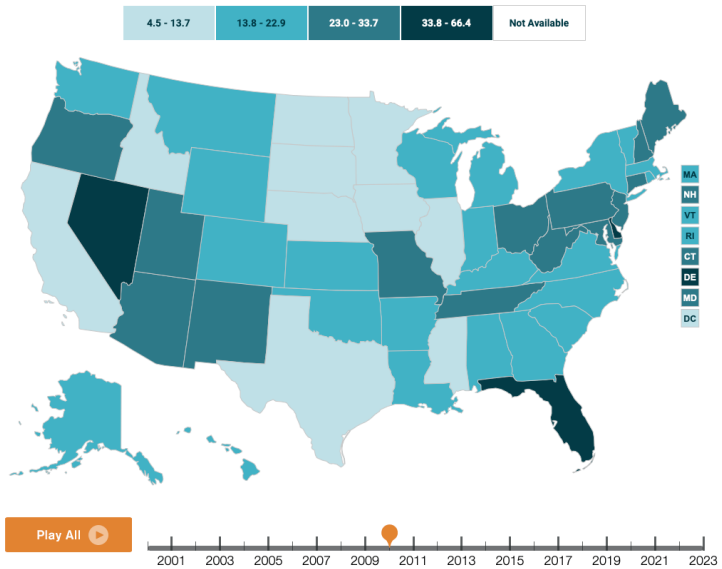



Figure 8-22: US Map - Florida was for many years a hotbed of so-called "pill mill" doctors and pharmacies that make huge profits from prescription pain medications that become street drugs. Source: US DEA and SHADAC. Interactive Map.

In recent years, more aggressive policing of pill mills, and a reformulation of Oxycodone created a scarcity of many prescription pain pills, which drove up the price for them on the street, and in turn invited those addicted to prescription pain pills to turn to cheaper, but more deadly alternatives to prescription opioids, including heroin, Fentanyl and a host of other synthetic opioids made in "labs" run by crime syndicates in the US, Mexico, and China. As a result, drug overdoses from opioids (prescription and illegal) have gone up from about 6 per 100,000 in 1999 to over 21 per 100,000 in 2017. The US Congress and state governments have been slow to act.

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# 8.4: CrimeMapping and Analysis

The collection of electronic crime data allows law enforcement agencies to map each instance of crime digitally. By plotting crimes on a map, along with data about demographics, businesses, institutions, and known offenders, crime analysts using GIS have created an entire subfield of geography known as forensic geography or crime mapping. GIS, in the hands of crime geographers, offers law enforcement agencies a robust analytical toolkit that can offer both long-term policy guidance and short-term tactical advice.

Numerous television shows feature crime analysts who engage in criminal profiling, which is a kind of pseudo-scientific attempt to identify perpetrators of crime based on psychological characteristics and behaviors of suspects. Geographers use more scientifically rigorous analyses of data to identify likely suspects in specific types of crime sprees. Perhaps the most thrilling application of spatial principles in the study of crime is known as geographic profiling, a collection of techniques designed to identify spatial patterns in criminal behavior. Serial offenses, like arson, murder, car theft, etc. can be mapped, and by observing the criminal tendencies (modus operandi or M.O.) of offenders, analysts attempt to predict where an offender is likely to commit additional crimes, and even where the offender may live. Criminal activity, like most other activity, is conditioned by the principle of distance decay, therefore it can be assumed that most criminals tend to commit crimes near their home, or another locus of activity. With crime, however, there is a caveat: most serial criminals tend not to commit a crime in very close proximity to their home/workplace because they fear that someone would recognize them at/near the crime scene.

There are significant variations in the spatial pattern of crime sprees that depend on the individual serial criminal, the type of crime, and the geographic peculiarities of the region; but in some instances, criminals behave just as the geographers' theories suggest and analysts using GIS can occasionally make predictions with reasonable accuracy. An assignment accompanying this text allows students to do some geographic profiling with data associated with crimes committed by the so-called Hollywood Arsonist, who set nearly 60 fires during several days near New Year's Day 2012. Far more complex procedures are available to advanced students of the craft, including Rossmo's Formula. More Americans are becoming aware of the power of GIS thanks to the publicity generated by television crime dramas (like NCIS, CSI, or Numb3rs) that occasionally feature geeky GIS crime analysts helping detectives solve baffling crime sprees.

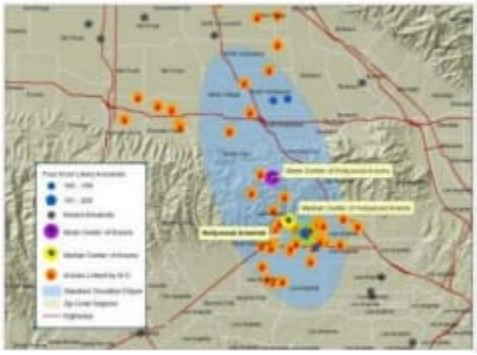


Figure 8-9: Hollywood, CA – A serial arsonist burned nearly 60 buildings during the New Year's holiday 2011-12. Basic statistical techniques indicated where the perpetrator was likely to live. Data Source: LA Times

## Social Disorganization Theory

Most geographers who study crime focus not on the behaviors of individuals, but rather on groups and the contexts in which they live, as a way of understanding crime trends. Criminal behavior exhibits trends at the neighborhood, county, state, and national levels permitting an array of research possibilities. By mapping crime data along with a variety of social, cultural, economic and law enforcement data, crime analysts not only can begin to understand why crime happens where it does, but they can also assist in making neighborhoods safer by helping officials redirect scarce resources to locations where they are most needed. New York City's Police Department has employed a GIS-based, quality of life/crime data management tool called CompStat for years with celebrated success.

The most popular theory guiding research into the geography of crime is known as Social Disorganization Theory. This theory was built upon observations made by researchers from the so-called Chicago School who began using maps to understand

crime over 100 years ago. According to this theory, place really matters. In other words, Social Disorganization Theory posits that neighborhoods create conditions that may encourage or discourage criminal behavior. Of course, individuals within any neighborhood may choose to pursue or avoid criminal activity, but numerous studies have shown that criminal behavior is far more common among people from areas that fit certain demographic and economic profiles.

What factors predict an elevated crime rate? Poverty, ethnic heterogeneity, and residential mobility are the chief indicators, and they manifest themselves in ways that are relatively easy to measure. According to this theory, poor neighborhoods, with a heterogeneous population, where people frequently move in and move out, residents are unable to exert effective,collective social control. This is like a family where parents have lost control of their children because they don't know them well enough, and have little leverage over them. In neighborhoods, where the population is wealthier, stable, and homogenous people tend to develop a shared sense of right and wrong, and they become more willing to defend their neighborhood (and property values) from those who would commit crimes. You are far less likely to "defend your neighborhood" when you don't know your neighbors, and you don't have a sense of ownership over your neighborhood.

One of the more important findings made by the chief architects of this theory many years ago was that ethnicity was not directly related to crime. They came to this conclusion by mapping different ethnic groups as they moved up the socio-economic ladder and from neighborhood to neighborhood. What Shaw and McKay found was that recent immigrant groups often exhibited high rates of juvenile delinquency while they lived in a specific type of neighborhood. Yet when those immigrant families moved into more stable and prosperous neighborhoods, the delinquency rate of juveniles declined. For those families from the same ethnicity that remained in the old neighborhood, the delinquency rate did not decline. Therefore, ethnicity could not be at fault. Instead, it was the cultural ecology (or social environment) of the neighborhood that made a difference. Geography matters.

This text's author used these very same theories to co-author a study analyzing the effect of payday lenders on crime rates in Seattle, Washington. By using social disorganization theory to conduct a GIS-based statistical analysis, it was possible to forcefully argue that 1) neighborhood variables like the of percent young males, the jobless rate, the residential instability of residents, the population density, etc.strongly predicted crime rates; 2) when those factors were held statistically constant, the addition of specific businesses or institutions (in this case payday lenders), crime rates worsened significantly over time. Similar studies have analyzed the effect of a variety of landscape elements on crime, including parks, liquor stores, and schools. Most have found that neighborhood variables affect the propensity of residents to engage in criminal behaviors.

## Modeling Crime

Consider a situation in which a person has petitioned your local government for a license to open a liquor store (or casino, flower shop, or gymnasium) in your neighborhood. City officials and concerned residents may want to estimate the effect such an establishment might have on local crime rates. A geographic approach would call for an analysis of similar instances occurring in the past, or in other locations, perhaps in other towns or in other parts of the same city. A common technique used by geographers is to first map the relative data and then create a regression model of the variables. Regression models are statistical tests that allow users to estimate the effect of one or more causal variables (e.g., income, education, liquor stores, etc.) have on an outcome variable (e.g., crime rates). Modeling crime with regression models is a well-established technique among social scientists. It not only permits analysts to identify likely causes of criminal activity but also by mapping the results of the test, geographers can identify neighborhoods that have crime rates that are higher/lower than what is expected, based on predictions made by the regression model. Law enforcement officials can use these maps to decide where to deploy additional resources, or to investigate more closely the factors contributing to higher (or lower) than expected crime rates in a specific location.

## Hot Spot Analysis

Patterns of criminal behavior that might be impossible to spot in a spreadsheet or among stacks of crime reports are often readily discernible using GIS. One pattern mapping technique is called hotspot analysis. One version of this technique begins with a simple point map of crimes, but the GIS software calculates small buffer zones around each point. Those areas with multiple overlapping buffers are assigned a progressively higher score on a color-coded pixel grid map, thereby enabling GIS users to quickly visualize the presence (or absence) of multiple crimes in the region. Hotspot maps may also indicate the location of a nexus of criminal activity (like a drug dealer) even when no arrests have been made at a location. GIS analysts can also add to a hotspot map addresses of known felons, repeat offenders, parolees or institutions, like pawn shops, liquor stores or strip clubs to help identify likely suspects, or landscape elements affecting crime.



Figure 8-10: Los Angeles, CA – This hot spot map of car thefts in the eastern San Fernando Valley shows that cars theft is worst in high traffic areas, along commercial corridors. Data Source: City of Los Angeles

## Broken Windows Theory

A crime theory advanced by Wilson and Kelling in the 1980s argued that the appearance of neighborhoods was another factor in the pattern of crime in cities. This idea, known as Broken Windows Theory, suggests that visual indicators of disorder on the landscape (e.g., trash, graffiti, vandalism) signal to passers-by that there is a low level of social control and community investment in an area. In other words, where visual disorder is evident, people assume that behavioral disorder is also acceptable. At the very least, visual disorder is a signal to would-be criminals that if even if residents do not approve of criminal behaviors, there is likely to be little consequence for those who commit crimes. On the other hand, in places where it's obvious that people are caring for their windows, lawns, walls, streets, and sidewalks, criminals will surmise that residents actively monitor the behavior of others, and are likely to act against those who violate the social norms associated with well-kept locations.



Figure 8-11: Detroit, MI - The abandoned Michigan Central rail station near downtown Detroit signals to all that this neighborhood has little social or government authority.

Implications of this theory suggest that police and residents should vigilantly guard against visual disorder. Windows that are broken should be fixed immediately. Graffiti should be painted over immediately, trash should be removed quickly, and repairs to buildings should be made as quickly as possible. Lawns should be mowed and kept tidy, etc.

## Zero Tolerance Policing

Many police departments across the United States embraced the principles of Broken Windows Theory in the 1990s and attempted to apply the logic to a crime prevention strategy known as Zero-Tolerance Policing, a misapplication of Broken

Windows Theory that has generated intense controversy. Zero Tolerance Policing incorrectly assumed that disorderly behaviors by citizens had the same effect on crime as visual disorder on the landscape. By assuming that allowing small transgressions of the social order and/or petty crimes to go unpunished signaled to citizens that serious crime must also be OK, police departments embracing this thinking began cracking down on all sorts of small crimes. The idea behind Zero Tolerance Policing is that by arresting people for small crimes (graffiti, petty theft, failing to pay subway fares, etc.) people will not engage in major crimes. Zero-Tolerance Policing policies give officers little discretion in the sorts of crimes they actively pursue. Every little crime must be stopped. Arrests for petty crimes must be made. In New York City, Zero Tolerance Policing evolved into a strategy known as Stop and Frisk. Under this policy, the number of times New York City cops stopped and questioned individuals on the street quadrupled went from less than 100,000 in 2002 to over almost 700,000 in 2012.




Figure 8-12: Chillicothe, OH - This town, after witnessing a spike in opioid related crime, adopted a stop-and-frisk policy like New York City's.

Black and Latinos were disproportionately targeted for police stops and interrogations, leading to protests and lawsuits accusing police of illegal racial profiling. The Black Lives Matter movement is in some ways a reaction to the misapplication of Broken Windows Theory.




Figure 8-13: New York, NY - Protestors march to protest "Stop and Frisk" policing. People of color often view the strategy as racial profiling. Source: Wikimedia.

Advocates of Stop and Frisk policies have pointed to the dramatic reduction in crime in New York City since the adoption of Zero-Tolerance Policing there. Critics counter-claim that other cities, including most that do not use zero-tolerance policing, have

experienced similar dramatic reductions in crime rates. Other research suggests that attending to visual blight in neighborhoods, such as graffiti, garbage, broken streetlights, etc., resulted in a similarly positive reduction of crime rates, without widespread complaints from communities of color about police harassment.

In 2020, after what appeared to be some improvement in relations between police and communities of color, widespread protest erupted once again in the wake of a series of high-profile tragedies involving police and black citizens in the US. Unlike earlier protests that were largely confined to major cities with large minority populations, the 2020 spring protests were staged in small towns, white suburbs and even spread to Europe, where protestors expressed solidarity with both American people of color and European minority populations that have in recent years suffered increased racism, anti-immigrant hostility, and xenophobia. Calls for significant changes in the American criminal justice and policing policies seemed to gather momentum, under the unfortunate slogan "Defund the Police".




Figure 8-14: Ottawa, Canada: Protestors call for a reconsideration of policing policies and how police departments are funded. Source: Wikimedia

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# 9: ETHNICITY

**Geography plays a significant role in the creation, maintenance, and erosion of ethnic identity. A person's ethnic identity can be very complex because it is determined by many cross-cutting factors, including language, appearance, national heritage, and religion. Although all identities are social constructions, identity influences many cultural practices, including politics, religion, and economic behaviors.**

"What are you?" You need some sort of an answer to this question about your ethnic **identity** because you will be asked about it frequently. Employers, schools, banks, and the US Census are among the many institutions interested in placing you into a category based on your ethnicity and/or race. You may be asked the same question by new acquaintances or old friends. Despite the potential complexity of the answer to that question, our limited vocabulary and our political structures often prohibit people from answering that question in anything other than the most simplistic terms. The world seems to want you to check only one box. Some people find it easy to check a single box or provide a one-word answer to questions about ethnicity. Others find checking a single box or providing a simple answer difficult. Moving from one region of the world to another can make answering identity questions even more confusing because "what you are" can change when a person moves to a new location. This happens because the categories that governments and culture groups use for ethnicity are socially constructed. In other words, we made them up. Because these categories are socially constructed, they're also subject to change through time and across space. Who you are - depends on where you are. Geography matters. A lot.

**X. INFORMATION FOR GOVERNMENT MONITORING PURPOSES**

The following information is requested by the Federal Government for certain types of loans related to a dwelling in order to monitor the lender's compliance with equal credit opportunity, fair housing and home mortgage disclosure laws. You are not required to furnish this information, but are encouraged to do so. The law provides that a Lender may not discriminate either on the basis of this information, or on whether you choose to furnish it. If you furnish the information, please provide both ethnicity and race. For race, you may check more than one designation. If you do not furnish ethnicity, race, or sex, under Federal regulations, this lender is required to note the information on the basis of visual observation and surname if you have made this application in person. If you do not wish to furnish the information, please check the box below. (Lender must review the above material to assure that the disclosures satisfy all requirements to which the lender is subject under applicable state law for the particular type of loan applied for.)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BORROWER** | ☐ I do not wish to furnish this information | | | **CO-BORROWER** | ☐ I do not wish to furnish this information | | |
| **Ethnicity:** | ☐ Hispanic or Latino | ☐ Not Hispanic or Latino | | **Ethnicity:** | ☐ Hispanic or Latino | ☐ Not Hispanic or Latino | |
| **Race:** | ☐ American Indian or Alaska Native | ☐ Asian | ☐ Black or African American | **Race:** | ☐ American Indian or Alaska Native | ☐ Asian | ☐ Black or African American |
| | ☐ Native Hawaiian or Other Pacific Islander | | ☐ White | | ☐ Native Hawaiian or Other Pacific Islander | | ☐ White |
| **Sex:** | ☐ Female | ☐ Male | | **Sex:** | ☐ Female | ☐ Male | |

Figure 9-1 Many government documents ask people to report their identity, but provide the few categories thereby actively helping create or maintain identity categories into which people generally place themselves, even if they don't fit well.

The idea of ethnicity has ancient roots. Slavery, once nearly a universal human practice, and perhaps as old agriculture itself, may well be the original impetus behind the creation of ethnic categories. Some of the criteria we use today in the US to determine ethnic identity were introduced by Europeans hundreds of years ago to make slavery more efficient and to increase the profitability of agriculture.

Today, because the ethnic composition of our country is far different than it was in the 1800s, Americans use multiple strategies and frameworks to maintain categories of ethnic identity. The three main frameworks are race, language, and national ancestry. Americans regularly confuse race, ethnicity, and/or national origin, mistakenly treating these concepts as one. The paragraph below describes how these ideas and concepts work together.


9.1: Race

9.2: Language

9.3: Religion

9.4: National Heritage

9.5: Region

9.6: American-American?

9.7: Space Makes Race

9.8: Ethnic Regions

9.9: Processes
9.10: Enforced Ethnic Regions
9.11: Black Ghetto Typology
9.12: Environmental Racism
9.13: Ethnicity and the Economy
9.14: Ethnic Landscapes

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# 9.1: Race

Race is the identity category largely based on a person's appearance or phenotypes. The specific traits used to determine racial categories change through time and across space. In the United States, notions of race are rooted in the slave economy of the colonial period. Nearly 100 years before the English established the Jamestown colony in Virginia, the Spanish brought African slaves to North America. To maximize profits in this agricultural system, the legal system required identity categories that easily marked who was eligible to be held as a slave and who was not. Africans became the preferred source for slaves partly because of their appearance, which is to say, their **race** allowed them to be easily identified by the legal system of the slave era. Although slavery was outlawed in the US during the 1860s, the Jim Crow legal system that followed continued to govern many aspects of American life for at least another 100 years, reconfiguring and making legal many American concepts of race. The US Census Bureau played an important role in eliminating some of those old categories, but in the process, it reinforced other strategies used by Americans to create race groups.

Today, Americans generally use only three criteria to classify someone by race. The first criterion is skin pigmentation. People with darker skin are distinguished from those with lighter skin, but in the US, skin color by itself is insufficient to classify anyone into a racial category. Therefore, people are further categorized by the texture and color of their hair. People with naturally straight hair or light-colored hair, are generally not considered "black" or "African-American" regardless of their skin tone. Finally, people are categorized by the shape and color of their eyes. People with brown "almond-shaped" eyes, and straight hair, are often placed in the "Asian" category. This "three-factor test" generates three groups: White, Black, and Asian. Americans use this clumsy, old-fashioned test all the time although it works so poorly that millions of Americans, particularly those from Latin America, are left out requiring the creation of additional categories.

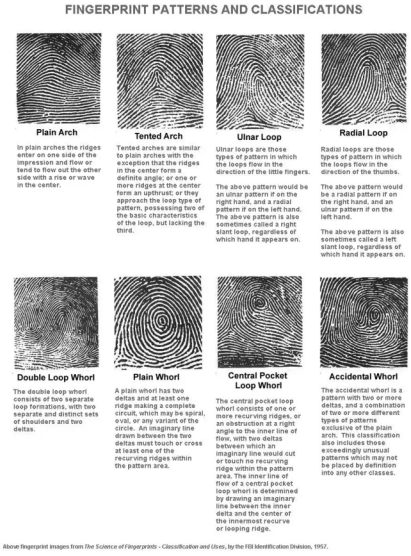



Figure 9-2: Fingerprint patterns vary across the globe much like skin color, but because they are difficult to see, they were not chosen as markers of race. Source: FBI

The notion of race is problematic for other reasons. Clearly, the "three-factor test" used by Americans is a **social construction**. People created both the test and each category. Anthropologists, biologists, and geneticists argue that the concept of race itself is not scientifically valid. While there are genetic markers for physical characteristics, like skin color and hair texture that are evident in the DNA of each person, only a few of the many thousands of DNA markers align with the convenient categories we use to categorize into racial groups. For example, only about 15 of our 45,000 genetic markers control for skin pigmentation If we wanted, we could choose from thousands of alternative genetic characteristics to classify people. If our social constructions were to change, and we suddenly decided to group people by height, fingerprint patterns, or blood type (rather than skin color, hair texture, and eye shape), we would have an entirely different set of races across the globe.

Race is also not logically from a statistical view. This is because the overall amount of genetic variation among people of the same "race" is equal to or greater than the amount of genetic variation among people of different races. Statisticians argue that race fails the simplest definition of what constitutes a "group". Even though the concept of race has been rejected by statistics

and science, it remains a vital reality in the lives of almost all people across most of the world, especially where there are many groups of people who look different living together.

## Marxism and Race

So why do we have "races" then? Marxists regularly argue that "race is the cultural clothing of capitalism". Marxists note that racism and/or ethnic bias is one of the most important tools used by the elite to maintain power. According to Marxist theory, the construction and maintenance of racial and ethnic identities permit political and economic elites to justify their economic, political, and military dominance over less powerful groups. Marxists also argue that ethnic biases and racial conflict distract working-class people from all groups from focusing their energy and anger against the capitalist class and capitalist system.

## Physical Geography of Race

Human appearance does vary across the planet and geography played a role. Human phenotypes evolved over thousands of years to help humans thrive in various climates and environments. Skin pigmentation is the most noticeable adaptation. The traditional theory, which explains the process, known as **directional selection**, holds that dark skin is an evolutionary adaptation that helps protect people from the damaging effects of the sun's ultraviolet radiation. The theory suggests that darker-skinned people had an evolutionary advantage over lighter-skinned people in sunny locations, so they became more numerous in sunny regions. However, dark skin may be disadvantageous in sunlight-deprived areas, like northern Europe, where darker skin prevents the body from producing adequate amounts of Vitamin D from sunlight. Vitamin D is an essential dietary nutrient, especially for lactating mothers, so pale skin provides an advantage in places where it is frequently cloudy or where winters are long and days are short for much of the year. Some evidence suggests that the variations in skin pigmentation may have taken as few as 100 generations to appear in humans. There is evidence that the process is reversible as well. There is also some emerging theory to suggest this old theory may not be valid.



Figure 9-3: Tamil Nadu, India – People from Southern India tend to have darker skin, but also share many phenotypes with Europeans and are generally lactose tolerant. Source: Wikimedia

The ability to absorb vitamin D into the human body may also have influenced the development of lactose tolerance, and the evolution of dairy agriculture culture in Europe. Most adult mammals cannot drink milk because of an inability to produce lactase, an enzyme that metabolizes lactose. Most Europeans can drink milk. Traditional thinking suggests this is because thousands of years ago, Europeans who had a genetic mutation that made them lactose tolerant had an evolutionary advantage over those who were lactose intolerant. In any case, **where** was, and continues to be, a foundational, causal variable in the construction and maintenance of our ideas about who we are, what we do and why we do it.

# BABY'S GOT BACK – GEOGRAPHY AND STANDARDS OF BEAUTY

Cultural factors also play a role in the evolution of our physical appearance. Some of our physical characteristics, like skin tone, height, or body morphology have been influenced by long-standing regional standards for physical attractiveness. This process is known as sexual selection. For thousands of years, standards of "beauty", that are sometimes very local, even random fascinations, have lent themselves to regional evolutionary changes in body morphology that have contributed to human phenotypes.

Across the globe, differences emerged in what men and women consider attractive in the opposite sex. For example, for many generations, many Chinese men were attracted to women with tiny feet. The feet of some young Chinese women were bound. Presumably, tall women with naturally big feet were considered less desirable than short women with small feet. Did the presence of this sexual preference help make the Chinese much shorter on average, than, say, the Dutch where that particular sexual preference was uncommon?



Figure 9-4: Chillicothe, Ohio – Tiny shoes, a relic of pre-industrial China hint at the role of sexual selection in evolution of phenotypes.

In West Africa, where maternal societies and a cult of fertility characterized the religion of many cultures for untold generations, a preference for large buttocks, especially on females, emerged. In places where food insecurity threatened the lives of infants, a large derrière may have been interpreted as a sign of good health and some insurance to men seeking mates that their mate would produce many healthy children. In Japan, a place with a vastly different agricultural and religious history from West Africa, this taste preference for large buttocks is muted or even reversed.

In the United States, especially during the 1970s and 1980s, many white people worked to darken or "tan" their skin to meet an evolving standard of beauty. Generations earlier, pale women sought instead to remain as pale as possible to ensure beauty. A geographer might explain this shift in cultural practice by arguing that in agricultural societies, darkly tanned skin was a sign of poverty because agricultural field laborers worked long hours in the sun. Starting with the Industrial Revolution, poor white people were more likely to live in cities and work in factories, and as a result, were kept pale by spending long hours indoors. The wealthier classes finding themselves now indistinguishable from the impoverished classes began to tan to signify their status via their ability to engage in outdoor leisure activities, like going to the beach. A good tan became a marker of wealth and exclusivity – which are desirable characteristics. In recent years, however, the threat of skin cancer and shifting demographics have confounded this American beauty standard once again.




Figure 9-5: Chinatown, Los Angeles, CA: Chinese women, especially the elderly, are careful to avoid exposure to the sun as they cling to standards of beauty more common in agricultural China.

## African-American and Blackness

In the US, the two main ethnic categories are black and white, though these categories have evolved. Early on, and in some regions of the US, there were multiple ideas about what made a person black or white. For example, racial categories such as octoroon, mulatto, and high yellow, once commonly used in the 19th century to describe Americans of mixed ethnic or racial backgrounds, are unused today. During the late 19th and early 20th century, at the height of the Jim Crow era, new "blood laws" were enacted that redefined "blackness". Some states declared specific percentages (one-fourth, one-eighth) of ancestry as a legal limit to be considered legally white or black. In some places, there was an official policy that ruled that any person with any ancestry from Africa was considered African-American, regardless of their physical appearance. These were known as "one drop" rules. It is interesting to note that before the great period of European migration in the late 1800s and early 1900s, a large percentage of Americans were of mixed African, European, and Native ancestry. In 1930, the US Census Bureau even stopped using the designation "mulatto" to indicate people of mixed ancestry. Subsequent censuses (1940-1960), black ("negro" back then) and white were the only options, officially eliminating the mixed-race options from earlier eras.

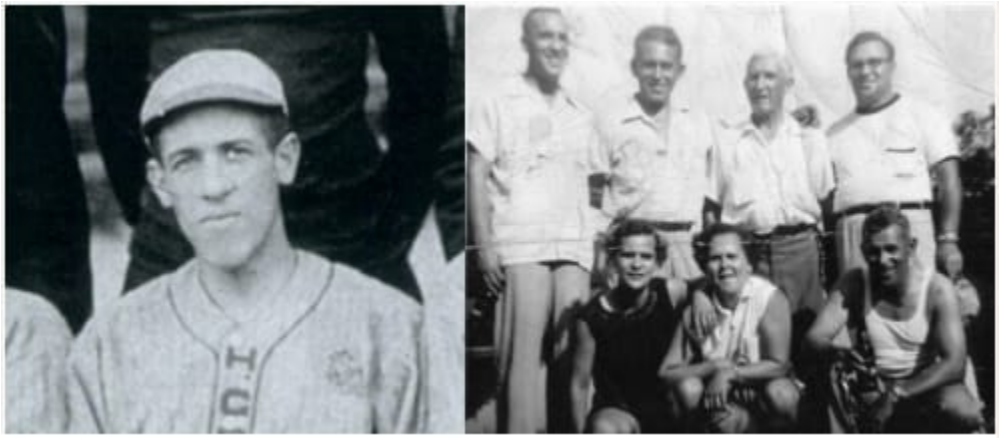


Figure 9-6: Cumberland Posey, a famous baseball and basketball player from Homestead, Pennsylvania was considered "black" because local people knew of his family's African ancestry. He played baseball in the "Negro Leagues" and basketball in the Black Fives league. His first cousins, (right) moved to Ohio in the 1920s, and passed for "white" in another town where their family history was less well known. The younger men in the photo fought in World War II in all-white units and attended white schools. They moved and became white. Mr. Posey did not move and stayed black.

Many Jim Crow laws remained intact until the late 1960s when the Supreme Court struck them down. These laws were necessary

back then because other laws and regulations required people to be categorized as either black or white. For example, the US military was segregated by race until 1948. Blood rules forced the military to render a judgment on each soldier or sailor so the military could assign each individual into a race-based unit. Similar laws, known as blood quantum rules may still be applied to determine membership in various American Indian tribes. It wasn't until the 2000 census that the government again allowed people of mixed heritage to identify by more than a single category.

The effect of these laws remains strong in the United States. Persons of mixed ancestry generally are pressured by society to identify themselves with a single heritage, especially if they have even an identifiable percentage of African ancestry. This is probably because black people were the group most often targeted by the old blood laws. Those definitions linger. According to DNA tests, African-Americans are on average about 20% "white". About 10 percent of African-Americans are more than half white in terms of ancestry, yet they still identify (or are identified) as "black". Even very well-known people of mixed ancestry, like President Barack Obama and golfer Tiger Woods, are forced to identify as a single ethnic category, sometimes over their very public objections. Woods is considered black in America, but he calls himself Cablinasian, a word he made-up to characterize his ancestry that includes **Ca**ucasians, **Bl**ack, American **In**dian, and **Asian**. In Thailand, Tiger Woods is embraced as "Thai", the home country of his mother. The unfortunate lesson here is that it frequently doesn't matter what you think you are if everyone else insists that you are something different.



Figure 9-7: Born of a European mother and an African father, Barack Obama is widely considered simply "black". It shows that even the "most powerful man on the planet" is unable to overcome the cultural notions of race in the US. Source: Wikimedia

In South Africa, where race-based apartheid government policies lasted until the mid-1990s, officials devised a variety of tests to determine an individual's inclusion as a white, coloured or black. Consider, for example, the so-called pencil test in which a pencil was stuck in an individual's hair. If the pencil did not fall out easily, the individual might be classified as black. In one famous case, a girl, whose parents were both legally recognized as white, was reclassified as coloured, and subsequently removed from her all-white school, though her parents remained white.

Light-skinned black people could move from the United States or South Africa and suddenly find themselves white. For example, in many places in Latin America or the Caribbean, light-skinned persons of African ancestry who would be black in the US are considered white in the Caribbean or South America. Brazilians who were considered white in their home country often find themselves black once they move to the United States. Such migrants must navigate a potential minefield of bigotry. Americans may simply consider these immigrants "black" without reflecting much about the way the person from Brazil might self-identify. Discrimination could ensue. If the immigrants deny their African heritage by claiming that they are white, then American blacks may be off-put or upset because the metrics for determining who is "black" is different here.

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# 9.2: Language

The language a person speaks is another characteristic used by Americans to categorize people into ethnic groups. Like race, language is a convenient marker of identity that holds up poorly under scrutiny. In the United States, linguistic heritage is the first characteristic that officials from the government use to organize people into ethnic categories. The US government categorizes everyone into one of two categories: “Hispanic” or “Not Hispanic”.

Almost 20% of Americans speak Spanish “at home” and therefore are considered “Hispanic” by the government. Among Hispanics though, there are multiple subgroups or ethnicities. Because “Hispanic” is a linguistic characteristic separate from how one looks, people from any race could be Hispanic. There are Hispanic Asians (Filipinos, e.g.), Hispanic Whites(Spaniards, e.g.) and Hispanic Blacks (Cubans, Dominicans, e.g.).

A sizeable percentage of Hispanics in the United States have ancestors from both Europe and the Americas, and therefore, those persons are racially mixed. Traditionally, this racial mixture was known as Mestizo. Today, the term Latino is commonly used instead in the US to refer to people with Latin American heritage. It should be noted that the term Latino is an inexact synonym for Mestizo. Even though millions of Americans trace their ancestry completely or partly to Latin America, the US government does not officially recognize “Latino” or “mestizo” as racial categories. So, Latinxs (mestizos) living in the US typically select “other” when prompted to identify a racial category. Therefore, maps of race in cities like Los Angeles feature large swaths of people identifying as “other” in neighborhoods dominated by Latinx peoples. On the US census roles, this group appears as “Hispanic Other”.

Like American concepts about race, “Hispanic” is an overstuffed class of identity created by government officials seeking to conveniently reclassify heterogeneous groups into a single homogeneous category. Within the US, only Hispanics are grouped by language by the US government, which is somewhat ironic given that Spanish speakers are one of the few groups who do not readily classify themselves by reference to their language. Most Americans with ancestry from Spanish-speaking countries prefer to use nationality-based markers of identity, like “Chicano”, “Mexican-American”, “Tejano” or “Cuban”. Doubling the irony is the fact that there are linguistic groups in the US that do generally identity themselves by language (Basques, Chinese, e.g.) in a way the government does not. The government’s sloppy use of linguistic markers of identity indicates a long history of ignorance about, and/or indifference to, or even aggression toward people who speak Spanish.

Complicating the issue of race among Latinos is the varied way Spanish speakers use the expression “La Raza” (translated “the race”). Fascists in Spain used the term to celebrate the uniqueness and racial purity of Spaniards for decades, but the term has since been adopted/adapted (appropriated?) by various Latinx groups to refer to a host of sometimes competing claims to ethnic identities not based on race, or at least as it is defined in this text.

## Switzerland

A quick examination of how Switzerland, a linguistically diverse country offers valuable insights. Switzerland is overwhelmingly “white”. Less than 10% of its population is non-European. Switzerland is nevertheless a multi-ethnic country because of its great linguistic diversity. Most Swiss speak German, but there are sizeable numbers of Swiss who speak French and Italian. Even Romansh is recognized as an official language in Switzerland, though only about 1% of the population speaks it.




Figure 9-8: Map of Switzerland - Mountainous regions often feature linguistic diversity. The Swiss present a model of ethnic harmony in the face of diversity. Source: Wikimedia.

The jigsaw-puzzle linguistic map of Switzerland is similar to those found in other rugged, mountainous, or inaccessible regions where the friction of distance is significant and the risk of balkanization is high, yet it has been a model of stability. So, despite their linguistic diversity, various peoples living in that part of the world agreed to become a country 1291, and since then Swiss have largely focused their attention on national commonalities such as their neutrality, love of democracy and Alpine sports to build a special sense of national identity that overwhelms the various linguistic identities. The strong tendency to self-identify with a common national identity by Swiss people is probably helped by the fact they have one of the highest standards of living in the world (health, wealth, happiness), but by the same token, their health, happiness, and prosperity are in no small part due to their ability to get along well with Swiss who speak other languages. What makes Switzerland somewhat unusual though is how the Swiss have embraced their linguistic diversity, even requiring school-aged children to become bilingual. The Swiss demonstrate to the world that people of diverse backgrounds can live together quite happily if they chose to do so.

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# 9.3: Religion

In some parts of the world, religion is the primary marker of ethnic identity. In the United States, religion is rarely used as a marker of identity. Jews and Muslims are the two major groups in the US that sometimes self-identify by religion rather than some other marker of identity, but it is otherwise uncommon. The US government collects almost no data on religious affiliation because to do so would infringe upon the separation of church and state. In other countries where racial or linguistic differences are insignificant, religion sometimes becomes the primary marker of ethnic identity. Ongoing conflicts in India between Hindus and Muslims, or in Iraq between Sunni and Shia Muslims is a good example of how religion can divide an otherwise homogeneous population.

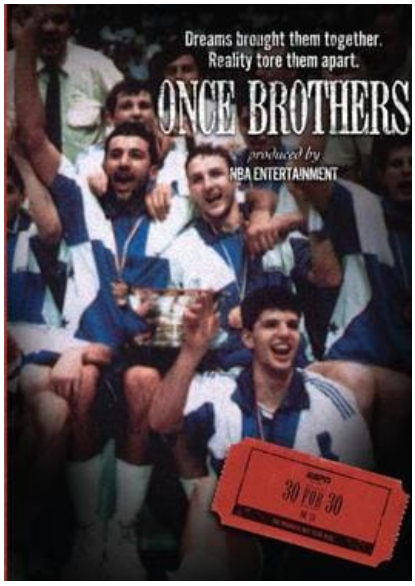



Figure 9-9: Once Brothers is a documentary film by ESPN detailing the emotional toll on former Yugoslav teammates who saw their former country and friendships torn apart by ethnic strife. http://vimeo.com/36827025

## Yugoslavia

The most tragic example of how religion-as-ethnicity can divide a people is found in the violent dissolution of the country of Yugoslavia. From 1918 - 1991, Yugoslavia was held together by a common language, a strong leader, and numerous common cultural practices. Translated literally, "Yugoslavia" means literally "Land of the South Slavs", indicating that there was a linguistic bond that formed the basis of a single national identity that held for several generations during the 20$^{th}$ century.

However, after the death of their leader, Marshall Tito in 1980, religious differences among the Yugoslavians proved increasingly unmanageable. The country broke up quite violently in the early 1990s, largely along lines established by religious identification. The Bosniaks (Bosnian Muslims) now inhabit a part of the former Yugoslavia now called Bosnia-Herzegovina. The Slovenes and Croats (Croatians) are largely Roman Catholic, and they now occupy the countries of Slovenia and Croatia. The Montenegrins, Macedonians, and Serbs (Serbians) are Eastern Orthodox Christians, and they now live in Montenegro, Macedonia, and Serbia respectively. Many observers considered the cultural differences between these groups insignificant, and certainly not worth the civil war that broke up the country. Critics of Yugoslavia's dissolution have argued that the actions of a few power-hungry politicians were responsible for whipping up nearly forgotten rivalries among neighbors who had been living together peacefully for generations. Some politicians created or exaggerated claims about historical wrongs done by one group against another. Today, each of the break-away countries has taken steps to create official languages based on the various regional dialects of the common Serbo-Croatian language they all speak in an attempt to manufacture multiple unique identities from an identity that was once shared by all for generations.

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# 9.4: National Heritage

Ethnic identity can also be tied to an association with an ancestral homeland or an ancestral group. Often, we call this type of ethnic identity nationality. Many Americans use nationality as their preferred marker of ethnicity. Many other Americans cannot even identify their national ancestry. Most of the time in the US, nationality-based ethnicities are expressed by the use of a hyphenated term, such as Chinese-American, Mexican-American, Persian-American, etc.

It is rare for Americans of European descent to self-identify as “English-American” or “German-American”, even though England and Germany have each been a significant source of migrants. One reason for the erosion of these identities as distinct is the long history of intermarriage between persons of European descent. This process is captured by the partially true myth of the **American Melting Pot** which suggests that over many generations European national identity has been overwhelmed by a generic American identity. Because Anglo and German migrants were so numerous, many of their cultural norms have become so thoroughly woven into the fabric of American life that together American culture is largely Anglo-German.

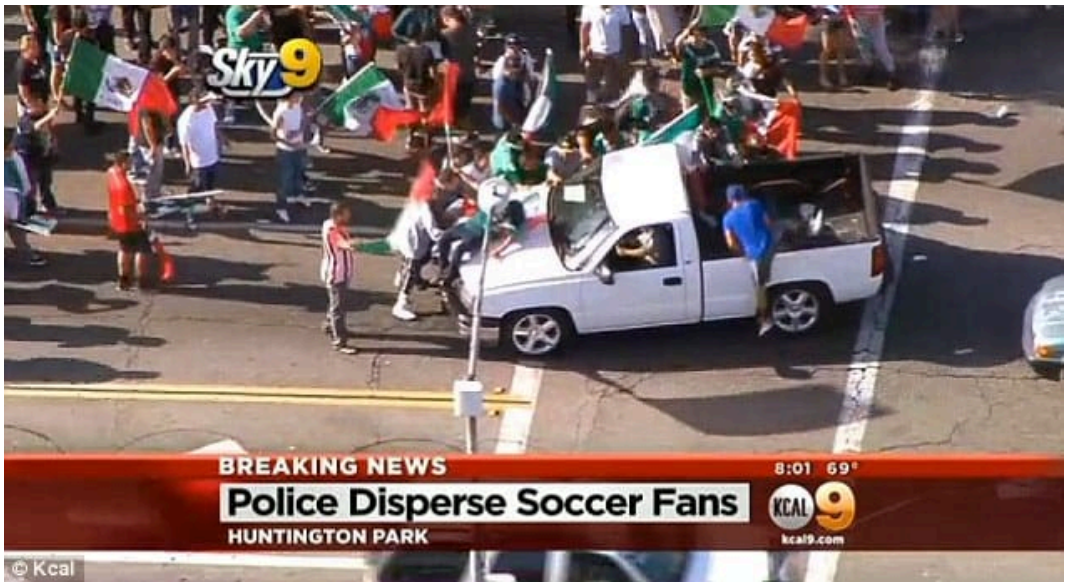



Figure 9-10: Huntington Park, CA - Fans of Mexico's men’s national soccer team celebrate in a Los Angeles neighborhood in a display of pride for a nationality-based ethnicity. Source: Daily Mail, UK

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# 9.5: Region

Finally, the US government also lumps people together by the continent of the origin of their ancestry. African-American and Asian-American are the most common examples of this type of ethnic marker. Both terms are problematic.

“Asian-American” is an absurdly broad term. It is nearly useless because it lumps several hundred ethnic groups from a vast continent together as one. People whose ancestry is traceable to China, Japan, Korea, India, Pakistan, Iraq, Turkey, and parts of Russia are all technically “Asian”, though they generally think of themselves as quite different from one another. Further complicating the term is the way many Americans use the term “Asian” to refer to an appearance-based racial group that includes only people from Eastern Asia (China, Korea, Japan, Vietnam, Cambodia, etc.).

African-American is another similarly confusing category. Mostly, the term is used as a racial category, but we must keep in mind that Africa is a region with about 50 countries and probably 500 ethnicities. Somehow though, only people whose ancestry is from **Sub-Saharan Africa** are widely considered “African-American”. Secondly, some immigrants from Africa are white, especially South Africans. Some African-Americans reject the label, preferring the term “Black” instead, partly because “African-American” has no equivalent, such as, “European-American”, but also because of how the term “black” evolved as a source of cultural pride and ethnic power during the Civil Rights era. The terms “colored” and “Negro” fell from common usage during the Civil Rights era as the term “black” gained currency.

White people are also overly broadly categorized. This category is used to classify people who are European, or whose ancestry is mostly European; but “white” also sometimes includes people from Northern Africa and Southwest Asia (Moroccans, Egyptians, Iraqis, Saudis, Turks, etc.). Depending on the context, the term Caucasian may reference either only Europeans or people from a vast swath of Europe, Asia, and Africa.

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# 9.6: American-American?

Some people reject inclusion in one of the numerous hyphenated American identities. What do people call themselves who would rather not be classified or those who think they're being left out? What about the millions who aren't sure what to check off on the "ethnicity" or "national origin" question? What about the people whose ancestry is mixed? The simple identity "American" is an option that a lot of white people chose on the US Census form, especially in the Appalachian South. This could be interpreted as an act of **xenophobia**, but for families from that region (the author included), many of whom trace their American roots back to the 1600s, the number of ethnicities, and national origins represented in the family tree is so numerous, so varied, and generally lost to time, to call oneself anything other than simply "American" defies logic. Anyone living in the United States with a complex family tree is perhaps best defined simply as "American".

During the 2000 and 2010 census, there was an effort by small, politically-motivated groups in some southern states to make Confederate-American or Southern White as an official ethnic designation. This effort seems an outgrowth of the racially charged, anti-Federal politics still quite common in the South, but there may be a less nefarious logic to doing so as well. Groups of people who share a common identity should perhaps be allowed to label themselves as they see fit. Certainly, many of the official and unofficial strategies we use to place people in an ethnic category are illogical and unhelpful. One could argue that because many people in the American South share a unique dialect, religious beliefs, politics, and social customs that they may indeed be entitled to call themselves whatever they want.

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# 9.7: Space Makes Race

Geographers like to argue that “space makes race” because spatial processes are ultimately responsible for the emergence of racial and ethnic categories. In the early history of humankind, there were no ethnicities. Everyone belonged to a single, very small group. Consider for example that the Chinese character for “China” also means “middle” or “center”. This symbol suggests that the Chinese, like many other ancient civilizations, thought of themselves as the center of the world; they were “the people”. As our species ventured out of Africa, languages evolved, multiple religions were established and humans’ bodies changed in response to random mutations, as well as changes in climate and environment. For millennia, humans’ inability to move quickly across the globe, to meet and breed with people from distant lands created, then maintained regional differences in our appearances, as well as the varied cultural practices that today mark the myriad ethnic identities.



Figure 9-11: The Chinese character for China is a stylized world globe.

The Age of Exploration (15$^{th}$-17$^{th}$ centuries) began a process of moderating the effects of space, and perhaps began eliminating the “races”. Today the erasure of space continues to accelerate with improvements in transportation, but imagine what would happen if someone invented an app that could instantly transport you to any spot on the planet, thus removing the friction of distance from our lives. If everyone had that app, within a few generations, racial and ethnic intermarriage would accelerate rapidly and the regional differences in our appearance and cultural ways would begin to fade. A single world language would begin to emerge. Perhaps a single world religion would begin to emerge as well. Maybe, we would begin to think of ourselves as earthlings or Terrans, rather than “Americans”, “Germans”, “Chinese”, etc. Or maybe not. Perhaps there is some psychological reason compelling humans to think of themselves as part of some group, or at the very least, to identify groups to which we are not a member.




Figure 9-12: Reseda, CA: This sign advertises a variety of ethnic-based businesses. Cultural hybridity and new ethnic identities are possible in neighborhoods such as this one.

# Acculturation and Assimilation

When ethnic minorities live among a larger "host" population, they tend to begin to adapt to the beliefs and practices of the larger group. This process is called **acculturation**. **Intermarriage** is the most effective means by which ethnic groups become members of the host culture, or **assimilate** into the dominant or **host culture**. Barriers to intermarriage among peoples of different European ethnicities have been generally lower than for those seeking a union between a European-American and a person whose ancestors were from elsewhere. For many years, in the US, **anti-miscegenation** laws against **interracial marriages** made it more difficult for minority groups to assimilate.

In the absence of legal or cultural barriers to intermarriage, time, and distance factor into how quickly and completely migrant families assimilate. After a few generations, most immigrant groups fully integrate into American culture, especially if the distance between the ancestral country of origin is great, making it difficult for migrants to remain connected to ancestral ways.



Figure 9-13: Location unknown - This soccer jersey features the colors and symbols of both the US and Mexico, in recognition of the transnational identities held closely by many Mexican-Americans living in both the US and Mexico. Source: MLS. (dead link)

Cheap international travel and even cheaper digital connections (TV, internet) have made it possible for migrants to retain connections to distant places, creating in some persons **transnational** identities. Transnationalism may arise when an immigrant either chooses not to assimilate; and/or is discouraged from assimilating by the host group. It is interesting to observe the rooting interests of recent immigrant groups during the Olympics and/or the World Cup soccer tournament. These events provide a window into the processes affecting identity construction and maintenance. Though not always a reliable measure of national identity, most fully assimilated Americans who identify simply as "American" would have trouble cheering for any country other than the United States in a contest involving Americans.

## MEXICO -CANADA - UNITED STATES – FOOD AND ETHNICITY

There's a well-circulated speech by Mexican-American essayist Richard Rodriguez in which he compares the assimilation strategies pursued by the United States and its neighbors to the north and south. Rodriguez offers a compelling look into three competing strategies for understanding and managing ethnic differences in North America.

Rodriguez points out that Mexico has largely realized the American dream of becoming a true melting pot. Racial minorities in Mexico are not very visible. Several million indigenous people live in Mexico for sure; the Nahua, Mayans, and Zapotecs come to mind, and there is a small population of Afro-Mexicans as well, but their experience has been different from equivalent groups in the US. The main difference between the US and Mexico was that in Mexico there were far higher rates of intermarriage between Europeans (Spaniards), the native population, and Africans. The host culture of Mexico is thoroughly mixed. Rodriguez likened this mixing to the process of making a good burrito: a lot of ingredients rolled up into a single creation. In Mexico, the host culture would have trouble aggressively discriminating against any of its constituent elements. As a result, Mexican identity and culture are more cohesive, happier because it is more monolithic than the multi-ethnic US.

Rodriguez points out that Canada, a country known for its typically genial multi-national culture, has become a welcoming place for immigrants because Canadians celebrate diversity and respect the rights of all who come to Canada to maintain their identity. As a result, Canada has had little of the racialized strife marking US history. Of course, some French-speaking Canadians have argued for secession, but it was handled in an orderly, democratic fashion (and rejected twice). The Canadians have pursued a national assimilation strategy just the opposite of the one used in Mexico. As a result, the Canadian strategy has also perhaps undermined the growth of a solid, singular national identity in Canada. Short of perhaps a common love of hockey and beer, it's hard to think of what makes Canadians "Canadian". Rodriguez notes that you will never be asked to go out to a Canadian restaurant. The lack of a widely embraced Canadian cuisine, Rodriguez argues, is because Canada never experienced the robust cultural hybridization of the type one finds in the US and Mexico. Without cultural hybridization, novel, creative cultural practices are starved of one important evolutionary pathway.



Figure 9-14: Poutine is one of the few identifiable dishes to emerge from Canada, a sign that cultural hybridization is under developed in this multi-ethnic society. Source: Wikimedia.

See: The Invention of Hispanics and the Reinvention of America

The United States has pursued, to some degree, both the Mexican and the Canadian models described by Rodriguez above. Many of the nationalities that migrated to the US have assimilated in true melting pot fashion, but others have not for a variety of reasons. There is some pressure for immigrant groups to do so, to act "like Americans" or to adopt "American" ways, cultures, and traditions. On the other hand, Americans are regularly encouraged to respect the diversity of the many dozens of ethnicities that constitute the American "salad bowl". The result has been complicated. Neither Mexico, nor Canada has had the sort of ethnic tension, riots, and violence that the US has seen, but neither of America's neighbors has spawned the sort of cultural innovations the US has become well known for: rock n' roll, rap and jazz; airplanes, light bulbs and movie theaters; football, basketball, and skateboarding.




Figure 9-15: Los Angeles, CA - The Kogi Burrito mixes Korean and Mexican culinary practices. It is an outstanding example of the complexities associated with ethnic identity, cultural hybridization and how foodways mark ethnicity.

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# 9.8: Ethnic Regions

Waves of immigration to the United States produced a variety of ethnic patterns on the landscape. Some ethnicities are so numerous that they occupy vast swaths of the country known as ethnic regions. The regions are typically dominated by a single ethnicity, even though barriers to entry to any of these regions are never legal. The US constitution does a reasonably good job of protecting the rights of minorities of all stripes to move to whatever region of the country they chose. In earlier times and in many parts of the world, regional and ethnic differences can be explosively dangerous.

There are three main ethnic regions in the United States. Around a dozen smaller ethnic regions, sometimes referred to as ethnic islands, also can be found sometimes occupying areas as small as a single county. The largest ethnic region in the US is German-American. It is hard for most Americans to point out the characteristics of Germanic-America because so much of American culture has been derived from German-Americans. But there are clues. For example, people in Wisconsin may drink more beer, eat more knackwurst and sauerkraut, and celebrate Oktoberfest more heartily than people in Tennessee. Still, to the outsider, German-America is difficult to characterize as fundamentally distinct from the Mid-South which appears on the map below as "American-American".

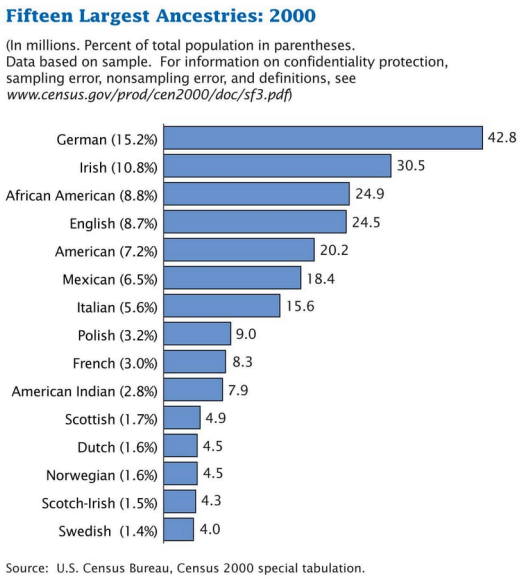



Figure 9-17: Infographic. Note the large percent of Americans that claim German and Irish heritage. There was a time in some parts of the US when a much lower percent claimed their Irish heritage. Most American families, if they have been in the US long have mixed ancestry. Source: Wikimedia

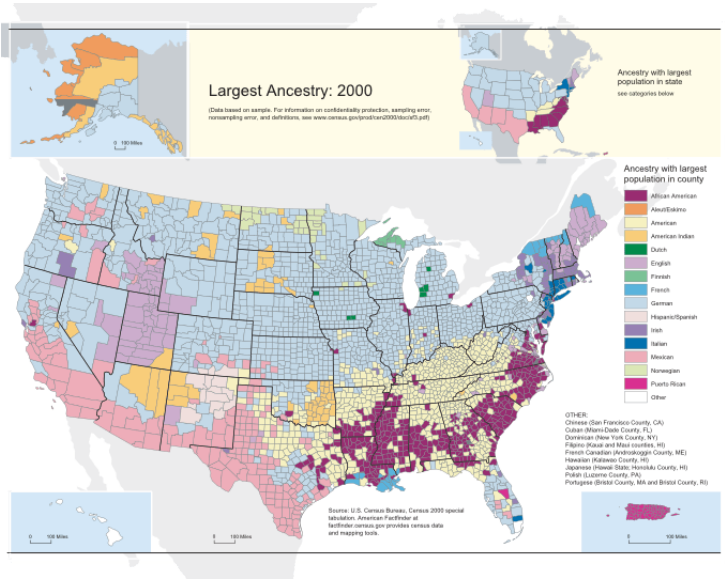



Figure 9-16: Map of US Ethnicity by County - This map shows the dominant "Ancestry" in each US county in 2000. Source: US Census Bureau / Wikimedia.

The other large ethnic regions in the US are the Mexican Borderlands and the so-called Black Belt in the Lowland South. These latter two regions are distinguished by cultural traditions that are more recognizably distinct from mainstream America. Foodways, musical traditions, holiday celebrations, and a host of other cultural practices mark these two regions as somewhat unique from the rest of the US. In the Southern Black Belt, you might eat a soul food supper with collard greens, black-eyed peas, and chitterlings (chitlins) with sweet potato pie at a Juneteenth celebration. In the Mexican Borderlands, you might eat gorditas, pozole, and tamales with churros for dessert at a Día de Muertos party. You might not as well. Those characterizations of the Black Belt and the Mexican Borderlands are stereotypical, but either scenario would seem exotic in much of Iowa. There are many small ethnic islands as well. They are too numerous for an introductory textbook, but at least a few deserve some attention in hopes that students will be interested in visiting or learning more. Italian-Americans are the dominant group in many areas in the Northeast. Irish-Americans live in many of the same locations as the Italian-Americans. Norwegian-Americans, as well as other descendants of Scandinavian ancestors, form many ethnic islands in Minnesota and the Dakotas. Cajuns, descendants of French-Canadians migrants dominate regions of swampy southern Louisiana. Spanish-Americans are numerous in much of northern New Mexico.

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# 9.9: Processes

The processes that create ethnic regions of all sizes are varied. Some are mundane or ordinary, others are disturbing. Ethnic bias and animus are obvious factors and are discussed at length below, but accident and environmental factors are also important. It's not unusual to hear a story about why some great-great-grandfather moved to a certain city turn out to be as simple as "my car (wagon) broke down here" or "I only had enough money to get this far". Chaos theory and a variety of stochastic processes help social scientists explain and/or predict several random social and cultural phenomena.




Figure 9-18: Glendale, CA. Armenians settled in specific suburbs of Los Angeles drawn by the availability of schools, churches and other amenities, such as this market. People feel at home in enclaves, but residence in them may delay entry into the American mainstream.

## Culture & Environment

Many locations that are attractive to immigrants are those that remind them of their homelands. It makes some sense that Scandinavians found Minnesota to their liking. The Spanish found a familiar Mediterranean climate in Southern California. Germans probably found the Midwest similar to the North European plain. When cultures are well suited to thrive in a new environment, the migrant population enjoys some measure of **cultural preadaptation**. For example, Dutch people from Holland, having generations of experience with draining the Zuiderzee via an elaborate system of drainage ditches, windmills and dikes found taming the marshy, tall-grass prairies scattered across the Midwest little trouble. Other European settlers considered the soggy wetlands of the Midwest worthless wastelands. On the flip side, English colonists who arrived in the Americas in the 1600s found themselves **culturally maladapted** to settlement in both the Massachusetts and Virginia colonies. This maladaptation occasionally resulted in catastrophic loss of life. English colonists who survived learned new strategies for agriculture and housing in the extreme climates of North America, where heavy forests and unfamiliar soil conditions posed considerable challenges for the English. Mormon migrants to the Great Basin in Utah likewise were forced to quickly adapt to different climate conditions from those they were accustomed back East. Surprisingly, the Cajuns managed to survive in the swamps of Louisiana at all after moving south from Canada.

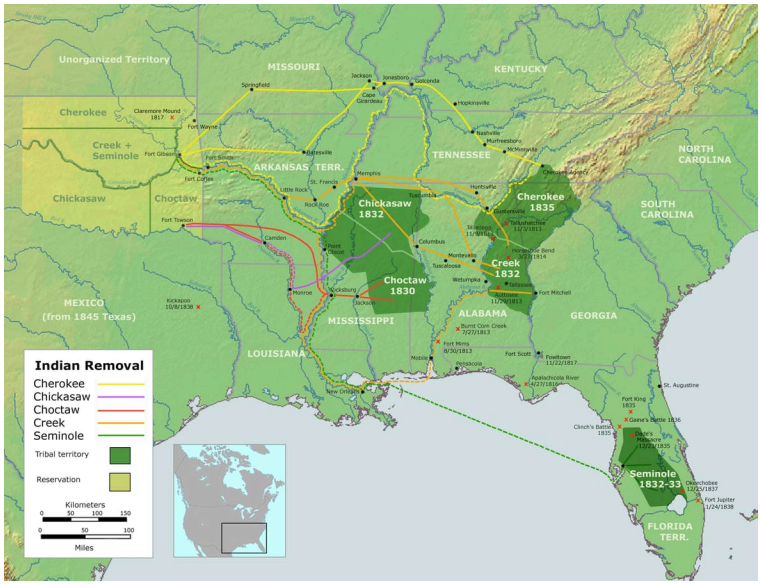
Once ethnic identities are established, they are subject to persistent changes or elimination. Geography may play a role in maintaining or preserving ethnic identity. Living in an inaccessible location often keeps outsiders from moving into an area. If a new group moves into a region, they can outnumber the original, or host group, and in the process erode or alter the identity of the host group. This process is known as the **changeover model**. Similarly, if large numbers of the host group move away from an ethnic region or homeland waves of outmigration may degrade the numbers needed to sustain the group's identity. This process is known as the **clearance model** of ethnic change. In the United States, for example, Cajuns and Creoles (French-speaking people of Louisiana) have managed to maintain their identity for hundreds of years, partly because they have occupied swampy parts of Louisiana where rail and highway infrastructure was late to arrive. Many have moved away in recent decades seeking jobs away from South Louisiana. At the same time, others have moved into South Louisiana threatening the survival of the Cajun and

Creole identity.

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# 9.10: Enforced Ethnic Regions

Some ethnic regions evolved on their own, but others created to purposefully isolate minority groups. For generations, North American Indians were forcibly removed from their lands and restricted to smaller parcels of land known as reservations. Sometimes, reservations were near or on the ancestral lands occupied by the tribe or nation of Indians. Occasionally, however, Indians were relocated to reservations many hundreds of miles from their homelands. The infamous Trail of Tears was a product of the Indian Removal Act of 1830, which led to the relocation of some 46,000 American Indians to Oklahoma from various tribal homelands in the American Southeast. Oklahoma's grasslands climate and environment made survival difficult for Indians from the humid, forested regions of the upland South and Central Florida.




9-19: Trail of Tears Map. How different or similar are the topography, climate, flora and fauna of Oklahoma to the homeland areas from which Indians were removed? Source:

Wikimedia

## Ghettoization

**Ethnic ghettoization** is a more organized effort by multiple parties to enforce the maintenance of established ethnic identities and structures of power that benefit one group over others. Historically, the term ghetto has been used to identify areas of a city where specific minority groups were forced to live. In recent years, the term has been largely used by Americans in reference only to poor African-American neighborhoods. It is important to recognize that ghettos have a very long history, can be found in almost every country on earth, and any minority group may be ghettoized. Certainly, the Chinatown districts in many US cities qualified as ghettos during much of the 19$^{th}$ and 20$^{th}$ centuries, before legal changes made housing discrimination unlawful. The Nazis confined Jewish people to ghettos during their reign of terror across Europe. Today, the less value-laden term, **ethnic enclave** is used by social scientists to describe neighborhoods dominated by a single ethnicity. Some more well-off ethnic enclaves are called ethno-burbs. The large concentration of Asians in Los Angeles' San Gabriel Valley is a good example of an ethno-burb.



9-20: Altgeld Gardens: Chicago, IL. This public housing project built after World War II to house black veterans after the war was built on an abandonned landfill. It remains a black neighborhood and numerous toxic hazards remain in the vicinity. Source: Wikimedia

It is reasonably easy to understand why a group of people invested in racist/bigoted ideologies and/or sheer ignorance would seek to isolate people who are different from themselves. Keeping groups geographically separate makes it easier for groups in power to maintain the status quo. Residential integration of various ethnic groups invites children from different groups to become friends, maybe fall in love, make babies or just learn from one another. Perhaps the most important thing ghettoization discourages is marriages between people of different ethnicities or races. Bigots fear any dilution of the "purity" of identity, whatever that identity is based upon (race, religion, nationality, language, etc.), and residential proximity threatens that. More importantly, allowing people from different groups to live together makes it difficult for people from a dominant group to exercise and maintain political and economic power over the subjugated group(s). Isolating subjugated groups is the best way to perpetuate the ignorance that is the ultimate source of racial and ethnic prejudices.

## Restrictive Covenants

Following the Civil War, a wide variety of strategies were developed to limit the geographic distribution of African Americans in the United States. Early on, very simple legal measures were enacted that restricted African Americans to certain locations, especially in the Jim Crow South. Such laws were declared unconstitutional by the US Supreme Court in 1917 (Buchanan v Warley). As a result, more sophisticated **segregation** methods quickly emerged. Restrictive or exclusionary covenants were written into the deeds of sale for many homes sold during the next 50 years. Deed restrictions typically prohibited owners from doing mundane things like building garages, fences, or porches, but they sometimes also forbade the sale of the house to specific ethnicities. Black people were frequently the target of these discriminatory deeds, but Jews, Catholics, Chinese, and other ethnic groups also found themselves the target of restrictive covenants. It was once illegal to sell or rent property to Jewish people in Beverly Hills.

After 1948, when the U.S. Supreme Court found restrictive covenants also unconstitutional. Another round of tactics designed to maintain housing segregation emerged. Realtors, fearing a loss of profits through the degradation of home values in integrated neighborhoods, would simply refuse to sell houses in white neighborhoods to people from ethnic minority groups. Other practices made it harder or more expensive for specific ethnicities to buy or rent in white neighborhoods. Banks and other lenders also practiced **mortgage discrimination**, which effectively kept ethnic homebuyers out of selected neighborhoods by denying loans or making them irrationally expensive. There is evidence that this last practice continues today, albeit more clandestinely.

## Blockbusting and White Flight

One of the most controversial practices, known as **blockbusting** was used to some effect, especially in cities in the Industrial Midwest. Realtors engaged in blockbusting would convince white homeowners in a majority white neighborhood that the arrival of a black family into the neighborhood had eroded the value of all the houses in the neighborhood. If the realtor could convince the white owners of this argument, the realtor would buy the property at below actual market value from the white home owner

, and often seek to sell it to a prospective black homeowner at above market value. Real estate speculators, land developers, and lenders all made substantial profits from the scam. White and black homeowners alike lost money. The Fair Housing Act of 1968 outlawed blockbusting, but only after most of the damage was done. Blockbusting no doubt accelerated the most common, legal, process of ethnic segregation, known as **white flight**, in which white people moved from heterogeneous inner-city locations to homogenous, largely white suburbs and exurbs. Court-ordered desegregation busing of students during the 1970s may have accelerated white flight and invited even greater residential segregation in many U.S. Cities.




9-22: This sign was erected in 1942 near a proposed housing project in Detroit.
Rioting followed
. Note the use of the American flag, during World War II. Eventually the National Guard arrived to protect the black residents. Source:
Wikimedia
.

## Steering

More benign, perhaps even subconscious, actions also create and maintain ethnic neighborhoods. One realtor behavior called steering may be still widespread today. Steering happens when a realtor, trying to sell a prospective buyer a house, focuses the buyer's attention on houses in neighborhoods predominated by persons of the prospective buyer's ethnicity. Whether this is always a purposeful, discriminatory act, or simply a logic geared to help find people homes in neighborhoods where they "feel at home" is less clear.

## Public Housing

Even some of the actions taken by national and local governments seem to have contributed to the ghettoization of minority groups. There is some debate about the intentionality of the government and the overall long-term effects of American public housing policy, but it does seem clear that public housing projects designed to offer affordable housing to inner-city residents did, at the very least, contribute to the maintenance of ethnically segregated neighborhoods in many cities where "projects" were built. Public housing projects were by the 1970s emblematic of the ghettoization of African-Americans in the United States. Other government policies, including the Interstate Highway Act, redlining and Federal Housing Authority polices are discussed later.

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# 9.11: Black Ghetto Typology

Because ghettos develop in different places and at different times, they are not all the same. Geographers Larry Ford and Ernst Griffin developed a typology of black ghettos in the United States based on their morphological evolution. By mapping the patterns of black ghettoization, one can gain valuable insight into the different methods of discrimination in the United States, and the peculiar differences in black-white relations across the US.

## Early Southern

Before the Civil War, most African Americans lived in the Lowland South. Most were slaves. Most enslaved blacks lived on farms, but a substantial number of slaves lived in cities, like Charleston, New Orleans, and Atlanta. Urban slaves living in the South during this period were largely domestic servants and because most were enslaved, they were required to live with the white slaveholders. Enslaved blacks and the "Free People of Color" were typically quartered on the property of white employers/slavers, generally in a small house, or stable facility at the rear of the main house, along the alley, or as they say down South, "in the lanes."

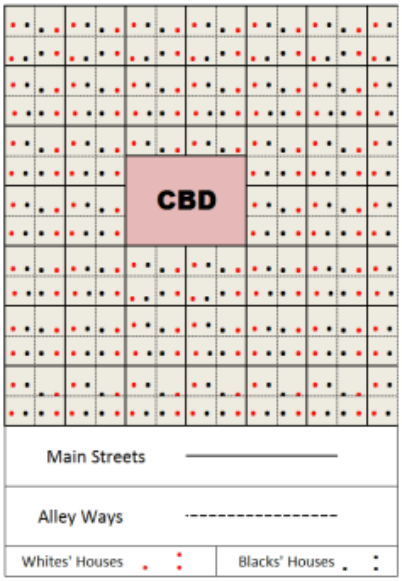



Figure 9-23: Early Southern Ghetto. Black people lived on the same property as whites, often in small houses along alleyways before the Civil War.

The close physical proximity combined with the exceptional differences in economic and social status produced a peculiar type of ghetto where blacks and whites lived together, but very much apart at the same time. Intense day-to-day sharing of space inevitably leads to cultural exchange and even fondness, but in a system that demanded at least the appearance of separation, and maintained the potential for horrific consequences for the enslaved.

## Classic Southern

During the Civil War, slavery was abolished, but most freed black slaves continued to live on farms or plantations for years afterward, often a share-croppers. As the industrial revolution unfolded in the late 1800s, blacks (and poor whites) moved in ever-increasing numbers to cities in both the North and the South. In southern cities, where blacks were sometimes in the majority, Jim Crow segregation laws forced black people to live in specific areas of the city, thus creating the second type of American black ghetto known as the Classic Southern ghetto. In the Lowland South, where black people often outnumbered whites, as much as half a city or town was set aside for African-Americans. Often, the dividing line between Whites and Blacks was a rail line giving rise to the expression "other side of the tracks". Many cities around the South fit this model still today.

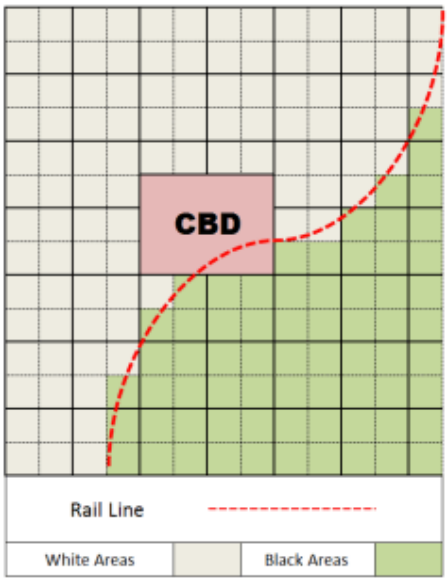



Figure 9-24: Classic Southern Ghetto. Black folks following the Civil War were required to live on "the other side of the tracks".

## Early Northern, Classic Northern

Outside of the slaveholding regions of the South, the pattern of black ghettoization evolved quite differently. In the 19th Century, African-Americans were often a very small minority in northern cities. Like others, they competed for precious housing space near downtown with other minority populations, most of whom were recent immigrants to America. In the figure below, you can see African-Americans, along with Anglo-Americans and two other minority groups represented by the blue and peach colors (Irish and Greeks?). This pattern represents the Early Northern ghetto. Over the years, European immigrants, less restricted by law and custom from moving to newly built neighborhoods, moved from inner-city regions of northern cities. African-Americans, restricted from moving out of the inner city more than other groups eventually came to dominate the entire inner-city, especially when migration from the Lowland South accelerated during the late 19th and early 20th century. By the 1980s, African Americans were outsized majorities in the inner cities of many places in the Industrial Midwest and Northeast. The intensity of black ghettoization is extreme in cities with Classic Northern style ghettos. Cities like Cleveland, Detroit, Chicago, and Milwaukee have much higher segregation index scores than counterparts in the west or the southern United States.




Figure 9-25: Chicago, IL. Vast crowds, dressed in green, line streets for the Saint Patrick's Day parade, a jubilant celebration of an Irish heritage that was once ghettoized in the United States, in places like Chicago.



9-26: Housing Projects in St. Louis (left) and Chicago's Robert Taylor Homes in the mid-1990s. These well-intentioned public housing efforts concentrated poor blacks into small areas of the inner city, reinforcing the “Classic Northern” style ghetto. Crime and other social dysfunction afflicted these projects and their host neighborhoods. Large-scale housing projects are far less common today, and the racial segregation created by these projects has diminished since the 1990s.

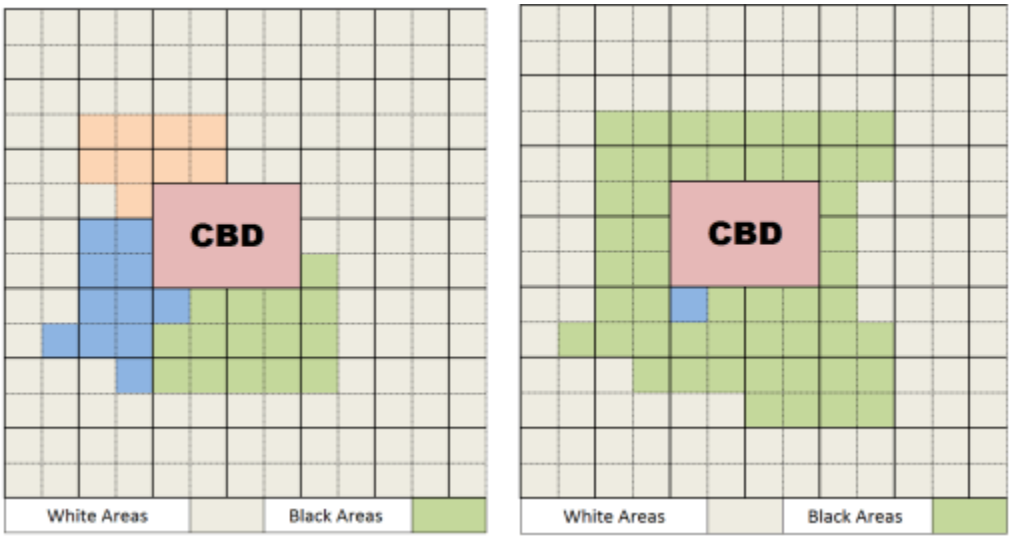



Figure 9-27: Early Northern (left) and Classic Northern (right) Black Ghettos. Typical of the pattern of black ghettoization in cities in the Industrial Midwest and Northeast, blacks occupy an ever-increasing portion of the inner city. Note that other minority groups occupy parts of the inner city in the Early Northern model and far less in the Classic Northern model.

## New City

In the western United States and parts of the Sunbelt, a different type of black ghetto evolved during the age of the automobile. The morphology of these black ghetto reflects the importance of the highway and interstate system that evolved with the car and the city itself. These new cities grew rapidly after 1920 but had intense growth during and immediately following World War II. Los Angeles is a classic example. Good jobs in defense industries attracted large numbers of African Americans from the South, Midwest, and East during the war and black neighborhoods grew rapidly along major highway corridors.

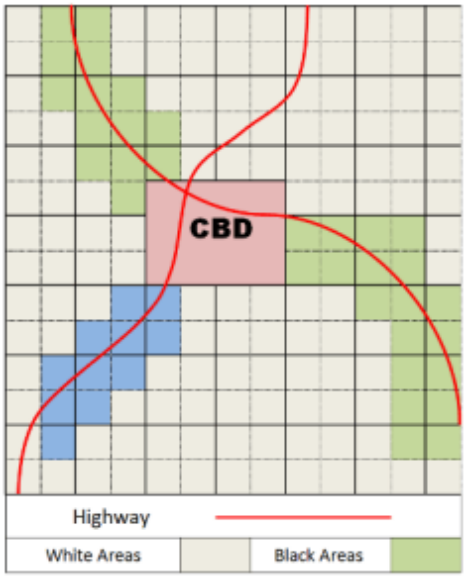



Figure 9-28: New City Black Ghetto: In this model ethnic ghettos evolve along corridors established by major streets or highways. The blue areas may represent a Mexican-American neighborhood.

In cities new cities like Los Angeles, Dallas, and Phoenix that built without efficient public transportation systems, dense inner-city cores never developed. Therefore, most families bought single-family homes. Multi-family apartment complexes that attracted in-migrants of all ethnicities were built near highways, where accessibility was greatest. As a result, ghettos in automobile friendly locations are known as New City Ghettos. These ghettos tend to be linear, stretching along a highway outward from downtown. In some cities,several distinct “black corridors” developed. In some cities, Latin American and Asian groups are large enough to create additional linear “ghettos” also along important highway corridors extending outward from the central business district (CBD).

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# 9.12: Environmental Racism

In addition to keeping specific groups of people residentially separated, ghettos seem to serve a variety of other unpleasant functions as well. Ghettos have been used for many years as dumping grounds for a variety of social ills and civic **disamenities**. For example, Chinatown regions across the West Coast hosted brothels, opium dens, and gambling houses – not because the Chinese embraced those activities any more than any other ethnic group, but because city leaders permitted/encouraged those activities, as long as they were in Chinatown. Rather than engendering pity for the Chinese that were left without protection from the law, the lack of police enforcement in these regions of the city reinforced negative stereotypes about Chinese people.

Ghettos are also frequently subject to industrial disamenities; health hazards not found elsewhere in the urban environment. Air, water, and ground pollutants are frequently worst in poor, minority neighborhoods leading to the evolution of what some call environmental racism. Historically, laundry activities were considered a nuisance – soap making was hot, dirty, and often foul-smelling, so "washhouses" were often confined to Chinese ghettos – giving rise to the institution of the Chinese Laundry. Many similar conditions exist today. Black and brown people in many cities suffer from higher rates of environmental health issues like asthma and obesity than non-Hispanic whites. These statistics may be caused partly by ethnic cultural practices and poverty, but it is also clear that poor minority people are least able to move away from polluted neighborhoods, most of which were established long before the Civil Rights era. Minority groups also have more trouble defending their right to a healthy neighborhood via political processes.

In addition to the obvious toxic pollutants, other environmental hazards in the form of things like payday lenders, fast food restaurants, loud traffic, and even poor disaster planning may undermine the ability of residents living in minority neighborhoods to live as long and as well as fellow citizens across town. For example, during Hurricane Katrina (2005), black residents of New Orleans were neglected by the city's hurricane evacuation plan because the plan was designed to cater to people who owned automobiles. A significant percentage (100,000 people) of the city's black population relied on public transport and were therefore not part of the city's hurricane evacuation plan.

## Positives

While many of the effects of ghettoization undermine the quality of life of minority groups, it must be noted that there are positive outcomes from ghettoization as well. This is not to justify the official and unofficial discriminatory practices (see the section below), but to argue instead that the spatial concentration of minorities creates situations that affected groups have leveraged to their advantage.

First, diversity is preserved via ghettoization, just as those who engineered these elements of cities hoped. By undermining the prospects of intermarriage and assimilation, excluded groups remain somewhat distinct from the host culture. If every minority group melted perfectly into the host culture, then everyone would be robbed of many of the magnificent cultural aspects of a diverse society. Large cities are exciting and enriching precisely because they have diversity. Certainly, lots of people enjoy the wide variety of ethnic foods in cities where ethnic identities remain strong, but there's far more at risk should the distinctiveness of ethnic populations erode. Minority religious traditions, languages, philosophies, arts, and economic practices would all suffer if complete assimilation were to occur.

Other benefits may accrue to ethnic groups who remain near each other. Mutual support, in a variety of forms (economic, political, recreational, etc.) is easier when members of an ethnic cluster together. A reduction in some types of conflict may occur if people of like values and traditions are neighbors. Opinions regarding how late a party should go, or what a proper lawn should look like may vary less in neighborhoods where residents come from a common background. Recent immigrants, even those seeking to shed their ethnic heritage, often find ethnic enclaves easier places to begin the acculturation and assimilation process than a neighborhood dominated by the host culture group.

Ethnic minorities seeking to preserve their traditions and identities also stand a greater chance of exercising political power if they live together; concentrating voting power in specific areas. Many voting districts are gerrymandered to help promote (or deny) the interests of specific ethnicities. Even simple pleasures, like finding someone who also likes to play games, like dominoes or cricket; or finding a bakery that makes an ethnic-specialty food (e.g., pan de muerto, king cakes, laffa bread or knishes) is easier when people who share an ethnic identity clusterin space.

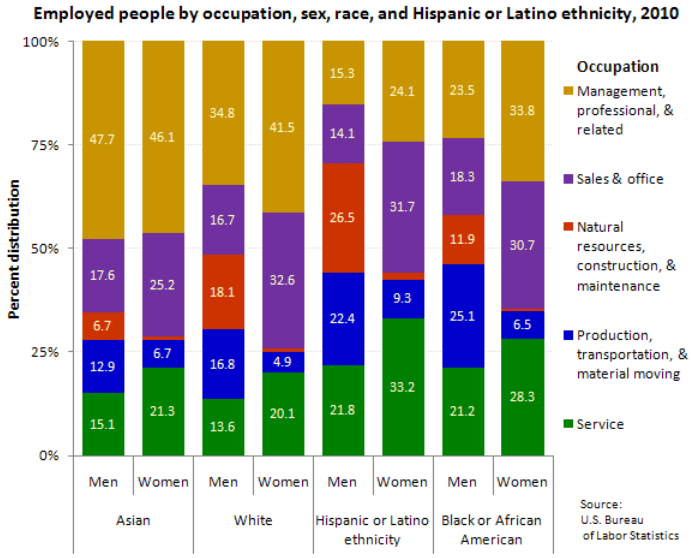



Figure 9-29: Los Angeles, CA - Immigrant Thais have creatively adapted this hot dog stand. The mish-mash of American and Thai influences points to the competing forces that challenge the immigrant assimilation process.

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# 9.13: Ethnicity and the Economy

Your ethnicity may also guide (not determine!) how you navigate many life choices and obstacles. Students on multi-ethnic campuses see this process unfolding across the university campus. Certain ethnicities are easier to find in engineering and business buildings. Some ethnicities are particularly rare in majors like Anthropology or Agriculture. Gender biases compound these tendencies further. Students chose majors in part because of the values placed on certain career paths by their family and/or community. These biases play out in many areas in the economy.




9-30: A graphic from the Bureau of Labor Statistics. Note the significant differences in occupation by gender and ethnicity. Source:

Bureau Labor Statistics

Differences in the choice of major or career are partially a result of variations in values among various ethnic groups. Some groups seem to value high-paying careers. Other groups seem to value prestigious occupations. Still others value occupations that have intrinsic rewards or those with specific fringe benefits, like ample vacation time, or good health care packages. Some folks just hate to have a boss, and so chose to be self-employed. In the US, About 13% of white males are self-employed. Black males are about half as likely to be self-employed. Men from Israel or Korea are mostly like to be self-employed at around 30% of the time. Immigrants come to America sometimes pre-equipped with specific skills – especially if they are coming from a distant land. Because it can be expensive to get into the US, groups including Koreans and Israelis often have some business experience before arriving in the US. Other migrant groups, especially those from nearby countries like Mexico or Honduras, generally have a shorter, less costly journey to America, allowing them to arrive in the US with fewer skills. Again, location factors into a robust understanding of why things are the way they are.

Other elements of occupational choice are a bit more mundane. You may get a job in a field because some relatives helped you get started. Particularly in big cities, where robust ethnic employment niches develop, you'll find specific job categories or businesses dominated by a single ethnicity. A great example is the motel or hospitality industry where South Asian-Americans operate about half of all US motels. Interestingly, most of these South Asians are Gujaratis, a linguistic ethnic group spread across the India-Pakistan border. So strong are family connections in this process that a single name dominates this area of the hospitality industry, lending itself to the catchphrase used to describe these lodgings: "Patel Motels." It appears that a single Gujarati man, who opened a sort of youth hostel in the US during the 1940s, may have started a snowballing process. He was able to demonstrate that a farmer from India could succeed in this industry, inspiring others from the same region. Many of the others that tried, and succeeded in running a motel, invited friends and relatives to work for them; and naturally, after a few years, those employees ventured out and started running a motel for themselves. The hospitality industry has built-in advantages for impoverished immigrants seeking a better life for their family, including built-in and housing, and an opportunity for women to stay-at-home with children.




Figure 9-31: Prague, Czech Republic. In Europe, many Asian immigrants are self-employed as they are in the US. Migrants from more distant regions tend to bring more skills than migrants from neighboring countries.

Other sectors of the economy may have a less random origin. For example, Korean-Americans own almost all stores that sell hair-care products designed for the African-American market. It is a somewhat bizarre reality, but it can be traced to a few international trade policies adopted by the US and South Korea decades ago that made Korean wig manufacturers and distributors more competitive than those from other countries. Korean-Americans came to dominate the industry, and the web of familial and linguistic ties (and barriers) has made it difficult for non-Koreans (including African-Americans) to break into a business that largely caters to African-Americans.

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# 9.14: Ethnic Landscapes

Ethnicity is heavily inscribed onto the landscape. Ethnic enclaves or ghettos are excellent places to practice reading the cultural landscape. African-American, Latino, Armenian, Chinese, Irish, Greek, and Polish neighborhoods each feature unique elements. Because housing in ethnic neighborhoods was most often not built by minority residents themselves, but rather by Anglo-Europeans, and later inhabited by another group, urban architecture rarely offers few clues to the cultural values, beliefs, or histories of the ethnic minorities. So, geographers focus their attention on other landscape elements in ethnic neighborhoods, including the distinct businesses, the variations in the use of public space, public art, and graffiti, as well as yard ornamentation and statuary to extract insight from the built environment. Next time you find yourself in a neighborhood dominated by an ethnicity different than your own, look for visual clues on the landscape that characterize the neighborhood as distinct. What elements of the landscape are common to all neighborhoods? Consider how income factors into the "look" of an ethnic neighborhood? What differences can be found in the landscapes where middle-class Whites, Blacks, Asians, or Latinos live?




Figure 9-32: Columbus, OH - Restaurants, pubs, churches and other institutions sometime linger on long after the initial immigrant group has moved away. This old German restaurant indicates a legacy ethnic enclave.

## Ethnicity Based Tourist Landscapes

The landscape also can be misleading as well, bolstering stereotypes and eroding a healthy understanding of ethnic differences via a process called othering. Touristic landscapes are a prime source of simplified ideas about some ethnic minorities because they tend to exaggerate aspects of ethnic-themed destinations.




Figure 9-33: Chinatown, Los Angeles, CA. Buildings with Chinese architectural motifs mark this area as a tourist zone because they evoke the exotic. Asian neighborhoods in the suburbs do not use these designs.

Ethnic enclaves often try to attract visitors by theming their location as a tourist destination. Many cities' Chinatowns have done so successfully, turning run-down ghettos into fun, profitable, and visually interesting tourist traps. One of the key strategies used by almost all designers in Chinatowns is to create landscapes with many exaggerated architectural motifs that conform to touristic expectations about what Chinatown should look like, even if one would be challenged to find actual examples of such architecture in China itself. Chinese-Americans have every right to cash in on the erroneous beliefs held by tourists, but it can also be argued that places like Chinatown reinforce stereotypes about Chinese people. On the other hand, if such destinations did not build upon the stereotypes held in the imaginations of tourists, then tourists might not visit at all, perhaps foregoing any opportunity for them to learn any at all about Chinese culture.

Tourist attractions, playing upon both the real and the imagined ethnic histories of many dozens of locations across the US, attract millions of tourists. Some claims to authenticity are dubious at best. The towns of Kingsburg (Swedish) and Solvang (Danish) in California both attempt to leverage muddled Scandinavian imagery to attract visitors. For example, both make ample use of windmills on the landscape, partly because few Americans are aware that the Dutch (Netherlands) are the ones who are famous for windmills (not the Danes or the Swedes). Still, visitors crowd the streets, particularly of Solvang, happy to be strolling along, buying sweets and trinkets in a miniature, but vaguely Danish-Dutch-Germanic European fantasyland.




Figure 9-34: Santa Nella, CA - This restaurant uses a Dutch-style windmill to attract tourists. The windmill is an icon that evokes Europe, excitement expectations about the food and atmosphere inside.

# American Indians

Perhaps the most unfortunate representations of ethnicity in the US involve American Indians. Business people use American Indian imagery to sell everything from trinkets at roadside stands to motel rooms to slot machines. Surely no other ethnic group is so consistently utilized as a tool for commerce. The commodification of “Indian”, in the generic, may help explain why Indians remain the only ethnic group so consistently misused as mascots for sporting teams (see below).




Figure 9-35: Indio, CA. The Riverside, California fairgrounds, like many other landscapes in this desert community adopted an exotic Arabian motif to attract visitors in the post war era. Since the 1970s, the imagery has lost some appeal, but remains. Note the small irony of the sponsor.

Part of the reason Indian imagery is so compelling is that it is hopelessly tied to our collective fantasies about the frontier era in the American West. Most people have little idea of the staggering diversity of languages and cultural practices among the hundreds of Indian nations, tribes, and bands that continue to exist in the United States. Instead, most Americans, at least casually, think of Indians as a monolithic ethnicity; noble warriors, silent, primitive and respectful of nature; but mostly extinct. Americans have learned little of substance about American Indians because we instead rely upon the misinformation and stereotypes about Indians perpetuated by the movie industry. Hollywood chose a few tribal practices, common only among Plains Indian cultures, modified them, and muted any other representations.

For example, tipis (or tee-pees) a tent-house once widely used by nomadic tribes on the Great Plains of North America, including the Lakota, Sioux, and Blackfoot, are the only Indian housing form regularly used in Hollywood movies. As a result, tipis dot the landscape at tourist destinations from California to Maine to Florida, though there is ample evidence that tipis were little used outside the Great Plains region. Indian headdresses, beaded moccasins, tomahawks, bows and arrows, horseback riding, and other symbols associated with the Hollywood stereotype of Indians dominate references to American Indians on the tourist landscape of America in happy or willful ignorance of the myriad traditions and symbols of actual Indians cultures across North America. Perhaps the only exception to this rule is in parts of New Mexico and Arizona, where Navajo and Hopi people are numerous enough to provide an effective counter-narrative to the stereotypes commonly advanced elsewhere.

# Washington R*dskins

One of the most controversial uses of Indian imagery is for sports mascots. Most teams eliminated Indian mascots decades ago (Stanford, Syracuse, etc.) but a few teams (Florida State, Cleveland Indians, Chicago Blackhawks, etc.) cling to controversial mascots. None are more controversial than the NFL franchise in Washington D.C. that uses an offensive racial epithet for the team name.




Figure 9-37: The federal capitol building, source of many racist policies, serves as a background for a racist mascot.

Geographers would point to the role of space and place in creating and maintaining these racist structures. First, spatial thinkers would point out that American Indians were ghettoized in mass reservations which prohibited other Americans from coming to know Indians and Indian culture in any meaningful manner. The spatial isolation of Indians has not only helped impoverish American Indians but prevented the rest of America from the kind of direct interpersonal contact that might undo the lasting effects of Hollywood stereotyping. No other ethnic group could be so consistently stereotyped and used for commercial purposes without a significant cultural backlash from within and beyond that ethnicity. Geographers would also argue that because the federal government in Washington D.C. has been the primary source of racist policies (though it's ultimately the American population at large), having an Indian mascot for a team from Washington DC is especially irritating to Indians. The fact that many other victims of structural racism, like African-Americans, play and/or root for the team from Washington DC, and perhaps even defend the use of the mascot or epithet, indicates the deep power of structural racism upon everyone.




9-38: Touristy tipis. Clockwise from upper left - Upstate New York,
San Bernardino, California
; Moab, Utah and Holbrook,

Arizona. None of these locations were likely to have had Indians that used this sort of housing. Why are people drawn to this

imagery? How do they help maintain simplistic, erroneous, stereotypes about Native Americans?

## TERMINOLOGY

What to call Indians is another source of controversy that is instructive on several levels. The ability to name or label anything is an important indicator of the locus of power, a term that points to “where” power is held – a spatial concept. The most popular theory regarding the word Indian suggests that it was Christopher Columbus who mistakenly believed that he had landed in South Asia, rather than the Caribbean in 1492. Columbus assumed, incorrectly, that the people of the Caribbean were therefore from the country of India. The exonym stuck even though the indigenous people of the Americas were not from India.

During the Civil Rights era in the 1960s, American Indians, like other minority groups did a good deal of agitating in favor of

policy changes. In response, the United States government adopted the term " ", because somebody considered it less offensive, or more accurate than "Indian". However, since the expression "Native American" was imposed upon American Indians by the US Government, many Indians rejected the term as just another symbol of abusive government power, preferring instead of the age-old term "Indian", or "American Indian." This text regularly uses "American Indian" in deference to what the author perceives to be the preference of the people to whom it refers. Other terms are occasionally used as well. "First Peoples", "First Nations" and "First Americans" are terms that include peoples from Canada and Alaska as well. "Indigenous Americans", "Amerind" and a handful of other terms have been forwarded as well to include a greater geographic range of persons from both continents and adjacent islands. Ideally, we should use specific endonyms referencing specific national identities, like "Cherokee", "Ute" or "Chumash" where possible.

Similar care should be used when referring to Asians. Most people today recognize that the term "Oriental" refers to things like rugs and food, rather than people from East Asia. When possible, we should try to identify specific ethnicities (Chinese, Japanese, Korean, Bengali, Tajik) rather than lumping diverse groups into a single blanket term. To do so is to demonstrate respect for people's chosen identity After all, that simple courtesy is generally extended to citizens of the United States. All people of the western hemisphere (Canadians, Mexicans, Brazilians, Cubans) could be called, "Americans", but they are generally not referred to with that overly broad term – but instead are given the courtesy of country-specific identity by people from Asia, Europe, and Africa.




9-39: Three Rivers, CA. This sign welcomes visitors to a national park. Is this an appropriate representation of American Indians? Why would this imagery be linked to a park known for large trees? Would the imagery of any other ethnic group be used in such a manner?

## LINK LOCKER

- James Allen and Eugene Turner's website featuring outstanding maps and data regarding ethnicity, especially in Los Angeles and Southern California: http://www.csun.edu/~hfgeg005/eturner/books.html
- Washington Post, America is more diverse than ever — but still segregated: https://www.washingtonpost.com/graph...tion-us-cities (excellent interactive mapping tool)
- 'Normal America' Is Not A Small Town Of White People | FiveThirtyEight
- 160 years of US immigration trends, mapped - Vox
- From Ireland to Germany to Italy to Mexico: How America's Source of Immigrants Has Changed in the States, 1850 – 2013 | Pew Research Center
- Two Centuries of US Immigration Visualized
- So What Exactly Is 'Blood Quantum'? : Code Switch : NPR
- Segregation map: America's cities 50 years after the Fair Housing Act of 1968 - Washington Post
- How Cambodians became the kings of beloved South L.A. fried chicken chain - Los Angeles Times
- Flower Mound, TX | McMansion Hell
- Studies Find Redlining Linked To More Heat, Fewer Trees In Cities Nationwide : NPR

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# 10: GENDER AND SEXUAL IDENTITY

**Our gender is one of the most important components of our identity, yet most people understand little of the mechanisms responsible for the creation and maintenance of the categories we use to identify ourselves by gender. The gender categories we use are heavily laden with expectations and conditions that deeply affect the lives of us all. Where you live affects how others see you, how they label you, and how you understand yourself. Where you can go and what you can do is also the product of place-based gender roles. Geography matters from the day you are born.**

Are you a boy or a girl? It seems a simple enough question, and for most people it is. For millions of people though, this question is not simple at all. There are dozens of chromosomal combinations, body types, and psychological orientations that fall outside of the traditional male-female binary widely used by governments, many religions, businesses, and most Americans. Still, thousands of **intersex** babies are born every day whose bodies make it difficult for doctors to put them easily into one of the two traditional categories: male or female. In the United States, doctors and parents generally assign a gender to such babies, often when the person is an infant. Traditionally, Americans have insisted that everyone "must be either a boy or a girl", because only two gender categories are widely available in American culture. A person cannot be both. "Neither" was also unacceptable as a gender identity. Western cultures rarely recognize even a **third gender**, though there may be many physiological or psychological conditions that invite non-binary gender identities.

Keep in mind that gender categories, like race and ethnicity, are social constructions, and like most social constructions, they vary across time and through space. In other parts of the world, people who do not fit neatly into the gender binary used in the United States may have several additional gender categories available for them to select. People in these other categories are hard to describe using the English language because English has no terminology sufficient to the task. Native Hawaiians celebrated and respected the Māhū, third gender persons prior to colonization by Americans. Kathoey (Thai), Travesti (Brazilian Portuguese), Femminello (Italian), and Hijra (Hindi/Urdu/Bengali) are terms other languages use to express a range of gender identities that fall either between or outside, the man-woman binary known to English speakers. Alternative genders may be celebrated or condemned in other cultures. In Las Salinas, Dominican Republic, there's a town where intersex children are common. They are called "Guevedoces" because their gender identity is often not evident until they are about 12 years old. In the US, those who do not fall into traditional categories are often subject to mistreatment and perhaps suffer from physical and/or emotional abuse. However, the plight of transgender people in the United States does appear to be improving, especially in certain parts of the country.

In recent years, there has been a growing recognition here in the United States that gender is more complex than our traditional binary conceptualization. Our growing consciousness of gender complexity has led to the adoption of the word transgender to help us to begin to conceive of a third gender category. In this context, it is interesting to note that elected officials, courts, and voters continue to argue, often in heated terms, about the legitimacy or desirability of permitting only marriages between a man and woman without pausing to even consider what the words "man" and "woman" really mean. The disconnect between the lived reality of millions of transgendered people and our vocabulary points to the profound influence our language has upon our ability to solve problems. Sometimes, the problems created by our culture's resistance to recognizing more than two gender identities aren't as profound or theoretical. Often, these questions are as mundane as, "which restroom should I use?"

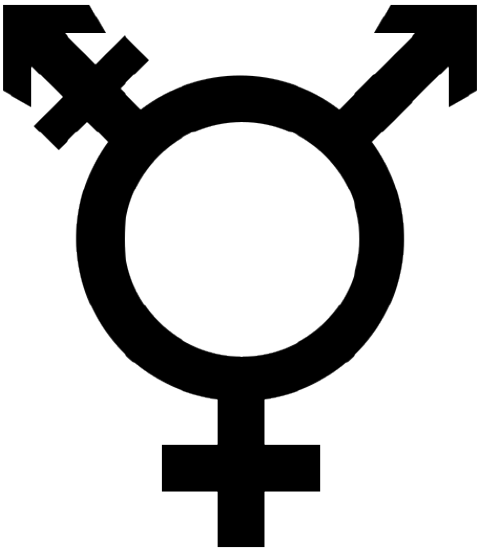


Figure 10-1: Symbol: Transgender. Source: Wikimedia.

## Sports and Gender

Organizers of sporting events have struggled to address the disconnect between cultural concepts surrounding gender and the biological realities of gender. This happens in many sports at many levels, but perhaps nowhere are the challenges more evident than in Olympic sports, where female athletes have for many years subject to gender verification to ensure they were true "women". In the past, the "test" for inclusion in a women's events was a simple, but probably humiliating, visual inspection of the athlete's genitalia. Sometimes, this visual inspection was inconclusive. So, a variety of blood tests have evolved to determine whether an athlete falls within some boundary of hormonal "normalcy" for women. It hasn't been easy. The International Olympic Committee, FIFA and other sports governing bodies have struggled to find a way to allow everyone to compete against people who share similar hormonal and chromosomal profiles. During the 2016 Summer Olympics in Rio, 800-meter gold medalist Caster Seymena was at the center of a controversy regarding her inclusion in the women's division of the sport because hormonal tests had shown her to have exceptionally high, but natural, levels of testosterone. It is worth asking why if the International Olympic Committee with all their resources can't conclusively determine who is a man and who is a woman based on biology alone, how can we expect ordinary people to make those determinations? It's is also well worth noting that the psychological factors associated with gender are no less complex than the biology of gender and that the gender identities each of us have is a result of complex and ever-changing interactions between our biological and psychological states.

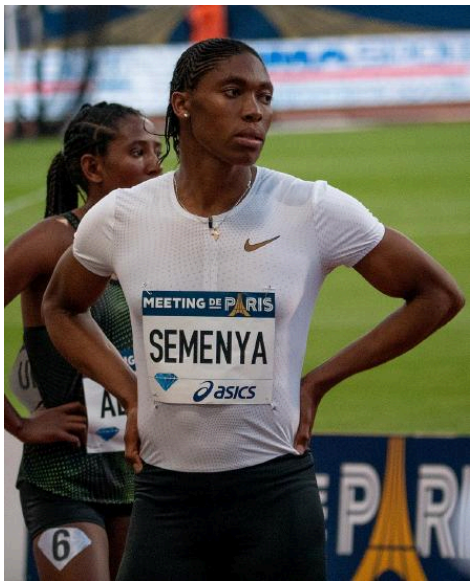



Figure 10-2: Paris, France. Female track athlete Caster Semenya whose elevated testosterone levels challenged authorities in the sporting world provides an example of the complexities surrounding gender identity. Source: Wikimedia

## Same-Sex Marriage

Governments often grapple with questions about gender equity, but in the last decade, no issue put gender identity more in the spotlight than the debate over same-sex marriage. The topic is covered briefly in the chapter on Political Geography, but there, the focus is on questions about whether the government has a compelling interest in deciding who may marry whom, and the role of religion has in the shaping of laws regulating marriage. Another line of inquiry into the question of same-sex marriages is to call into question the government's ability to identify or define "sex" in a legally consistent pattern. If the law of a state only recognizes "man" and "woman" as gender identities, what is to be done with people who have indistinct, or non-binary gender identities (biological and/or psychological)? What scientifically valid criteria can governments use to determine a person's legal gender identity? Most laws fail to consider any of the complexities of gender identification, and therefore identity questions are not a common fixture of legal (or public) debates on marriage rights. As of 2020, only Connecticut and California have enacted gender-neutral marriage rights, either through legislation or court decisions.




Figure 10-3: Washington, DC - A sign at a rally for traditional marriage relies on traditional notions of gender. Source: Wikimedia.

10.1: Gender and Identity in San Francisco, California

10.2: Evolution of Gender Roles
10.3: Demographic Transition Model
10.4: Sex Ratio
10.5: Gendered Landscapes

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# 10.1: Gender and Identity in San Francisco, California

San Francisco has been for many years a location where gender is understood differently. Geographers are interested in locations that are different because they offer insight into the processes that shape human behaviors. Consider for example that in 2013, California legislators passed a law protecting the right of schoolchildren to select lavatories and sports teams based on their self-proclaimed gender identity rather than their anatomy or chromosomal profile. It appears to be the first statewide law of its sort in the United States. California has officially recognized that some people do not fit into the traditional gender binary. Meanwhile, in 2020, some states' politicians seek to advance legislation preventing people from living a life as the gender that suits them. Why do events in California so often foretell changes in the rest of the county, especially with respect to gender and sexuality issues? Why do politicians, and presumably a significant percentage of people in California understand, or at least accept the complexities of gender while clearly people in other states do not?

The Golden State has long been home to large populations of lesbian, gay, bisexual, transgendered, and other people (LGBTIQ+) who fall outside traditional gender roles and classifications. These attitudes can probably be traced back to the days of the Gold Rush. The San Francisco Bay Area may have been the first place in the world to host a truly multi-national, multi-cultural community during the 1850s. Some advanced measure of tolerance for diversity was a necessary component of life in California from its early days. Californians' reputation for tolerance of difference is probably what attracted thousands of persecuted people from elsewhere for nearly 100 years before. Of course, California has had ugly moments of racism and bigotry, but in general, Californians have shown an extra degree of willingness to condemn their own bigoted moments and to learn from them. The bigotry of the US military during World War II, oddly enough, probably helped create greater openness toward gender identity tolerance in California. During World War II, the Bay Area became the primary location where gay men serving in the Pacific Theater were dishonorably discharged from the military after their homosexuality was discovered. Frequently disgraced and vulnerable, many discharged gay military men found themselves unable to return to their hometowns where the reason for their dismissal from the military would be known. As a result, many gay men appear to have opted to stay in California to build a life after the war. They found that San Franciscans tolerated, perhaps even accepted, people who were deemed outcasts and misfits elsewhere in America. Bohemians, radical poets and Beat Generation figures had already established a significant presence in San Francisco, and their influence grew during the post-war era. These radicals occupied night clubs, like the Black Cat and other social venues that openly accepted LGBTIQ+ people. By the 1950s, several civil right groups focused on the rights of LGBTIQ+ people appeared in Los Angeles and San Francisco. Jose Sarria, an openly gay political activist and regular at the Black Cat, even ran for office in 1961.




Figure 10-4: San Francisco, CA - A gay pride flag flies in San Francisco's Haight-Ashbury district demonstrating this city's exceptional commitment to divesity and tolerance.

During the 1960s, San Francisco's growing reputation for gay tolerance attracted more gay men from around the country. An entire neighborhood where gay men could live in relative safety evolved in a region of the city known as The Castro District. At the same time, the nearby Haight-Asbury District evolved into the symbolic headquarters of the anti-establishment youth, or

hippie culture. News spread through word of mouth and the news media, that San Francisco was tolerant of alternative lifestyles and alternative cultural politics. People who felt uncomfortable, unwanted or unfit to live in other parts of the United States (and elsewhere) moved to San Francisco, providing additional momentum to the tolerant cultural trajectory of the Bay Area and the rest of the state. In 1977, one of those migrants, Harvey Milk, became one of the first openly LBGTIQ persons elected to public office in the United States. He was assassinated alongside the Mayor of San Francisco George Moscone in 1978.

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# 10.2: Evolution of Gender Roles

The notions governing how men and women should behave are called gender roles. These largely unwritten rules are quite powerful, governing much of our behavior every day, including how we dress, what courses college students enroll in, what kind of car we drive, and even what we eat.




Figure 10-5: San Miguel, CA - Missions in California failed for several reasons, including disease and political shortcomings, but the sudden reassignment of gender roles to Indians undermined the economic viability and the cultural health of missions across California.

Although many people consider them immutable, gender roles constantly change and they vary widely by geography. Economic systems have a great deal of influence on gender roles. For example, hunter-gatherer societies and agriculturalists tend to feature gender roles where men hunt and women gather food and process it. This fact is one of the reasons why European efforts to enslave American Indians were generally unsuccessful. Enslaved male Indians tended to be very reluctant agriculturalists because farming/tending plants was considered women's work among many Indian males who had been raised to be hunters and/or warriors. Spanish Missionaries in California had similar difficulties convincing male Indian neophytes at the Missions to abandon masculine hunting roles for more feminine agricultural roles. Men from agricultural societies in West Africa generally did not consider farming to be women's work and therefore were not emasculated by farming.

The Industrial Revolution brought additional changes to gender roles. In earlier agricultural societies women and men had more similar economic roles. Successful farming in the pre-industrial age required all members of the family to work hard to plant, weed, harvest crops and tend animals. Men and women and children may have had different jobs back then, but women were essential to the survival of the family farm. Even in pre-industrial urban areas, families who were engaged in trades or crafts generally required that women play an important role in the production of goods and/or the management of the family business. Geographers point out that during the pre-industrial era, domestic spaces (family houses) were not just homes but also the family's place of economic livelihood. Women and men worked side by side in the home which was a sort of "family factory".




Figure 10-6: Angelino Heights, CA - This grand Victorian home evokes an era in which many of American's traditional gender role norms were idealized.

Gender roles changed dramatically during the Industrial Revolution of the 19th century, when men, and sometimes women, started to work more frequently away from home. This era, also known as the Victorian Era, has had an enduring impact on gender roles in the United States and Europe. During this era, large numbers of middle-class men began to work away from the home, and middle-class women were left behind at home, tasked with housekeeping and child-rearing. As the economic roles changed, so did other expectations for women. Victorian values required "proper" women to be modest in dress, sober, private, and impeccably moral, especially when it came to sexual mores and marriage.

Poor women often worked as domestic workers, or occasionally in light-industry factory jobs where such employment was available; and though poor women may not have been bound to their residences, such employment was considered improper by the upper classes, who were influential in crafting public opinion about gender roles. Women of all classes had few rights to property, income, and political rights. They had little power over their own bodies, especially if they were married. All this is especially ironic given that the most powerful figure in the world at the time was Queen Victoria of England.

Victorian gender roles survived well into the mid-20th century. Additional changes in the economy began to erode some of the rules governing the proper behavior for women. In the United States and Europe, a backlash against the repressiveness of Victorian gender codes began with the age of the automobility. By 1920, women won the right to vote in the US. During the subsequent decade, many young women exercised their right to drink alcohol, smoke cigarettes, cut their hair short, wear makeup and comfortable clothes, to have sex and to generally violate Victorian gender codes. They called themselves flappers. Geographers would point out that flappers, also had very different spatial behavior – they were not bound to the home like their Victorian counterparts, many were prone to driving automobiles. At the time, flappers elicited considerable controversy. Today, flappers are widely considered important figures in the evolution of the women's rights movement.

Flappers all but faded from the American consciousness during the Great Depression, but they were replaced admirably by the iconic mythic figure Rosie the Riveter during World War II. During the war, women were needed to work in factories because a significant percentage of young male factory workers were called to serve in the Armed Forces. Women stepped out of the house and into the factories and shipyards; places that had been largely reserved for men for the previous 100 years. After the war, women who had experienced the freedom of working outside the home, in defense of their country, demanded the right to continue working outside the home, especially because the good wages and benefits that came with factory work ensured them continued mobility. Women had certainly earned it.

## Sports and Beauty Pageants

Geographers can analyze gender roles using a number of metrics, but two of the more interesting variables include the recreational choices made by boys and girls during high school. In places where girls are provided with opportunities and encouragement to participate in non-traditional female activities, like sports or hard sciences, they are also likely to find

encouragement and opportunities in the career fields as adults that may have been denied to their grandmothers. Indeed differences in wages for men and women, known as the **pay gap**, generally reflect the trends evident in the maps of sports participation.



Figure 10-7: Nashville, TN - This "Rosie" operates a drill while working on a dive bomber in a factory during World War II. Source: Wikimedia.

Data from the National Federation of State High School Associations reveals that girls do not participate in high school sports at an equal rate across the U.S. In the Lowland South, where gender roles remain more bound to tradition, girls do not play sports nearly as much as boys. As few as one-third of participants in high school sports are girls in Alabama, but in Minnesota girls' participation in sports is on parity with boys (49%). Girls living in much of the Yankee region also participate in sports nearly as frequently as boys. The pattern of participation varies slightly by sport because some regions do not regularly offer some sports for boys (e.g. volleyball) or girls (e.g., wrestling). However, sports like basketball and track and field/cross country, which are widely available and have lower barriers to entry, tend to show that southern girls don't play sports as much as southern boys and that girls up north generally play sports at about the same rate.

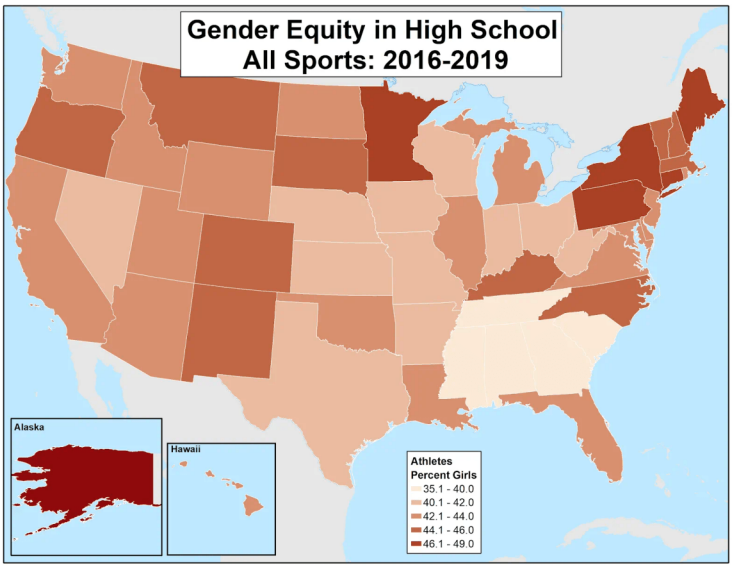



Figure 10-8: Map of US states showing the percentage of high school athletes participating in all sports who are girls.

One of the reasons girls in the Deep South may not play sports as much is because they are engaged in other school or out-of-school activities that are considered by Southerners to be more gender appropriate. Beauty contests, for example, are more popular in the Lowland South than elsewhere in the U.S. In Alabama, where girls participate in sports less than any other state, many elementary, middle schools and high schools host an event called a "Beauty Walk", which is basically school-sponsored

beauty pageant, complete with fancy dresses, and a panel of judges who evaluate girls on characteristics like, “beauty”, “poise” and the photogenic nature of young women and girls. The notion of a school officially sponsoring a beauty pageant may seem foreign to people in other parts of the U.S., but in the Deep South, debutante /cotillion balls and participation in organizations such as the Junior League hint at the lingering power of traditional gender roles, while functioning to reinforce these ideas. For boys at these schools, masculine sports, especially American Football, function both to remind and reinforce traditional gender roles. Given the regional cultural emphasis on traditional gender roles, its hardly surprising that states in the Deep South produce (per capita) far more pro football players and Miss America winners than any other region of the United States. It may come as no surprise then that in Deep South, women earn, on average, as little as 70% of what men earn. In New York and California, where equal pay laws are strong, women earn nearly 90% of what men do.

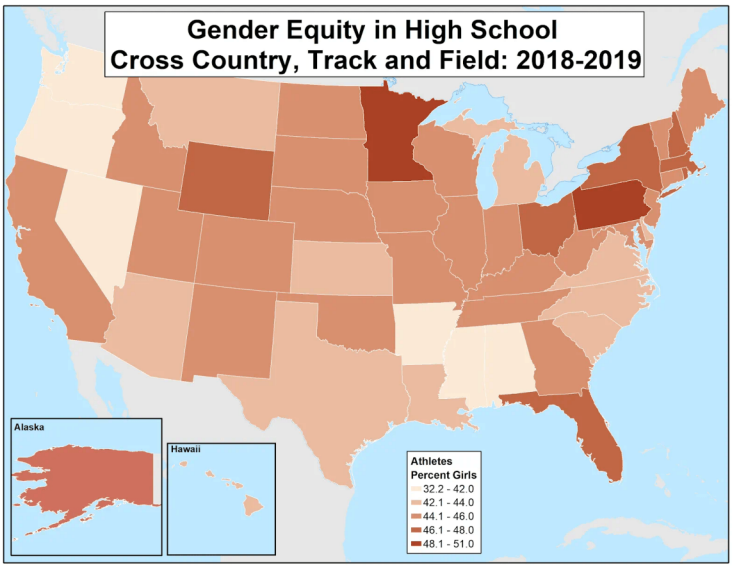



Figure 10-10: Map of US states by percentage of high school athletes participating in running sports who are girls.

## The Equal Rights Amendment

In the post-war era, people who participated in the war effort, either in factories or on battlefields often found themselves not fully permitted to enjoy the fruits of the American economy or American democracy, both of which were held forth as important reasons to wage war with Germany and Japan. A new series of battles emerged on the home front in the form of various Civil Rights campaigns. Ethnic minorities fought for their rights and women fought for theirs. A key battle in the fight for women’s rights centered around an amendment proposed in 1971 to the US Constitution known as the **Equal Rights Amendment** or simply the ERA. Section 1 of the ERA, the important part read very simply, “Equality of rights under the law shall not be denied or abridged by the United States or any State on account of sex”. The proposed amendment had widespread support in both houses of Congress and from the White House. It only had to be ratified (approved) by three-fourths of the US state legislatures (38 of 50). Within five years, 35 states had ratified the ERA, and its inclusion in the US Constitution seemed certain. Several state legislatures in the Lowland South where social conservatives held power refused to ratify the ERA. A few states in the West also failed to ratify the ERA. Some states, affected by the rise of neo-conservative politics in the late 1970s, actually voted to rescind their vote to ratify the ERA as the deadline (1979) approached for states to make a decision. The deadline was extended into the 1980s, and there were several court cases argued about the legality of the extension and the legality of those states that rescinded their support. For a couple of decades, the ERA seemed to be dead, but in recent years Nevada and Illinois ratified the ERA, which set off lawsuits from more conservative states arguing that since the deadline had passed there was no legal way to move forward on the ERA. In 2020, Virginia ratified the ERA, bringing the total number of states that have ratified it to 38, which was the magic number for passage prior to the deadline. It is very likely that the ERA will return to the court system for additional years of legal wrangling.

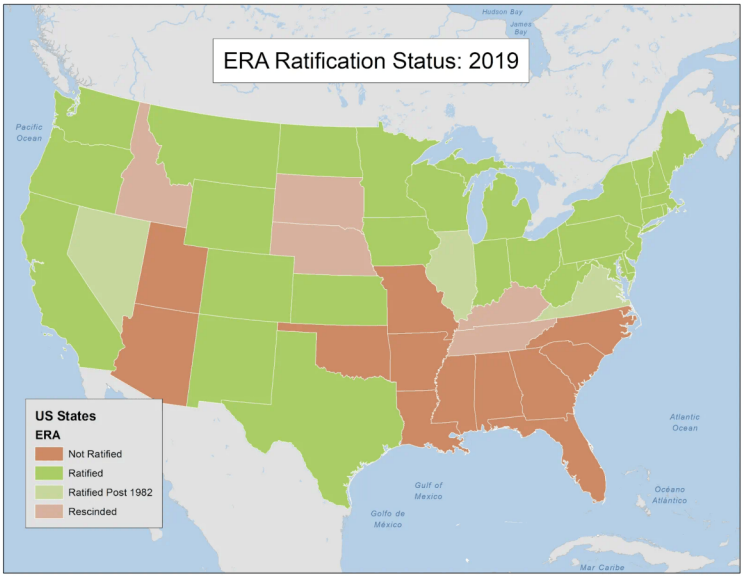



Figure 10-11: US map of states by the ratification of the ERA. The states of the Confederacy and the Libertarian West refused to ratify the ERA.

## Women's Reproductive Rights

Closely paralleling the drama over the ERA has been the ability of women to control their bodies, particularly in terms of having children. In the pre-industrial age, women had little control over the number of children they were expected to bear. Women in many societies were to varying degrees considered the property of their fathers, brothers and/or husbands. They often had little to control over when and/or with whom they had sex, or to whom they were married. Refusing sex could even be very dangerous for married women. The rights of women improved slowly, especially in the 20$^{th}$ century. A major breakthrough in reproductive rights occurred in the early 1960s when birth control pills became widely available to the American public. The impact on the lives of millions of women is hard to overstate, though it should be noted that in some countries, birth control pills continued to be illegal or unavailable.

The right of women to control when to get pregnant and to have a child when they got pregnant was further extended when the US Supreme Court decided in 1973, in the landmark **Roe v. Wade** decision, that American women could, without much government interference, end a pregnancy during the first three months of pregnancy, but that the government could regulate the conditions under which abortions could be performed after the first trimester. Before Roe v. Wade, abortion was illegal in much of the United States. Since Roe v. Wade, there have been numerous challenges to it brought before the US Supreme Court, but only technical changes have been made to the federal law since 1973. In many of the social conservative (traditionalist) states, however, a variety of laws have been passed in recent years that while maintaining the legality of abortion, functionally limit the conditions or location where women (especially poor women) can go to obtain a safe and legal abortion.

Public debate over abortion in the United States has been lengthy and intensive. Supporters and opponents of abortion follow patterns and alliances that frame American politics. Tradition-minded Southern conservatives tend to oppose abortion on religious grounds, and because they think it disrupts changes in well-established family norms. Moral-Progressives in states like Massachusetts and California tend to favor the rights of women to chose what to do with their own bodies. Western Libertarians tend to be pro-choice because they find anti-abortion laws an intrusion to personal liberties that they value.



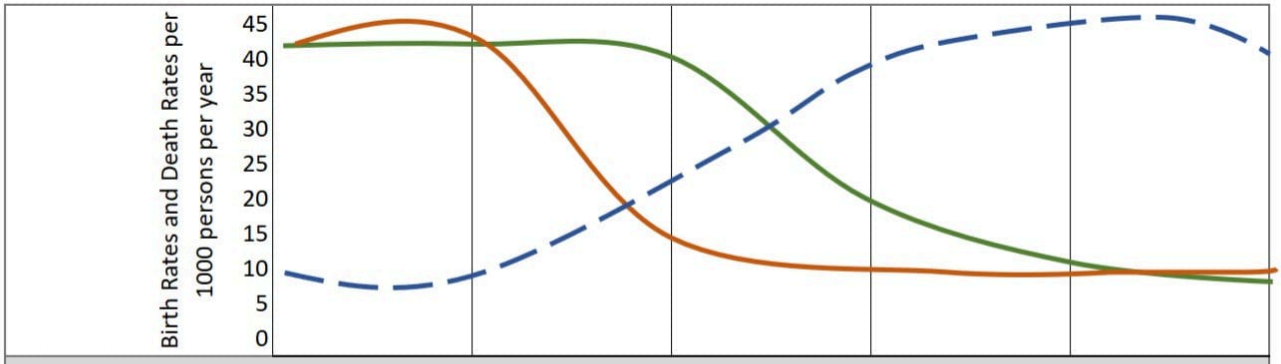

Figure 10-13: District of Columbia. The March for Life is a large protest rally where "Pro-Life" or "Anti-Abortion" advocates express their desire to overturn Roe v. Wade. Source: Wikimedia

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# 10.3: Demographic Transition Model

The evolution of the world's economic system had implications for women's reproductive rights, as well as population growth rates around the world. Geographers observed a regular pattern of reduction in average family size during the Industrial Revolution. Their observations have been described in a theory known as the Demographic Transition Model (DMT).

In stage one of the DMT, pre-industrial economic systems and traditional gender roles typically compelled women to bear numerous children, often more than 10. Families were large partly because children in pre-industrial economies tend to be economically beneficial, but also prone to pre-mature death. Keep in mind, that where (when) children could work around the house or on the farm and/or where they functioned as safeguards against starvation and violence for elderly parents, families with numerous children were considered wealthy. In places where a significant percentage of children die before they can become economically useful, it was (is) wise to have as many children as possible – just in case disease or some other misfortune takes some of them away. During stage one, the overall population growth rates are small and the population is reasonably stable, because births roughly equaled deaths. Occasional plagues and famines sometimes caused dramatic reductions in a population's growth rate.




| | Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 |
|---|---|---|---|---|---|
| Birth Rate | High | High | Falling Slowly | Low | Very Low |
| Death Rate | High | Falling | Low | Low | Low |
| Increase | Stable | Increasing | Slowly Increasing | Stable | Stable or Decline |

Figure 10-14: Graphic representation of the Demographic Transition Model. The green line is the birth rate, the orange line represents the death rate and the dotted blue line represents the rate of natural increase or population growth rate.

During stage two of the DMT, advances in nutrition, sanitation, and medicine that accompany industrialization and urbanization greatly reduce the death rate as countries industrialize. Not only do far more children live to become adults, but women live far longer and therefore bear even more children. During stage two, the growth rate of countries increases rapidly because age-old cultural traditions continue to encourage parents to have numerous children, even though the economic value of children begins to falter. In Europe and the United States, stage two occurred roughly between 1800 and 1950.

Stage three occurs when people eventually realize that in an urban-industrial environment, children are no longer economic assets, especially once children are forbidden to work in factories and are forced to go to school. Children become expensive to house and feed. Once old-age insurance and other social security functions become available, children lose the last remaining economic value they bring to families. Overall, the population growth rate slows a good bit, as the birth rate falls dramatically.

During stage four of the DTM, the birth rate eventually drops to match the death rate, which fell during state two. At this point, population growth rates stabilize once again and countries experience modest population growth. Sometimes the demographic transition model includes a fifth stage in which large numbers of families decide to have only one, or no children. At this point, the growth rate becomes negative, and the overall population shrinks as the rate of natural increase (live births minus deaths per year) turns negative. Japan, Russia and some countries in Europe appear to have entered stage five. The United States appears to be transitioning to stage five slowly.

It is very important to keep in mind that the DTM describes an ideal evolution in national patterns of birth, death, and growth. Perhaps no country went through this process precisely as the theory predicts, but the model does help us understand the basic pattern of population change that most industrial countries witnessed over the last 200 years. It suggests that many developing countries, where populations are exploding (stage two) will eventually industrialize and enjoy manageable population growth rates, but there's no guarantee that this will be the case. Women in many parts of the world, even where economic changes invite smaller families, have not managed to wrest control of their own reproductive choices. Free birth control devices **are not** enough to overcome economic logic, nor stubborn cultural norms that characterize parts of the world where very large families are valued. Until women in these cultures are free to leave the home to pursue education and work opportunities, the economic incentive to have fewer children will not emerge. In regions where women are prohibited from working outside the home, robust economic development is hindered. Without women workers to attract factories, the economic value of women remains muted, economic development stunted, and the prospects for smaller families, and slower, stable population growth rates are diminished. It's a vicious circle.

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# 10.4: Sex Ratio

Gender roles, economic decisions, and even government policies all influence where women and men live. Without the effect of culture, the **sex ratio** should be almost perfectly 1:1 – men to women. However, in many places around the world that ratio is skewed, sometimes dramatically, in favor of one sex or another. Skewing can occur because the infant mortality rate for boys may be higher or lower than it is for girls, or because women may outlive men by a few years on average. In the United States, about 105 boys are born for every 100 girls, but because more boys die as infants, through violence as young men, and from heart and lung disease as older men, women outnumber men in the United States slightly (97 males for everyone 100 females or .97). That ratio can be greatly exaggerated in some countries, and even in some US states. In the Lowland South, and parts of the Upper Midwest there are lots more women than men. The imbalance in the Deep South is related to the exaggerated infant mortality rate and the levels of deadly violence, especially among African-Americans. In the Upper Midwest, where the average age is unusually high, elderly women skew the ratio toward women. On the other hand, in places where economic numerous opportunities for men in heavy industry and mining creates an excess male population.

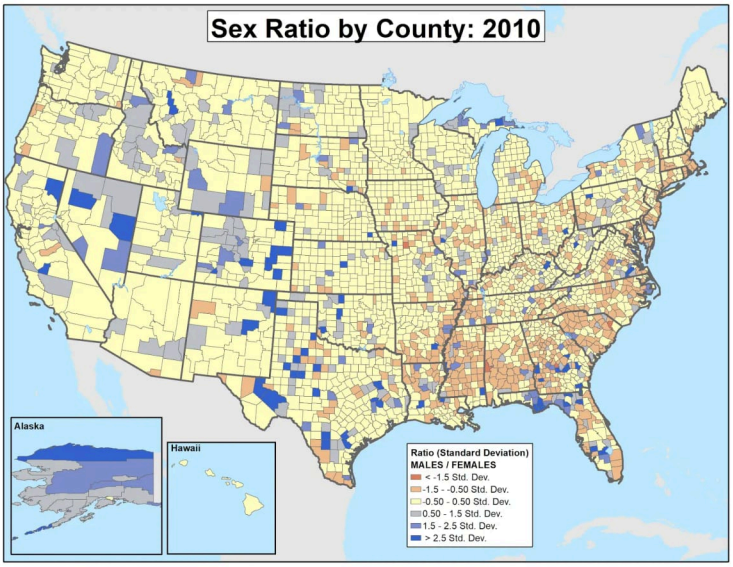



Figure 10-15: US map of counties by ratio of males to females expressed in standard deviation above or below the national average of 96.7 males to females.

Economic opportunities can also draw people across international borders as well. In many of the oil-producing countries of the Middle East, there are extremely lopsided sex ratios favoring men, while women far outnumber men in the countries where the migrants left. Sexist cultural attitudes, wars and government policies can also create imbalanced sex ratios. In parts of India, where families often pay a large **dowry** in order to secure a husband for a daughter and stand to receive a sizeable dowry for each married son, it appears that boys are favored enough over girls that the sex ratio skews heavily toward boys. Similarly, in China where a national **One-Child Policy** (1979-2015) designed to reduce China's population growth rate combined with traditional notions about gender greatly diminished the number of girls born there for nearly two generations. As a result, by 2020, China is expected to have nearly 30 million more men than women. Even small imbalances in the sex ratio have numerous, often significant, consequences for societies, including increases in crime and, ironically, an increase in the population growth rate.




Figure 10-16: Sichuan, China. This roadside sign reminds passers-by that “It is forbidden to discriminate against, mistreat or abandon baby girls”, a horrifying indication of the human cost that traditional gender roles can have. Source: Wikimedia.

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# 10.5: Gendered Landscapes

Landscapes are given meaning by the way they are used. Landscapes also create meaning because they simultaneously affect the way we behave. Feminist geographers have explored the role of landscape both in terms of how the landscape is affected by gender roles and how landscapes influence evolving gender roles. The role of housing and neighborhood design offers a glimpse into these processes.




Figure 10-16: Sichuan, China. This roadside sign reminds passers-by that "It is forbidden to discriminate against, mistreat or abandon baby girls", a horrifying indication of the human cost that traditional gender roles can have. Source: Wikimedia.

## Housing

Since the Industrial Revolution, most houses in the developed world have been designed by architects. Unlike their folk predecessors, the designs were not perfected over generations of trial and error, but rather the designs reflect the experiences and imaginations of the very few – often a single architect, who was often a man. Male architects designed Victorian-era housing to be private, domestic spaces where women were to work and men could recreate. For some feminist geographers, housing plays a critical role in the cultural machinery that reinforces oppressive roles for women. Males have largely designed and built houses, often with little understanding of how to optimize the designs to suit domestic labor. For example, the size and layout of kitchens, the height of sinks or countertops, the location of laundry rooms, and other domestic workspaces were often thoughtlessly designed by men, and as a result, functioned poorly for women. On the other hand, many Victorian-era homes tend to have rooms dedicated to male recreation that are both expansive and well designed.

Some women report that their houses feel like prisons. Architects rarely designed houses with female recreational spaces. Beginning in the Victorian era, builders often positioned houses on lots as far as possible from the street - a public sphere. Men installed gates, high fences (or walls) around perimeters, and designed the yard space to create a safe perimeter, largely to protect the family from other men. Simultaneously, these designs cut women off from the outside world and prevented them from easily sharing burdens with neighbors. During much of the 20$^{th}$ century, automobiles worsened the situation. Houses were increasingly built in suburbs, with ever-larger perimeters separating women from the rest of the world. Often left at home during the day without a car, suburban women found themselves surrounded by endless blocks of housing, cut off from shopping, job opportunities and entertainment options available to those living near the center of the city. Gender roles and suburban neighborhoods of the 1950s America could leave women with little of their own money, a low degree of mobility, and few options to pursue career options once their children had grown. Many women, no doubt, loved this role, but for others, the domestic sphere was stifling. It also left some women dependent on husbands, and, therefore, unable to escape abusive or unhappy marriages.




Figure 10-18: Los Angeles, CA - The courtyard of the Avila House, built in 1818, features an outdoor kitchen and an adjoining courtyard. Multiple houses may have once shared this central courtyard where domestic chores and child rearing tasks could be completed communally.

As a counterpoint, consider for example how the design of courtyard houses, common in many parts of the world, creates a communal central space in which people (women) from multiple families can share work and play. This design provides a safe, monitored area for children and permits those working at home the ability to socialize and share work with neighbors/relatives sharing the same courtyard. Many modern American homes instead have high fences or walls separating neighbors and smallish, non-functional backyards, a sacrifice to enhance the appearance of a large front lawn.

## Public Space

While the demands of housekeeping and childrearing may have kept some women chained to the home, a variety of locations refused them admittance, either forcefully or through gender codes. For generations, places, like barbershops, stag bars, fraternal lodges, automotive garages, gambling halls, and some sporting arenas were off-limits to women, especially women who wished to maintain good standing in society. Separate, and not always equal, spaces were reserved for women as well. Beauty parlors, grocery stores, flower shops, and eldercare facilities tended to be spaces for women. This gender segregation often begins at a young age. For example, American toy stores often feature “pink aisles” full of dolls, princess dresses, and miniature kitchens, where little girls are encouraged by the built environment to learn, through play, to be attractive, domestic and motherly – mostly indoor activities. Boys sections of the toy stores have construction equipment, action figures (not dolls) and sports equipment – all of which prepare them for careers outside the home.



Figure 10-19: District of Columbia, Vietnam Women's Memorial. Statues extolling the virtues and the accomplishments of women are rare. What does this suggest about the way our landscapes of remembrance reinforce historical narratives?

In some places, gendered spaces are officially endorsed by governments and society in a way that Americans would find a significant violation of the notion “separate is not equal”. In some countries, where Islamic law specifically sanctions the separation of men and women in public spaces, many locations are off-limits to women, and some are off-limits to men. Changes in the economic systems of many countries in the Muslim world are generating pressure to alter these rules. About a dozen countries have set aside women-only train/subway cars and buses, to combat persistent sexual harassment (groping) of women passengers by male passengers. The presence of such vehicles indicates the ability of the local government to recognize a serious problem, but an inability to effect cultural change. How do you think most American women you know would respond to being groped on a crowded subway here in the US? How would male by-standers respond to witnessing that behavior?

## Landscapes of Fear

Gender is a core element in numerous studies of fear, a subfield of investigation that cross-pollinates geography, psychology and gender studies. Several studies have found that women report being afraid of victimization more frequently and to a greater degree than men. Though men are more likely to be the victim of violent crime, women’s fear of crime, especially sexual crimes, often limits where women willingly travel.

Studies have shown that women may avoid outdoor public spaces, like parks, as a result. Oftentimes, there may be no documented reason to avoid specific locations. Perhaps no crime has been ever committed in a park that women fear. So why might women be afraid of a space like a park? Studies show that women use several visual cues to read the landscape. Lighting seems to be an important factor. Women read dark places as dangerous because would-be attackers tend to hide in poorly-lit locations. Other landscape features, like alleys, walls, or recessed spaces that provide concealment also elicit fearful responses. The presence of groups of idle young men, addicts, and prostitutes also creates a sense of fear among many because these characters represent the location of criminal activity. Disorder in the landscape, such as graffiti, litter, and vandalism also evoke fear (See Broken Window Theory in the Crime chapter), and together these various landscape elements keep people, especially women, and their children from spending as much time out-of-doors as they might otherwise. Women, children, the elderly and the infirm, especially in large cities, report feeling trapped in their own homes. Diminished mobility invites a host of other social ills, including ill-health, obesity, psychological disorders, social disengagement, and the loss of community bonds, the last of which is known to raise local crime rates. Landscape disorder (graffiti, vandalism, run-down housing, etc.) has numerous unseen consequences with far greater economic and social costs than most people recognize.

## Gas Stations

One of the peculiar manifestations of the way women read the built landscape is the evolution of gas station designs. In the early 20$^{th}$ century, before many women drove cars, gas stations looked very much like garages and were regularly untidy, smelly and unadorned. To make gas stations more appealing to newly mobile women motorists and complaining neighbors, petroleum

companies began building stations in the 1920s that evoked English Tudor cottages or used colonial revival style elements. They even put little curtains in the windows. The efficacy of these designs to attract female motorists and increase revenues during the 1920s is unknown. However, during the 1980s, the introduction of massive, detached canopies into the design of filling stations did prove popular with motorists. These massive canopies provide easy access for large trucks, and shelter from rain and bright sun, but stations owners also reported to have increased revenue by attracting motorists, especially women, who presumably felt safer pumping gas under these well-lit canopies at night.



Figure 10-20: Culpepper, VA - This building is an adaptive reuse of a former Union 76 gas station. The Gothic Cottage "look" was one of many strategies to make gas stations more appealing to women in the 20th century by making them look like small houses. Read: National Park Service's report on the historic preservation of vintage Gas Stations




Figure 10-21: Fontana, CA - Gas stations began introducing large canopy designs like this one in the 1980s to permit access to high profile box trucks. Widespread adoption of the design occurred quickly when station operators found the brightly lit canopies attracted more female customers who felt safer pumping gas at these locations at night.

## Women and the Environment

Gender roles appear to have a significant effect on how people interact with the physical environment as well. Several studies have shown that American women express greater concern than males do on environmental issues, like air/water quality, climate change, pollution, etc. In some ways, this makes sense because traditional gender roles urge women to be nurturing, and concerned for the welfare of others, especially their own children. Women are less likely to defend polluters' rights. What is

less clear, however, is how gender differences affect policy strategies regarding protecting the environment. Men and women seem to be equally unsure about the steps that should be taken to protect the environment and what personal/economic costs are acceptable in exchange for a healthy environment. It is also unclear if gender differences in environmental attitudes in all countries are equal.

In some countries, the gender gap on environmental issues is more evident, perhaps because gender roles remain far more clearly drawn than they are in the developed world. Several studies in various parts of the world have found women to be critical agents in the creation of sustainable agricultural and forestry practices. In the developing world, women also frequently seem to know more than men about the medicinal characteristics of plants. In both instances, policy formation must be carefully designed to ensure that women are part of any solution to environmental degradation. Unfortunately, women in many parts of the developing world have little land ownership rights and therefore are often unable to effectively enact conservation measures on the lands in which they may live and work.

## ADDITIONAL LINKS

Houses in the Hills: Berkeley's Early Bohemian Architecture:
https://alumni.berkeley.edu/californ...ouses-in-hills

National Park Service. The Preservation and Reuse of Historic Gas Stations:
https://www.nps.gov/tps/how-to-prese...s-stations.htm

Let Caster Run! We Should Celebrate Semenya's Extraordinary Talent | FiveThirtyEight

The Age That Women Have Babies: How a Gap Divides America - The New York Times

Transgender brain scans promised as study shows structural differences in people with gender dysphoria

What would a city designed by women be like? - BBC News

Geographies of Girlhood: Identities In-between - Google Books

Inside the Numbers on Girls' Participation in High School Sports

National Federation of High School Sports, Participation Statistics. NFHS MMS

Opinion | Racial Politics and Miss America - The New York Times

List of Miss America titleholders - Wikipedia

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# 11: URBAN GEOGRAPHY

**Most of the world's population lives in urban areas. An understanding of where, how and why cities evolved is critical to understanding modern societies. It's also important to know how cities work. Each city functions differently from all others because each was built according to local needs and resources. Still, there are common histories and processes, that have important implications for the daily routines of those who live in cities, and for those who simply rely upon cities.**

You are probably a city person whether you like it or not. Some people love the city they live in. Songs are written about cities. Still, many people say they don't like the cities because of the noise, pollution, crowds, and crime that come with city life, but living outside the city presents challenges as well. Living outside a city is inconvenient because rural areas lack access to the numerous amenities found in cities. The spatial clustering of activities near one another is called **agglomeration**, and spatial clustering characterizes an untold number of processes because agglomeration reduces the **friction of distance** for thousands of activities. Distance presents time cost – and as the saying goes, "time is money". Cities are therefore the most convenient, and cost-efficient places for people to live, work and play. The reduction in costs associated with transportation and the ability for people, governments, and businesses through sharing the costs for infrastructure creates what is known as **economies of agglomeration**, which is similar to the principle of **economies of scale**, but for cities. Economies of agglomeration is a fundamental reason for the existence of cities. When you add it all up, the savings in time and money have led nearly 8 in 10 Americans to live in urban areas. In California, America's most urban state, almost 95% of its people live in a city. This chapter explores the evolution of cities, why cities are where they are, and how the geography of cities affects the way urbanites live.




Figure 11-1: Chicago, IL. The "City of Broad Shoulders" gets its peculiar nickname from a poem extolling the vast array of industrial and agricultural pursuits made profitable by its special location.

11.1: Defining Cities
11.2: Birth of Cities
11.3: Urban Morphology
11.4: City Life
11.5: Cityas Place
11.6: Sound of the City

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# 11.1: Defining Cities

Though it seems simple enough, distinguishing cities from rural areas is not always that easy. Countries around the world have generated a plethora of definitions of “city” based on a variety of urban characteristics. Part of the reason stems from the fact that defining what constitutes urban is somewhat arbitrary. Cities are also hard to define because they look and function quite differently in different parts of the world.

Complicating matters are the great variety of terms we use to label a group of people living together. Hamlets, for example, are very small, rural communities. Villages are slightly larger, but exactly what makes a village distinct from a hamlet is arbitrary. Towns are larger than villages. Cities are larger than towns. Then there are words like metropolis and megalopolis to denote huge cities. Some states in the United States have legal definitions for these terms, but most do not. The US Census Bureau creates the only consistent definition of “city”, and it uses the terms “rural” and “urban” to distinguish cities from non-city regions. This definition has been updated several times since the 1800s, most radically in recent years as the power of **GIS** has allowed the geographers working for the US Census Bureau to measure multiple factors of urbanity simultaneously.

For decades, the US Census recognized an area as “urban” if it had incorporated itself as a city or a town. Incorporation indicates that a group of residents successfully filed a town charter with their local state government, giving them the right to govern themselves within a specific space within the state. Until recently, the US Census Bureau classified almost any incorporated area with at least 2,500 people as “urban”.

However, there were problems with those simple definitions. Some cities, even a few with large populations, remained unincorporated, and thus failed to meet the incorporation test for inclusion as a city. For example, Honolulu, Hawaii and Arlington, Virginia are not incorporated and therefore were labeled “census designated places” by the government, rather than “cities”. Conversely, some incorporated areas had very few people. This can happen when a city loses population, or when the boundaries of a city extend far beyond the populated core of the city. You may have witnessed this as you are driving on a highway, and you see a sign indicating “City Limits”, but houses, shops, factories and other indicators of urban life are absent yet for many miles. Jacksonville, Florida is the classic example of this problem. Jacksonville annexed so much territory that its city limits extend far into the adjacent countryside making it the largest city in land area in the United States (874.3 square miles!). California City, California is similar. It’s the third-largest city in California in terms of acreage but has only about 15,000 people (Look at it on Google Maps).

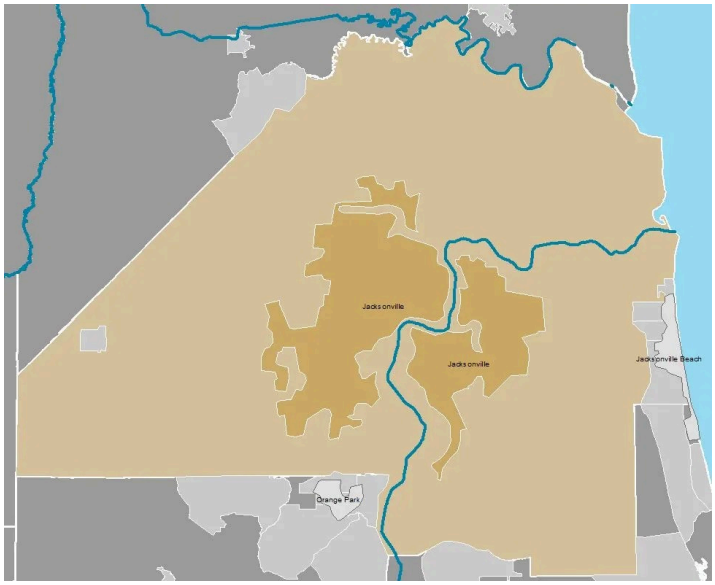



Figure 11-2: Jacksonville, FL. Jacksonville's city limits include all the area in the light tan - most of Duval County. According to the US Census, only the area in the dark tan in the center is actually "urban".

Therefore, the Census Bureau created a complex set of criteria capable of evaluating a variety of conditions that define any location as urban or rural. A key criterion now used by the Census is a minimum population density of 1,000 people per square mile, regardless of the incorporation status of the location. Additionally, any places that include non-residential urban land uses

are included in the definition of “urban”. Therefore, areas with factories, businesses or a large airport, even those that contain few residences are still counted as part of a city. The Census uses a measure of surface imperviousness to help make such a decision. This means that even a parking lot may factor into the classification of a place as“urban”. Finally, the census classifies locations that are near an urban region if it has a population density of at least 500 persons per square mile. That way, small breaks in the continuity of built-up areas do not result in the creation of multiple urban areas. Instead,single contiguous regions are created using that technique. So, people living in a suburb within five miles of the border of a larger city, are counted by the Census as residents of the nearby city.

## Census Designations

Because the terms, “village”, “town” and,“city” are problematic, the US Census Bureau devised another set of more precise terms to help us distinguish urban areas based on population and the manner in which people commute to work.

At the top of the urban hierarchy are Combined Statistical Areas (CSA); massive urban conglomerations that function as a single huge city. The most populous CSA in the United States is anchored by New York City (23.5 million people) and includes smaller cities and towns in northern New Jersey, eastern Pennsylvania, and southern Connecticut. In California, Los Angeles anchors a CSA of 18.35 million people that includes everyone living in Ventura, Orange, Los Angeles, San Bernardino, and Riverside Counties. The City of Los Angeles itself contains only 3.8 million, of which 1.5 million are in the San Fernando Valley.

A step down from the CSA is what the Census Bureau calls Metropolitan Statistical Areas (MSA), which like the CSA includes multiple cities or counties, but with even closer economic ties as measured by the commuting pattern of workers. Again New York City anchors the most populous of these, followed by Los Angeles, Chicago, and Dallas-Fort Worth. Los Angeles’ CSA is officially known as “Los Angeles-Long Beach-Santa Ana, California” and it includes only Los Angeles and Orange County. To the north is the “Oxnard-Thousand Oaks-Ventura” MSA, which includes just the cities in Ventura County.

The Census Bureau classifies smaller cities with between 10,000 and 50,000 people as “urban clusters”. When such a city is the focal point of commuting among residents living in the surrounding region, the census designates the “city” as a Micropolitan Statistical Area (μSA – the μ is the Greek letter “mu”). Though the “anchor” city must be less than 50,000, large semi-rural or suburban populations may live within easy commuting distance. Torrington, Connecticut, for example, anchors a μSA that has close to 200,000 people, though less than 35,000 live in Torrington itself.

People who live in on a farm, in the woods, or in towns with fewer than 10,000 people may still be part of a larger μSA, MSA or CSA, and so be technically part of some urban system in the United States. There are many thousands living in these small towns or in areas beyond easy commuting distance of a city. The Census Bureau considers these sorts of places rural. In California, only a handful of regions are not “urban” in some fashion. Two such towns in California are Lee Vining and Bridgeport, two touristy villages in Mono County well-known to many who have driven through while vacationing on the Eastern Sierra Nevada.

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# 11.2: Birth of Cities

Cities began to form many thousands of years ago, but there is little agreement among geographers (historians, anthropologists, etc.) about why cities form. Chances are that many different factors are responsible for the rise of cities. Some cities surely owe their existence to multiple factors while others grew largely because of a single factor.

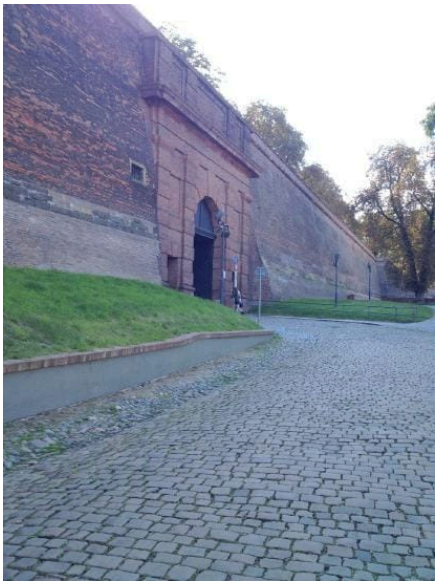


Figure 11-3: Prague, Czech Republic. Massive walls form part of an impressive defensive perimeter around Vyšehrad Castle, likely the location from which Prague grew. The other side of the grounds is a steep cliff down to the Vlata River.

Geographers like to place the causal forces that contribute to the rise of cities into two categories. **Site location factors** are those elements that favor the growth of a city that can be found at that location. Site factors include things like the availability of water, food, good soils, a quality harbor, and/or characteristics that make a location easy to defend from attack. Situation **factors** are external elements that favor the growth of a city, such as distance to other cities, or a central location. For example, Singapore has a wonderful advantage over other cities in the region because it is centrally located between important trading ports in East Asian and those in South Asia. Most large cities have good site and situation factors.

## Defensible Sites

In Europe, many major cities first grew because they offered residents a measure of protection against violence from outside groups during the Medieval Period. For centuries, rural peasants living in isolated areas were vulnerable to attack. The safest locations were those with quality **defensible site** characteristics. The European feudal system was, in fact, was built upon an arrangement whereby the local lord/duke/king supplied protection to local rural peasants in exchange for food and taxes. Places that afforded high levels of protection grew and prospered. Where agricultural supplies could not be protected were sure to be ransacked and destroyed. Natural fortifications come in multiple forms. For example, Paris France and Montreal Canada were founded on defensible **island sites**. Athens Greece was built upon a defensible hillside, called an acropolis. So famous is the Athenian acropolis that it is called simply The Acropolis. On the other hand, Moscow, Russia takes advantage of its **remote situation**. Both Napoleon and Hitler found out the hard way the challenges associated with attacking Moscow. London, England is not very defensible, so if you visit the Tower of London, the huge castle first built in 1078, you'll see it has a big (dry now) moat as its main protection.



Figure 11-4: Salorno, Italy. This commanding view of the Adige Valley from the ruins of Haderburg Castle indicates the importance of a defensible location. This site is below the Reschen Pass, a historic pathway for armies across the Alps since at least Roman times.




Figure 11-5: Paris, France. Notre Dame Cathedral built upon the Île de la Cité, a defensible island during the medieval era in the Seine River is the heart of French nationhood. The importance of religion and defense are evident in these images.

In the United States, the Atlantic and Pacific Oceans have largely functioned as America's defensive barriers, therefore few cities in the US are defensible. In fact, Washington, D.C. has no natural defenses. On the only occasion the US was invaded, the city was overrun by the British in the War of 1812. As a result, both the White House and the Capitol were burned to the ground. The poor defensibility of the American capital led to numerous calls for its relocation to a more defensible site during the 1800s. Because many states tried to entice the Federal government to move west, many capitol buildings in the Midwest resemble the US capitol building in Washington D.C.

San Francisco is the best example of a large American city established with defensibility in mind. Located on a peninsula between the Pacific Ocean and a large bay, San Francisco's site location offered a number of military advantages to the Spanish who built the fort, El Presidio Real de San Francisco, there in 1776. The US Army took control of the fort in 1846, and it remained a military base until 1994. Colonial San Francisco featured two kinds of defensible site advantages. It is both a **peninsula site** and a **sheltered harbor site**. Cannons positioned on either side of the Golden Gate could fire upon any enemy ships trying to pass

into the San Francisco Bay. Armies marching northward up the peninsula would be forced into a handful of narrow passes where an army could focus defensive efforts.

## Religious Sites

Even people can become a site factor if a specific person, or group of people, have a valued skill that attracts migrants or helps the city population grow. Consider for example the role religious figures have on cities. Priests and shamans are capable of gathering people of faith near to them, so that, like the armies of the lordly class, they could offer protection and guidance in return for food, shelter, and compensation (like tithes). The priestly class has also often functioned as the primary vessels of knowledge and skills, like writing and science (astronomy, planting calendars, medicine, e.g.). Often a cadre of assistants trained in those endeavors was necessary. Mecca is probably the best example of a religious city, but others dot the landscape of the world. Rome existed before the Catholic faith, but it assuredly grew and prospered as a result of becoming the headquarters of Christianity for hundreds of years.

### DID BEER GIVE RISE T O CIVILIZATION?

A related theory posits that beer might have been a motivation in the establishment of cities during the Stone Age. According to some researchers, brewing beer may have stimulated the domestication of grain, and in turn, the abandonment of nomadism. It is also reasonable that storing both grain and liquid alcohol would require the construction warehouses and the employment of armies to protect both. Alcohol may have played a role in developing political alliances, and/or religious activities as well. The health benefits of beer may have also contributed to population growth among those who had regular access because it provides a healthy alternative to unsanitary water, which remains a leading cause of death and malnutrition worldwide.

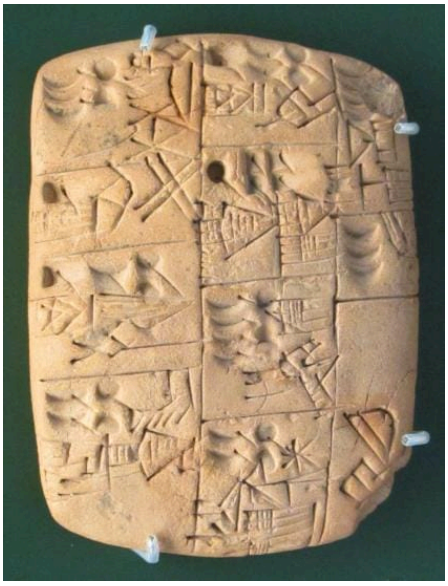


Figure 11-7: Early Sumerian writing tablet recording information about beer. Source: Wikimedia

## Industry and Trade Situations

The production of goods (like beer) and the provision of services is surely another reason why cities have appeared in specific locations over the centuries. Many cities evolved from small trading posts or market towns where agricultural and craft goods were exchanged by local farmers and/or wandering nomads. The surplus wealth generated through trade required protection and fortifications, so cities with walls may have been built to protect marketplaces and vendors from roaming bandits or invading armies.

Some trace the birth of London England to an ancient trading spot called Kingston upon Thames, a market town founded by the Saxons southwest of London's present core. The place-names of many exceptionally old towns in England reveal their genesis as centers of trade - Market Drayton, Market Harborough, Market Deeping, Market Weighton, Chipping Norton, Chipping Ongar, and Chipping Sodbury. (Chipping is a derivation of a Saxon expression for "to buy").

Cities, big and small, have always served market functions for those who live in adjacent hinterlands. Some market cities grow much larger than others because they have more advantageous situation factors. In other words, more centrally located trading towns tend to grow more than peripheral ones. Central location relative to other competing marketplaces is another example of an advantageous **situation factor**. Every major US city, including New York, Chicago, Los Angeles, Atlanta, and Houston has some situation factor that improved its competitive advantage in commerce and industry.

## Trade Site Locations

Some cities grow large because of specific **site** location advantages that favor trade or industry. All cities compete against one another to attract industry, but those with quality site factors, like good port facilities and/or varied transportation options, grow larger. All large cities in the US are located where two or more modes of transportation intersect, forming what geographers call a **break of bulk point**. Breaking bulk occurs when cargo is unloaded from a ship, truck, barge or train. Until the 1970s, unloading (and reloading) freight required a vast number of laborers, and therefore any city that had a busy dock, port, or train station attracted workers. Generally, numerous warehouses and warehouse jobs quickly emerge at break of bulk points. Manufacturing also tends to be attracted to these locations. New York City, Los Angeles, Chicago, New Orleans, and Houston all grew very large because each was well served by multiple transportation modes.

### River Barriers

Rivers are important for the growth of cities. Obviously, rivers provide fresh water for drinking (and irrigation), but the effect navigable rivers have had on urban growth is hard to overstate. Before the age of trains and highways, rivers were by far the most efficient way to transport heavy cargo, especially over long distances. The mouths of navigable rivers are break of bulk points, so cities often form where rivers meet the sea. Also, where river navigation is interrupted or ceases to be possible also creates break-of-bulk opportunities attracting workers and urban growth.

Waterfalls were for many years a complete nuisance to river traffic, but they also are responsible for numerous cities. For generations, waterfalls provided a key source of power for industry (see fall line cities below), but they also create a special kind of break of bulk point called a head of navigation. Waterfalls force people to stop, get out of their boats and carry the boat, or just the cargo they carry. Louisville, Kentucky is an excellent example of a head of navigation site because it arose next to The Falls of the Ohio, a place where the Ohio River tumbled over a waterfall forcing all boats to stop and break bulk, again providing jobs at the boat dock, in warehouses and encouraging manufacturing.



Figure 11-8: Louisville, KY. The McAlpine Locks and Dam represent a massive government investment to bypass the Falls of the Ohio (top center of photo). All river traffic once stopped at this location. Photo: Wikimedia.

Another kind of break-of-bulk point is created where two bodies of water come near each other but do not connect. This situation once forced people to carry boats and/or cargo between two bodies of water in a process called portage. Towns evolve at many portage sites. Indiana, New York, Ohio, Wisconsin, Michigan, and Maine all have towns named “Portage”

## Chicago

The most important portage site in the United States was once near Chicago. Just southwest of what is now downtown Chicago, near Midway Airport, was a portage where the Chicago River, which flows north into the Lake Michigan nearly intersected the Des Plaines River, which flows south into the Mississippi River system. In 1848, the people of Chicago built a canal connecting America's two greatest navigable water systems, and by doing so gave Chicago an enormous transportation advantage over all other locations in the Midwest. The Illinois-Michigan Canal made Chicago an especially attractive terminus for multiple railroad companies that sprang up in the 1850s, creating even more break-of-bulk opportunities. It took Chicago just over 30 years to grow from the 100$^{th}$ most populous American city to the number two spot. Today, interstate highways and airline routes continue to converge on Chicago.



Figure 11-9: Flag of Chicago. The two blue stripes symbolize the two waterways that created America's most strategic portage site. Source: Wikimedia

Rivers also create **chokepoints** for the movement of goods and people traveling by land. Rivers are often difficult to cross in many locations because the water either the water is too deep or the river too wide. In such places, before bridges were common, those trying to cross a river would seek out a ford, which is a shallow place to cross the river without a boat. City names like Stratford, Oxford, and Frankfurt all contain clues that they were once good places to cross a river. These fording sites often were simultaneously ideal locations for bridge construction because engineering a bridge across a shallow part of a wide river is often easier at a ford. Bridges funnel overland traffic to specific points, and provide another break-of-bulk opportunity, especially if the river is navigable.

## Pittsburgh

Sometimes two rivers merge into a single, larger river at a confluence site, creating yet another unique opportunity to gain an advantage over competitors. Pittsburgh, Pennsylvania lies at America's best-known confluence site. The steel industry thrived in Pittsburgh for over 100 years thanks in large part to the industrial advantages created by its location. The production of steel requires iron and coal, both of which are very heavy to transport and were once mined near the rivers (Ohio, Monongahela, and Allegheny) that converge in Pittsburgh. The three rivers do come at a cost. There are nearly 450 bridges in greater Pittsburgh.



Figure 11-10: Pittsburgh, PA - Pittsburg is a classic example of a confluence site where river-born commerce flowing from three directions intersects, creating break-of-bulk opportunities and inviting industry. What industry was synonymous with Pittsburgh for years? Source: Wikimedia

## New York City

New York City is the largest city in the United States. It wasn't always that way. It outgrew competitors on the East Coast because it built for itself advantages in transportation. Early on, Boston and Philadelphia were larger, but New York City developed several break of bulk advantages that helped it grow immensely. Key among the factors that helped New York outcompete rivals were its additional transportation options. Like its competitors, it had a port on the Atlantic Ocean. It also had a navigable river, the Hudson, which served many cities upstream, like Albany and Poughkeepsie. Then, in 1825, the Erie Canal opened, effectively connecting Lake Erie to the Hudson River and the Atlantic Oceans. New York City was the one East Coast city where trade to the entire Upper Great Lakes region could flow. The canal created a massive advantage for New York. With the opening of the canal, agricultural products produced in the Midwest could be transported across the Great Lakes through the Erie Canal to New York City, where it was off-loaded from riverboats to ocean-going ships headed for Europe. Simultaneously, goods coming from Europe and destined for any location in the Midwest would be unloaded first at the port in New York City. The additional jobs created at the docks and warehouses attracted other industries and a snowball effect was created so that by the mid-1850s New York City became, for a time, the largest city in the world.



Figure 11-11: New York City - The massive George Washington Bridge reminds those coming into New York City of the navigabilty of the Hudson River and the importance of the river to New York.

## Los Angeles

Los Angeles (L.A.) is the great metropolis on the west coast of the United States. The Spanish chose a location near what is now downtown L.A. for a pueblo (town) because they found fertile soil and a consistent source of water there alongside a large population of Indians that they hoped would form the core of a vibrant Spanish colony. As the years went by, Los Angeles' only significant advantage over potential competitors in Southern California was its river. Spanish water law declared all the water in the L.A. River belonged to the people of Los Angeles. This law prevented other towns from forming either upstream or downstream from the original pueblo. People living along the L.A. River and hoping to use its precious waters were forced by Los Angelenos to become part of L.A.

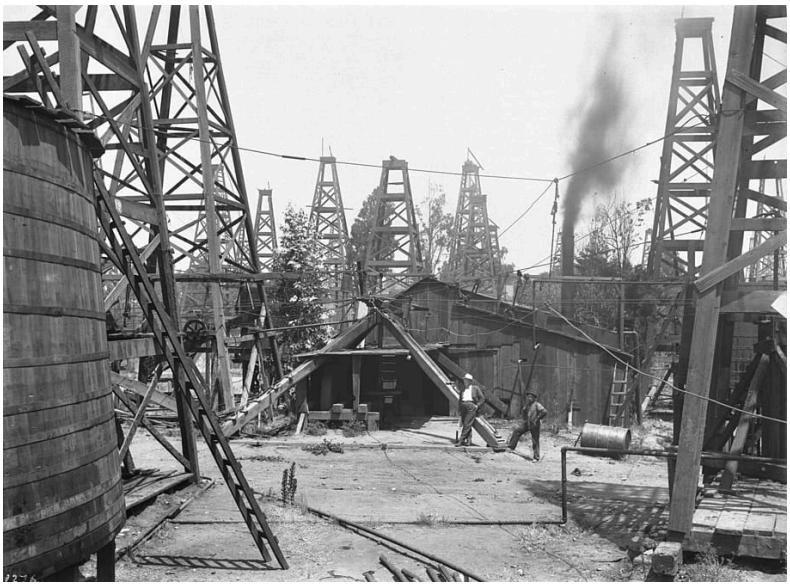


Figure 11-12: Los Angeles, CA. 1904. Among the many site location factors accelerating the growth of Los Angeles was the discovery of huge oil deposits in the region, a fact lost on most locals today. Photo: Wikimedia

Los Angeles remained a small town until the Santa Fe/Southern Pacific railroad opened a second transcontinental railroad terminus in L.A. in 1881. This gave Los Angeles a break-of-bulk advantage over other cities in Southern California. Not long afterward, the local port facilities at San Pedro were upgraded and L.A. began competing with San Francisco for business. The invention of the refrigerated boxcar around 1900 vastly expanded the citrus industry in the region. The discovery of oil in the L.A.

basin around the same time also invited a population explosion. Good weather helped encourage migrants to journey westward to take jobs in the petroleum and citrus industries. The same great weather later was critical in attracting both the movie and aeronautical industries in the decades to follow. Water resources though remained a problem. The Los Angeles River was never sufficient to serve the needs of a large city, so a series of canals and pipelines have been constructed over the years to bring fresh water from vast distances into the Los Angeles region. The city's water projects were controversial from the start and managing water resources for a metropolitan region of nearly 20 million is a critical challenge going forward, especially as climate change threatens the Sierra Nevada's snowpack – California's largest reservoir of fresh water.



Figure 11-13: Los Angeles, CA. The "cascades" is the last segment in a nearly 400-mile aqueduct bringing water from the Owens Valley to the very dry San Fernando Valley portion of Los Angeles. Photo: Stefanie Joseph

## Central Place Theory

In regions where no single location has special site location advantages situation advantages become very important. This happened on the vast plains of the United States during the 1800s, in places like Kansas where there are few navigable rivers, waterfalls, or ports. In instances like this, situation advantages become supremely important and generally a predictable, geometric pattern of cities and towns and villages tends to emerge. This process was more pronounced when transportation was primitive and the friction of distance was great, making the outcome of this process visible on the map of many flatland regions of the earth. Geographer Walter Christaller noticed the pattern and developed Central Place Theory to explain the processes that produce this pattern of cities, towns, and villages.

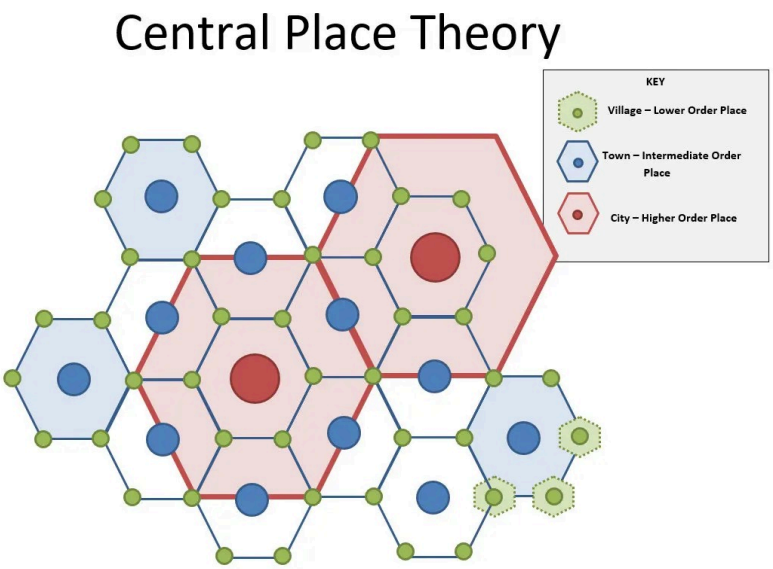



Figure 11-14: Central Place Theory. This diagram represents an idealized urban hierarchy in which people travel to the closest local market for lower order goods, but must go to a larger town or city for higher orders goods.

According to Christaller, if a group of people diffuses evenly across a plain (as homesteaders did when Kansas opened for settlement), a predictable hierarchy of villages, towns, and cities will emerge. The driving force behind this pattern is the basic need everyone has for goods and services. Naturally, people prefer to travel less to acquire what they need. The maximum distance people will travel for a specific good or service is called the **range** of that good or service. A product, like a hammer, has a limited range because people will not travel very far to buy hammers. A tractor, because it is an expensive item, has a much greater range. The cost of getting to a tractor dealership is small compared to the cost of the tractor itself, so farmers will travel long distances to buy the one they want. Hospital services have even greater ranges. People might travel to the moon if a cure for a deadly disease was available there.

Merchants and service providers also require a minimum number of customers living within a range to stay in business. Christaller called this number the threshold population. A major league baseball team has a threshold population of around two million people living within the range for a major league baseball franchise (the Milwaukee Brewers have the smallest local market at around 2 million people).A Wal-Mart store, on the other hand, has a minimum threshold of about 20,000 people, so they are far more numerous. Starbuck's Coffee shops have a threshold of about 5,000 people, and a range of a few miles, therefore they are numerous.

As customers and merchants living and working interact over many years in a flat region like Kansas, businesses in more centrally located villages will attract more customers because of the convenience of their location. This allows those businesses to grow and thrive. Additional businesses, and customers, are therefore attracted to those villages and over many years, those villages grow into towns or even cities. Less conveniently located villages will not attract customers, nor retain merchants, and they will not grow. Competition between towns prevents neighboring locations to grow large. As a result, centrally located villages tend to grow into larger cities at the expense of their neighbors. A network of centrally located towns tends to emerge in a geometric pattern, and among those growing towns, a few will grow into large cities.

The largest cities will have businesses and functions that require large thresholds (like major league sports teams or highly specialized boutiques). Merchants in villages and small towns offer only the most basic goods and services (e.g., gas stations or convenience stores) forcing villagers to travel to larger cities to buy higher-order goods and services. Some goods and services will be available in medium-sized cities, often called **regional service centers**. Some goods and services are only available at the top of the **urban hierarchy**; the mega-cities of the world. In the United States, a handful of cities (New York, Los Angeles, Chicago, Dallas) may offer exceptionally high order goods, unavailable in other large cities like Cleveland, Seattle or Atlanta.

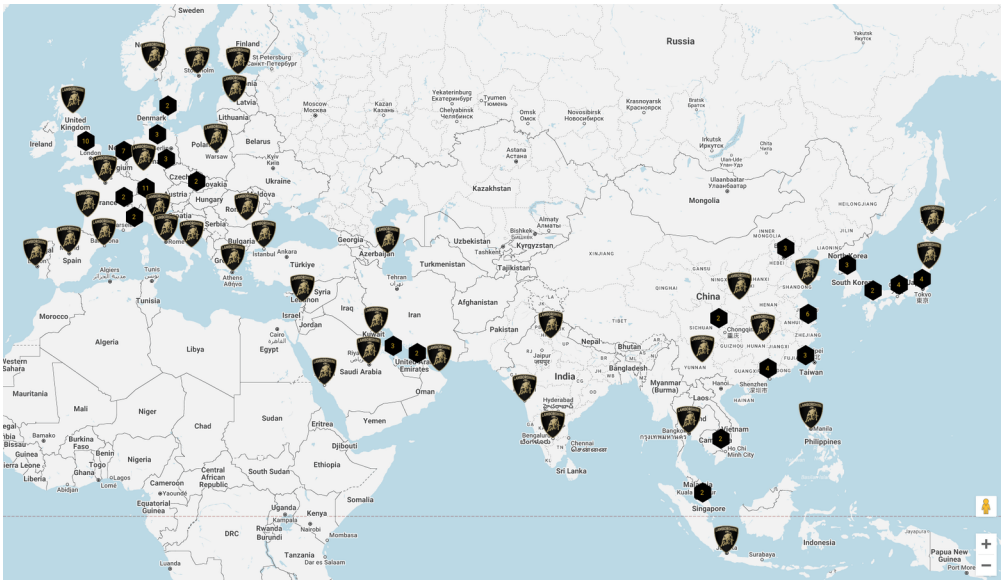



Figure 11-15: Map of Lamborghini Automobile Dealerships in the United States. Expensive automobiles have limited thresholds and extensive ranges, therefore only very hig order places host such businesses. Source: Lamborghini

Central Place Theory is one of the more compelling and widely applied theories in geography. It's not perfect because it is a model, and many criticisms have been leveled at it, but it can be successfully used to explain a great number of locational tendencies evident on the landscape.

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# 11.3: Urban Morphology

You've probably visited several large cities and noticed how differently they are organized. Visits to new cities can be disorienting if you're not used to the layout of another city. The way a city is organized in space is called urban morphology, and each city's layout offers strong clues into the evolutionary trajectory of the city. The morphology of a city is also a very potent force acting upon the cultural, political, and social life of each city.




Figure 11-16: San Francisco, CA. Public rail transportation has a significant effect on the evolution of cities. The extensive rail system in the Bay Area played a substantial role in the development of the personality of Jedi Goggles. Bay Area cities like San Francisco.

Consider for example, how the Californians often talk about the radical differences between Los Angeles and San Francisco. The differences are partly the by-product of the migration streams that populated each city generations ago, but profound differences in the basic physical geography of each city have also led to very different urban morphologies. A recursive relationship between each city's urban morphology and its political culture seems to have led to significant differences in the public transportation, housing, culture and politics of San Francisco and Los Angeles.

During the early 20$^{th}$ century a number of geographers, sociologists, and anthropologists trying to understand how cities worked, developed a variety of models to help identify, describe, and explain the various urban morphologies evident in the US and beyond. Many of these models were created by scholars at the University of Chicago, a city that had undergone incredible growth in the previous century.

## Concentric Ring Model

Ernest Burgess proposed the Concentric Ring Model that envisioned cities arranged in a series of concentric rings emanating outward from a central business district (CBD). The CBD is home to comparatively few people, but many businesses. Tall buildings are the key feature of most CBDs. Just outside the CBD is a pair of zones: the "inner city" and the "zone of transition". In these areas, one can find high population densities because people there tend to live in high-rise apartments or tenements because land values near the CBD would make single-family homes way too expensive. Commercial land uses are also common in the innermost zones, although fewer factories remain in the zone of transition today than was the case when Burgess conceived of this model in 1923. Just beyond the inner city is the zone of working-class housing. Here people often live in single-family houses or duplexes. Houses here tend to be closely packed together and have small yards, but residents are a mix of renters and homeowners. These folks generally work in the nearby factories or in low-paying jobs in the CBD. Beyond the zone of working-class housing are suburbs. Homes out in this zone are larger, with bigger yards and garages. Homeowners are likely to be part of the middle class. Beyond the suburbs are the more distant commuting zones, sometimes called exurbs. Upper-middle-class folks may live in the exurbs in houses on very large lots, with winding driveways. Also at this distance are the "septic tank strips", with homes for working-class people who value low population densities, and/or "country living", but who also often suffer longer

commutes than their working-class counterparts living in the working-class zone. The Concentric Ring Model accurately describes only a few American cities and these are most often found on the flatlands of the Midwest where suburbs grew steadily outward in all directions from the CBD and commuters mostly drive cars. Columbus, Ohio and Indianapolis, Indiana are two examples of cities that generally follow the concentric ring model.

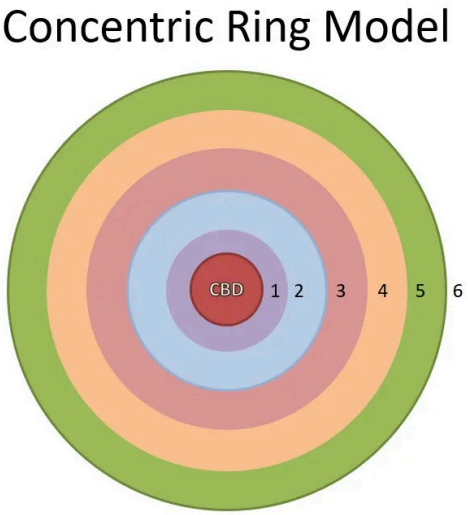



Figure 11-17: Burgess' Concentric Ring Model. 1 = Inner City, 2 = Zone of Transition, 3 = Working-Class Housing, 4 = Suburbs, 5 = Exurbs (adapted version).

## Sector Model

Homer Hoyt, a land economist, proposed an alternative to the concentric ring model he called the Sector Model. Hoyt argued that cities generally have wedge-shaped zones cutting across the concentric rings found in the earlier model. In the Sector Model, the CBD remains in the middle, but stretching away from the CBD, along rail lines and highways, are zones where working-class homes are commonly found flanking industrial corridors. Hoyt's model accounts for the effect of transportation routes, and even prevailing wind patterns on the location of specific urban land use.

According to this model, in regions of the city flanking significant transportation routes (rail, barge, freight), industrial and working-class residential corridors will develop. The noise and pollution of these factory zones drive all but the poorest residents away. In these industrial zones, almost every resident is a renter. In Chicago, several of these industrial corridors stretch outward from the CBD along railroad lines and along the Illinois-Michigan industrial canal. Adjacent to the industrial corridors is where lower-middle-class or working-class neighborhoods emerge, where factory workers live in small single-family homes and duplexes that are a mixture of owner-occupied and rental housing. These zones represent the so-called "other side of the tracks", but in reality, these **disamenity landscapes** are simply near the industrial districts, where noise, bad smells, and toxic pollution are worst. Such areas are also frequently associated with **environmental racism**, though **environmental classism** may be a more accurate description.

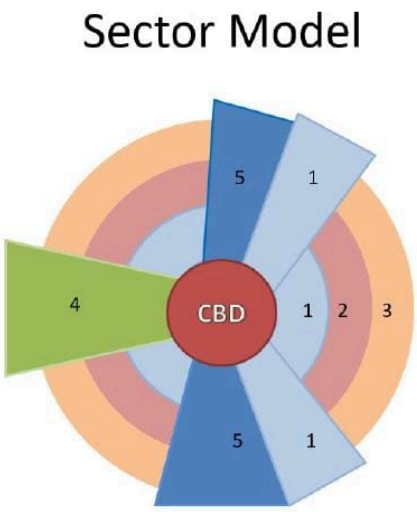



Figure 11-18: Hoyt's Sector Model. 1 = working-class housing, 2 = suburban housing, 3 = exurbs, 4 = upper middle-class housing, 5 = industry and lower-class housing (adapted).

Hoyt also proposed an elite zone where upper-middle and upper-class residents live, generally in a district flanking a grand boulevard. In Chicago, an entire system of boulevards was built in the 1800s. The most elite zone continues to be along Michigan Avenue which leads northward from downtown along Lake Michigan. In many American cities, the elite district is found on the west side of town where prevailing winds enter the city. Eastern halves of American cities tend to be downwind from dirty, smelly industrial zones, and therefore more likely to be where poorer people live. Suburban zones and exurbs, much like those evident in the Concentric Ring Model, are also included in the Sector Model. Chicago, Buffalo, Cleveland, and Detroit are cities that seem to best fit the sector model. Each city had a significant waterfront district, as well as important industrial corridors where poor folks lived alongside factories and noisy, smoggy, transportation routes.

## Multiple Nuclei Model

Many of the cities that grew rapidly after the popularization of the automobile did so without a robust public transit system. Authors Harris and Ullman described this kind of city with the Multiple Nuclei Model. The term “nuclei” refers to multiple secondary business districts (the old CBD is the primary nucleus) common in these cities.

Without efficient commuter rail or subway systems, cities like Los Angeles, Phoenix, Dallas and Atlanta evolved very differently from older cities in the Northeast and Midwest. These newly grown cities have a historic CBD, and an inner-city, but those areas tend to be relatively small, and less important to the city as their counterparts in older rail-oriented cities. Instead, in these newer cities, multiple small business districts (nuclei) grew in various parts of these cities. Some of these smaller districts compete with the historic CBD for common downtown businesses like banks, insurance companies, realty and legal affairs (FIRE industries). For example, Los Angeles has smaller business districts in Westwood, in the Wilshire District, Warner Center, Glendale, and Century City.

The multiple nuclei model also features zones common to the other models. Industrial districts in these new cities, unfettered by the need to access rail or water corridors, rely instead on truck freight to receive supplies and to ship products, allowing them to pop up anywhere zoning laws permitted. In the American West, where zoning laws are often less rigid than in the East, the pattern of industrialization can appear nearly random. Residential neighborhoods of varying status also emerged in a nearly random fashion as well, often creating “pockets” of housing for both the rich and poor, among large swaths of lower middle-class housing. The reasons for neighborhoods to develop where they do are similar as they are in the sector model. Amenities attract wealthier folks, transport advantages attract industry and commerce, and disamenity zones are all that poor folks can afford. There is a sort of randomness to multiple nuclei cities, making the landscape less legible for those not familiar with the city, unlike concentric ring cities where the layout of the city is generally easier to understand and navigate.

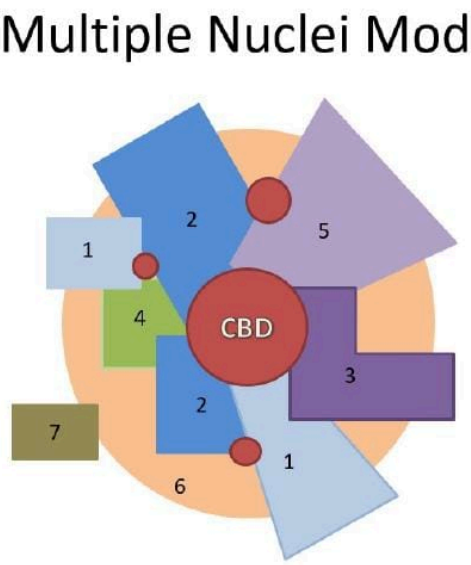



Figure 11-19: Ulmann & Harris - Multiple Nuclei Model. 1 = industrial, 2 = working class housing, 3= upper middle-class housing, 4 = elite housing, 5 = light industrial& wholesale, 6 = commuter housing, 7 exurban industrial. Note the small red dots as competing nuclei. (adapted)

## Latin American Model

Geographers Ernest Griffin and Larry Ford recognized that the popular urban models did not fit well in many cities in the developing world. In response, they created one of the more compelling descriptions of cities formerly colonized by Spain – the Latin American Model.

The Spanish designed Latin American cities according to rules contained in the Spanish Empire's Law of the Indies. According to these rules, each significant city was to have at its center a large plaza or town common for ceremonial purposes. Generally, a grand boulevard was built,stretching several miles from the central plaza. This elite spine served as both a parade route and an opulent promenade. For several blocks outward from the elite spine, housing for the wealthy and powerful was constructed.

The rest of the city was initially left for the poor because the middle class was tiny. Poor people built houses as close to the central plaza as they could. Jobs and market places were there. Over time, the ramshackle houses built by the poor were improved and enlarged. Ford and Griffin called this process in situ accretion. As the city's population grew, young families and in-migrants built still more shacks, adding rings of housing progressively outward from the CBD. At the edges of the city are always the newest residents, often squatting on land they do not own.

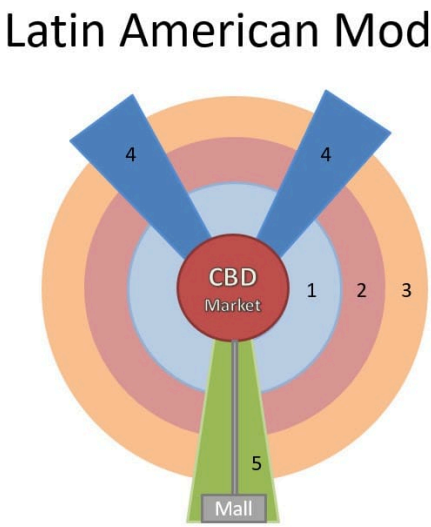



Figure 11-20: Griffin and Ford's Latin American Model - 1: Zone of Maturity, 2 = Zone of in situ accretion 3 = squatter zone, 4 = disamenity zone, 5 = elite spine and residential district. Note the CBD and Market at site of old plaza, and the mall serving the elite district. (adapted).

The main difference between North American and Latin American cities is where the poor live. In most US cities, the urban poor often lives near the CBD in the inner city. The opposite is true in Latin America where the far suburbs are home to the poorest of the poor. The reason for the reversed pattern lies in the differences in public infrastructure. In many parts of the developing world, transportation and utility networks are woefully inadequate to serve the rapidly growing population. Highways, bus lines, sewers, freshwater, and electrical networks are generally well developed in the oldest parts of cities, but in the newest suburbs (or squatter zones), these conveniences are generally absent. Cellular service and electricity are often the earliest public utility to arrive in squatter zones, but it may take dozens of years for governments to build sewers (storm and sanitary), public transit lines or even paved roads. In places like Lima, Peru or Sao Paulo, Brazil, residents of squatter settlements may walk several hours before they even reach the terminus of urban bus lines. It is for these reasons that people in the Latin American middle class do not “trade up” for a house in the suburbs, as is the case in the United States. Over time, governments will build waterlines, sewers, electricity lines and streets out to the squatter zones and residents there will, like their inner-city predecessors, begin the process of improving their homes.

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# 11.4: City Life

Where you live or grew up, is an element of your identity. “Where’s your hometown?” is a common question you might hear if you went on vacation or moved away. If you’re from a large city, what side of town, or what neighborhood you come from is another source of identity formation. Exactly what defines a “neighborhood” is open to debate. The US Census Bureau does not define “neighborhood” because they are **vernacular regions**. Each person has a sense of where neighborhood boundaries are, but those boundaries are largely in the imagination of individuals. Census tracts and ZIP codes sometimes function as proxies for neighborhoods, but they are often arbitrary as well. In some parts of the city, citizens have very specific ideas about neighborhood boundaries. Gangs often use graffiti to mark specific locations to notify others about their opinion on neighborhood boundaries – territories (see Politics Chapter). In some cities, like Los Angeles, the designation of unofficial neighborhood boundaries has been the source of angry debates because property values are greatly affected by the simple perceptions of where neighborhood boundaries exist.



Figure 11-21: Canoga Park, CA - Gang graffiti marks the edges of neighborhoods as gang members perceive the vernacular region – or neighborhood.

## Neighborhoods

Most neighborhoods don’t have organized gangs, but still, people with long-term commitments to homes and neighbors do engage in numerous group behaviors to protect their “turf”, and indirectly, the value of their property. Most of the time, these behaviors are benign – things like keeping weeds out of the yard, ensuring that local authorities enforce zoning laws about signs, junk cars, or residency restrictions. Neighbors may work together to improve local schools, parks, and hospitals. Homeowners may band together to accomplish other goals that might be deemed unsavory. They might want to keep certain businesses, like liquor stores, payday lenders, factories or nightclubs from their neighborhoods. They may even work together to prevent specific individuals, like sex crime offenders or the homeless, from moving in the neighborhood. Because many of these same individuals are less concerned when factories, stores or homeless people come to other neighborhoods, the term “not in my backyard” or “**NIMBY**” was coined to characterize the militant protectionist attitude. Generally, neighborhoods with wealthier people who are politically active, and have long-term residency patterns exhibit NIMBYism. Wealthier neighborhoods may erect gates and hire guards to prevent easy access to homes. Some have even created small, gated towns to keep undesirables out. Geographer Mike Davis called this process “the militarization of space” in his well-received book City of Quartz.



Figure 11-22: Calabasas, CA This wealthy suburb of Los Angeles has multiple gated areas, some of which encompass large recreation areas.

When residents in a neighborhood lack money, political organizational skills, or the motivation to protect themselves from disamenities, significant neighborhood degradation is possible. When that degradation affects the health of a local population of an ethnic minority, the term environmental racism is sometimes applied to describe the situation. What is racist is often hard to discern because cause and effect are not always obvious. Was a neighborhood polluted before minorities moved there, or did polluters move in after the minorities moved in? Did minorities populate a polluted neighborhood because that was all they could afford or were they forced to live there by law or precedent? Poverty is frequently at the root of these issues. Poor people of all ethnicities rarely can afford to live in neighborhoods that have outstanding schools, parks, air quality, etc., and so they are often able to afford to live only in the most dangerous, toxic, degraded neighborhoods.

## Neighborhood Life Cycle

How people come to occupy specific neighborhoods is a complex process that evolves over time and involves thousands of individual and institutional decisions. A number of these processes such as steering, blockbusting, etc. (see Ethnicity chapter) are rooted in systemic ethnic discrimination. However, economic decisions also factor prominently in the lifecycle of a neighborhood. As housing ages, it tends to become less desirable. People with enough money tend to move away and buy newer homes elsewhere. The lower classes move into the older homes, frequently as renters. Often poor people wind up occupying older, multi-family dwellings or apartments. Roofs and pipes leak, heating and cooling systems are often inefficient, neighborhoods are congested, etc. Sometimes, entire neighborhoods are abandoned. This process is known as the neighborhood life cycle. It's very common, however, in the last 50 years or so, some neighborhoods' life cycle is occasionally changed because wealthier people chose to move into older housing – or gentrification.

### Suburbanization

Suburbs first appeared in the United States in the mid-1800s as trolleys and other types of light rail extended beyond the limits of the pre-industrial, pedestrian-oriented cities. Light rail allowed middle-class families to move out beyond the city limits into communities called streetcar suburbs. When automobiles became affordable in the 1920s, suburbanization expanded. The Great Depression and World War II slowed suburbanization in the US, but during the 1950s, suburbs exploded on the American Landscape. The rise of suburbs in the post-WWII era brought profound changes to American cities. Many families found themselves able to exchange an old house in the crowded city for a new one with a bigger yard, near new schools, malls, parks, and hospitals. It was the culmination of the American dream for loads of people. The US and many local governments were eager to help people achieve those dreams, and created numerous financial incentives to make suburban dreams inexpensive, but government policies also created multiple unintended consequences.



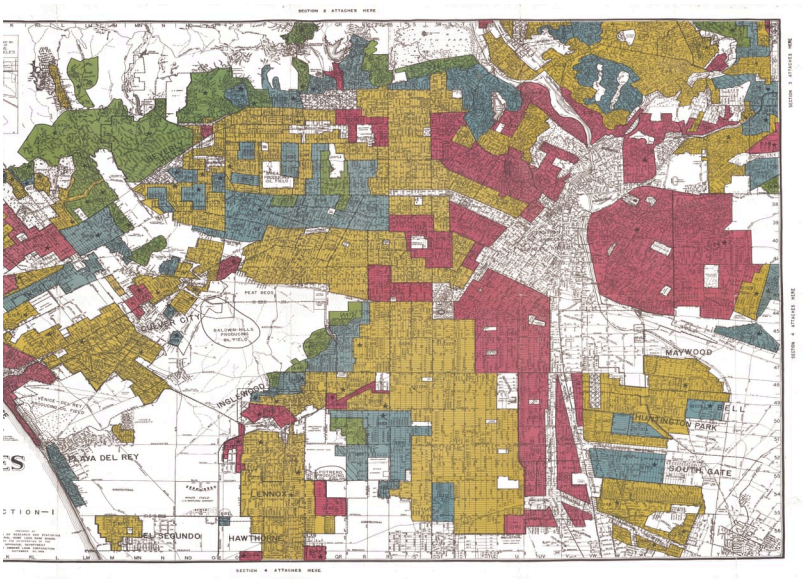

Figure 11-23: Toronto, Canada - A street car alongside an early automobile in 1923. Note the dense housing development created by the public transport, but the car would undermine both the density and the streetcar. Source: Wikimedia.

## FHA

The Federal Housing Administration (FHA), created in 1934 as part of Franklin D. Roosevelt's Depression-Era New Deal, was tasked with encouraging banks to make inexpensive loans to people seeking to buy new homes while ensuring that housing was built up to new safety standards. The FHA was part of a grand scheme to stimulate the housing sector of the economy during the Great Depression while extending federal oversight to the home loan industry. The program worked has worked. Overall homeownership was around 40% at the start of the Great Depression and it has been around 70% in recent years. The biggest jump in homeownership came shortly after World War II after the economy recovered and millions of veterans took advantage of the G.I Bill to help them secure a mortgage. However, the criteria upon which the government judged the desirability of insuring mortgage loans incentivized buying a new home in the suburbs, or rehabilitating old ones in the inner city. Faced with the option of buying a cheaper new home in a new suburban neighborhood or staying in the expensive, crowded inner-city, most people moved to the suburbs – if they could. Since many of those who qualified for loans were white and not in poverty, the FHA and related government programs helped increase the residential segregation of minorities by encouraging white flight from the cities. Minorities who were often poor and regularly prohibited from moving to new suburbs by discriminatory deed restrictions, found themselves stuck in the city, where the FHA's mortgage assistance programs were far less helpful.

## Redlining

Some argue that FHA policies encouraged several discriminatory mortgage and insurance practices, known as redlining. During the Great Depression, the federal government refinanced more than a million mortgages to stem the tide of foreclosures, but not everyone was eligible for this help. Neighborhoods with poor terrain, loads of old houses, or those with an abundance of "foreign-born, negro or lower grade population" were judged to be too risky for the government to help. Such neighborhoods appeared on mortgage risk maps outlined in red, which is where the term "redlining" evolved. For years afterward, banks, insurance companies, and other financial institutions also mapped out where not to do business. Residents living within the boundaries of a "redlined" neighborhood found it difficult to get loans to buy, sell, repair or improve housing. Even individuals with good credit histories and a middle-class income could find it impossible to buy homes in specific neighborhoods. Some couldn't get insurance on what they already owned. If they could, the terms of the loan or the insurance rates were higher than those outside the zone, a practice called **reverse redlining**. Redlining could be a death sentence to neighborhoods because of the destructive effect the practice had on property values. Most of the people suffering from the ill-effects of redlining are people of color. African-Americans appear to have been harmed most often. Because family wealth is often built generationally upon property ownership and passed down generationally, redlining has been a factor in the systemic impoverishment of many minority families. Billions of dollars in property equity have been denied to people of color via redlining since the 1930s.




s Angeles - Government made map of loan desirability from 1933.
sting effect of this government policy today. Source: Mapping Inequality

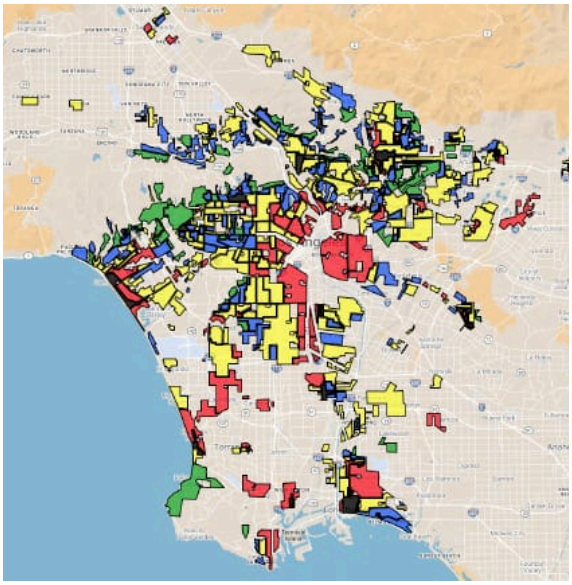


Figure 11-25: Los Angeles, CA - Interactive Map. Clic
above to open a Google Map of the map on the left.
government nearly 100 year ago affects neighborhoc
Source: KQED

In 1968, the Fair Housing Act was passed in order to outlaw redlining and other forms of housing discrimination, but additional laws have strengthened that landmark law over the years. Unfortunately, by the 1970s, the damage done by redlining was evident in inner cities across the United States. Many neighborhoods never recovered. Although it's illegal to discriminate against minorities (or anyone really) for non-economic characteristics, there is ample evidence to suggest it still occurs. Studies continue to show that people of color regularly

## Urban Renewal

As age and federal policies tore away at the fabric of America's inner cities, the US government launched an effort known as **urban renewal** in an attempt to reinvigorate the urban cores of large cities. The Federal Government launched several programs to provide funds to cities to buy up land in degraded parts of the city, to build public housing projects for the displaced, to bulldoze old neighborhoods, and to incentivize investors to rebuild on the vacated land. The idea was partly driven by a mistaken conviction that the visual elements of urban blight, were largely responsible for the problems of inner cities. Legislators believed that because old parts of cities were ugly, demolishing thousands of buildings would create a clean slate upon which new investment would pour in, and new businesses and housing would rise up. The displaced would be housed in new, high-rise housing projects that were clean and efficient. In a few instances, it worked. In some places, new businesses with good-paying jobs replaced abandoned old factories and warehouses. New apartments replaced dilapidated houses. Displaced folks moved to newer, cleaner safer housing elsewhere.

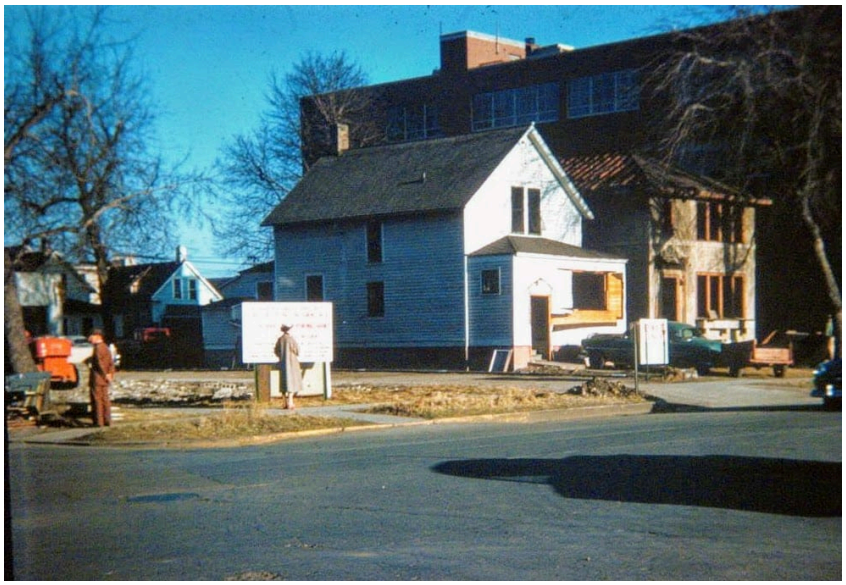


Figure 11-26: Fargo, ND - These houses, and much of the adjacent neighborhood were demolished in 1959 to make way for urban renewal projects. Most of it became parking lots for businesses or civic buildings.

However, the failures of urban renewal appear to have outnumbered its successes by a wide margin. Frequently, thousands of residents, most of them poor and minority, were displaced from their homes and their neighborhoods only to be herded into overcrowded, poorly built **public housing projects**. Within a decade, the word "projects" became synonymous with segregation and crime (see the Ethnicity chapter for additional information). Urban redevelopment efforts often turned out to be driven by unscrupulous deals made between land developers and corrupt civic leaders, who funneled millions into projects that were unnecessary, half-completed or doomed to failure. Perhaps worst of all were the numerous cities that found themselves with acre upon acre of empty lots; untaxable wastelands with only sidewalks where neighborhoods once thrived. Some urban renewal neighborhoods were also dissected by new highways or other transportation corridors, effectively rending the social fabric of those communities and cutting off traffic to businesses that remained. Boyle Heights in Los Angeles is a classic example.

In Los Angeles, perhaps the best example of urban renewal gone awry is the Marlton Square redevelopment project. Set within the mostly black Crenshaw District, the neighborhood had gone through a long cycle of decay punctuated by the 1992 Rodney King uprising/riots. Numerous promises of redevelopment came from politicians and a few high-profile sports stars who focused on a massive shopping district just west of Crenshaw Blvd that was once hosted a thriving series of shops and services. Millions of dollars were spent and rumors of corrupt bargains between land developers and local politicians swirled around a series of unsuccessful starts and bankruptcy proceedings. For more than a decade, the property remained empty (Google Streetview – use the timeline tool to see its evolution!). In 2012, the Kaiser foundation, a health care conglomerate, launched a new effort to build something of use to the community on the massive vacant lot. After several decades something is there!

## Interstate Highway System

The other important Federal program that sped forward suburbanization after World War II was the Interstate Highway System. The construction of a national network of high-speed roadways was originally intended to help the US military convoy troops and equipment rapidly in time of war. It was proven as early as 1919 that the existing highway system was grossly inadequate for the rapid deployment of forces. Additionally, President Eisenhower, who had served as the Supreme Commander of Allied Forces in Europe during World War II, was impressed with how the German Autobahn aided the mobility of the German armies and material. So in 1956, at the urging of Eisenhower, Congress passed the Federal Aid Highway Act, which dedicated billions of dollars to upgrade America's highway transportation. As soon as stretches of these new, high-speed freeways opened, it became clear that they would have a significant impact on the function of cities and suburbs they connected.




Figure 11-27: Los Angeles, CA - This photo of the infamous Sepulveda Pass on Interstate 405 is regularly traversed by nearly a half million cars per day, but when it opened in 1961, it was relatively free of traffic, allowing commuters in the San Fernando Valley quick access to the Los Angeles Basin, thus encouraging massive suburbanization.

Most folks consider one-hour the maximum desirable commute time. This was true when people walked to work and also when they ride public transit. When the interstates were first built, they were largely free from traffic congestion. People working in the inner city soon realized they could move further from their jobs without increasing their commuting time. Some found their commute faster after moving to a distant suburb. Combined with FHA incentives, suburban housing was plentiful, cheap and convenient. As a result, entire towns, often with little to no industry, began to emerge on the edges of larger cities. Suburbs without much commercial activity are sometimes called commuter towns or bedroom communities. If they are more distant from the city, beyond the suburbs, these areas are known as exurbs. The distinctions get blurry because cities and their suburbs seem to sprawl ever outward, gobbling up any undeveloped spaces on the edge of the suburbs. Exurbs become suburbs and bedroom communities grow large and begin attracting industry.

Over the years, as suburban populations exploded and women entered the workforce, the highway networks became overloaded, failing to convey commuters quickly to work in the inner city. Employers began putting offices and factories in the suburbs, much like commuters, drawn to cheap land served well by highways. Eventually, people found they didn't need to commute to the inner city. Some people found themselves living in one suburb and driving to another; those people are known as lateral commuters. Eventually, even people living in the inner city began finding jobs in the suburbs, commuting in the opposite direction of suburban commuters. Those who commute in the opposite direction of the traditional suburban commuters are called reverse commuters. So numerous are reverse commuters in Los Angeles that on some highways (US 101, e.g.) traffic is slower flowing into the city in the evening than the traffic going away from the city!

## Edge Cities

The industrialization of the suburbs, aided by affordable land, efficient highways, and an ample workforce attracted really exploded in the 1970s. Some suburban regions attracted so many employers that they emerged as significant new commercial nodes, or nuclei, competing with historic urban cores for business supremacy (see the multiple nuclei model above). Joel Garreau, a non-geographer who thinks very spatially, called these places edge cities. They are almost the opposite of bedroom communities in that edge cities have many businesses, but very few residents. Garreau defined an edge city as a location that:

1. Has at least 5 million square feet of office space
2. Has at least 600,000 square feet of retail space
3. Has more jobs than bedrooms
4. Is recognized as a vernacular place by locals, but not necessarily by outsiders
5. Did not exist in the 1960s.



Figure 11-28: Tysons Corner, VA – A perfect example of the suburban industrial complex, where the daytime population far exceeds the nighttime, or residential population. Source: Wikipedia

Tysons Corner, Virginia is a great example of this new urban form recognized by Garreau. In the 1960s, this location was essentially rural. Today, this “census designated place” remains unincorporated with a population of only around 20,000 people. Still, it has 46 million square feet of office space, two super-massive malls, and functions as the central business hub for much of Northern Virginia. In terms of business activity, Tysons Corner ranks among the top 20 cities in the United States. All the locals know exactly where “Tysons” is, but hardly anyone outside of Northern Virginia has even heard of the place. You will pass it if you travel from Dulles Airport to Washington DC.

## Suburban Disfunction

Overcrowding in the suburbs has become a problem. Older suburbs, though rarely approaching the mega-density of the inner-city core, often come to match (or exceed) the density in the rest of the city proper. “America’s Suburb”, the San Fernando Valley, occupies much of the northern half of Los Angeles. It was sparsely settled prior to World War II (one popular wartime song called it “Cow Country”), yet today, it has several neighborhoods with population densities in excess of 50,000 per square mile. The Los Angeles area highway network, once a model of efficiency, was quickly overburdened by unchecked suburbanization. US Highway 101 which stretches across the southern San Fernando Valley exceeded capacity in 1974, but suburbanization along US 101 continues today with commuters regularly driving on US 101 for 40 miles before even getting to the western edge of the San Fernando Valley. The intersection of US 101 and Interstate 405, in the southeastern corner of the San Fernando Valley consistently ranks as the most congested in the US, at over 350,000 cars per day.

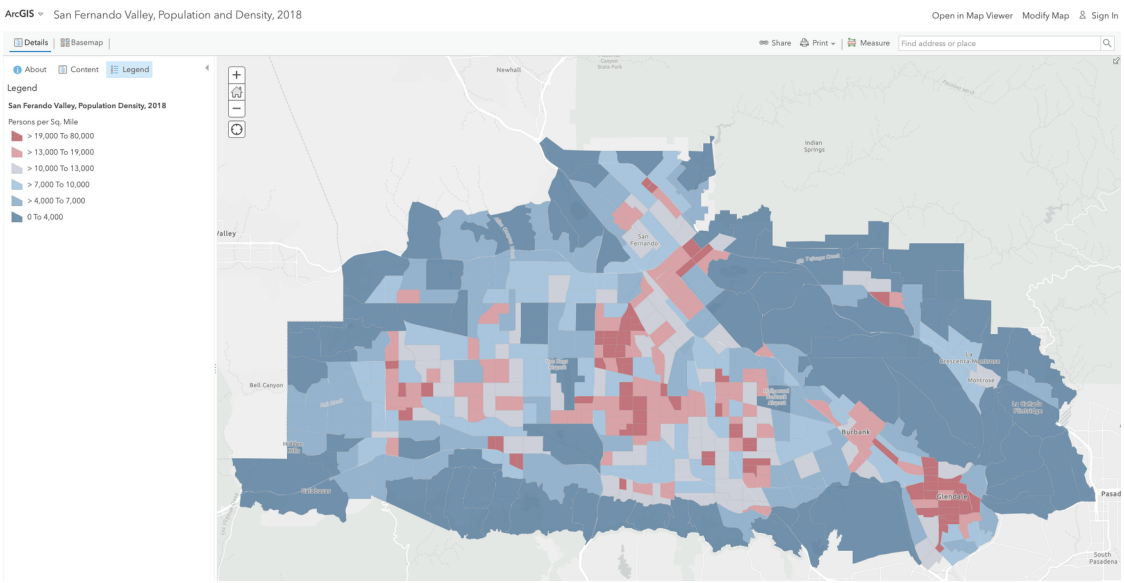



Figure 11-29: Map of San Fernando Valley. Click on this map to see an interactive map of America's Suburb where population densities sometimes exceed 50,000 person per square mile in defiance of traditional concepts of suburbs.

Land developers stand to make fortunes from buying up large patches of agricultural or rural lands surrounding cities and turning them into suburban communities. Large land development companies tend to be very well-connected politically and politicians are very responsive to the campaign contributions from developers and unions representing building trades, so there is often minimal resistance to pro-growth policies. As a result, poorly planned, sprawling suburbs regularly leapfrog outward from large cities. Occasionally, there's a backlash from opponents who favor less development, or "smarter" development. These so-called "slow growth" coalitions advocate for **in-filling** laws to force developers to develop land adjacent to existing neighborhoods, thereby preventing **checkerboard development**. Checkerboard development is expensive because the road network, utility lines and public safety infrastructure must be extended over "empty" land to serve the remote residential developments. Taxpayers, most of whom don't live in far-flung residential areas, eventually pay considerable external costs passed on by land developers and the residents of far-flung suburbs. Ironically, the burden for paying for exurban development falls partly on property owners in the inner city, diminishing the true value of housing there, and further stimulating growth in the suburbs.



Figure 11-30: Palm Desert, CA - Checkboard Development is clearly visible in this aerial photo. Several tracts are disconnected from the other parts of the suburb.

## Capital Flight

Almost all neighborhoods suffer through a cycle of decay. Some of America's older suburbs are more than 100 years old now. As houses age, modern families often find the houses too small, in need of frequent maintenance, and out of style. People with enough money move away from these houses. Old houses often become rental properties and rental properties tend to suffer from disinvestment and poor maintenance. The government even encourages disinvestment, perhaps unintentionally, by providing lucrative tax breaks to rental property owners to compensate them for the depreciation of the value of their properties. Renters themselves often misuse the housing they occupy or fail to maintain properties they don't own, especially if they plan to move soon. At some point, the value of rental properties falls to the point that even the minimal costs associated with necessary maintenance and taxes exceed the rent collected. At this point, rental buildings are abandoned, frequently becoming the property of the local city government via tax foreclosure. Abandonment accelerates the collapse of value for neighboring buildings, creating a sort of death spiral of home values. The net result can be ruinous.



Figure 11-32: Bronx, NY - President Carter visits an abandoned section of New York City in the mid-1970s. Source: Wikimedia

The geographic movement of investor money called financial capital can explain the lifecycle of any neighborhood. Banks and those looking to make money from real estate move investment money to places where the return on investment is perceived to be the greatest and financial risk lowest. After World War II, banks, the real-estate community, governments, and individuals moved most of their investment capital from the inner city to suburbs. Homeowners who could move, and were permitted to do so, naturally followed because they too sought profitable returns on their biggest financial investment. Because supplies of investment money are limited, inner cities got little or no (re)investment capital, and as a result, very quickly became decrepit. Still, not every inner-city fell into disrepair. Some older neighborhoods benefitted from an influx of immigrants, who often lacked ample financial capital, nevertheless brought significant human capital or sweat equity into older neighborhoods. Geographer Mike Davis calls the thousands of immigrant homeowners in Los Angeles "anonymous heroes" because they are willing to invest sweat equity fixing up housing in older neighborhoods abandoned both by the banking system and former residents.

## Gentrification

Occasionally, a neighborhood in an inner-city region is radically redeveloped and renewed in a process known as gentrification. The term suggests that the "gentry" are moving to the city from elsewhere, but that suggestion is misleading. Rather, gentrification is a process that often begins with people of lower social status gradually improving a neighborhood through sweat equity until people from higher social status consider it a desirable location and begin moving there. Gentrification does not typically involve people exchanging homeownership in the suburbs for residence in an inner-city neighborhood. Instead, gentrification is often driven by people buying their first homes in the inner-city, or simply moving from somewhere else within the city to a gentrifying neighborhood.

There are many theories explaining the process of gentrification, which became noticeable in the United States in the early 1970s. Some theories point to the growth of high paying jobs in the CBD as the US economy shifted away from manufacturing toward

high-tech and FIRE industries. Other theories suggest that changes in lifestyle and demographics drove gentrification. These theories suggest that baby boomers were prominent early gentrifiers, and they, unlike their parent's generation, often delayed entry into marriage and parenthood. They also got divorced a lot. Therefore, baby boomers spent more years unmarried and enjoyed living closer to nightclubs and other "courting" hotspots, most of which were located downtown rather than in the suburbs.



Figure 11-33: Chicago, IL - Gentrified rowhouses line a street in the Pullman district of Chicago. Blocks away, neighbors await/fear gentrification.

## The Organic Model

Sometimes it appears neighborhoods gentrify without significant assistance from the government or the banking industry. In this **organic model**, gentrification starts with a small group of bohemians, (artists, musicians, actors, etc.). Impoverished by their career choices, these "starving artists" seek cheap housing. Bohemians typically embrace cultural diversity, so they often attracted to minority neighborhoods. Bohemians, like immigrants, also bring sweat equity to older neighborhoods because financial capital is often unavailable. Unlike immigrants or poor minorities, their lifestyle choices frequently make bohemians ill-suited, and often unwelcome, in traditional family-oriented suburbs. These facts tend to keep bohemians from considering buying a starter home in suburban neighborhoods. Instead, they chose to live in inner-city neighborhoods, where they become long-term residents with strong interests in community improvement and safety.

People in the LGBTIQ+ community (some of whom are also bohemian) often participate in the organic model as well. Though less likely to be poor than bohemians, LBGTIQ+ persons sometimes find the suburbs less than welcoming places to live. Gay men, for example, built safe enclaves in many large cities during the 1960s and 1970s where they could live in relative peace; largely free from both social scorn and violence directed at them by homophobes and law enforcement (see e.g., the Stonewall Riots). Alongside bohemians, who welcome diversity, the LBGTIQ+ community brings both sweat equity and long-term commitments to improving the quality of life in their neighborhoods. Alongside immigrants, poor people and bohemians, the LGBTIQ+ community helped build unusual neighborhoods, marked by eclectic mixtures of cultural amenities (restaurants, art galleries, theaters, e.g.) and a vibrant nightlife (discos, bars, live music, e.g.). Drawn by the excitement, entertainment and affordability of gentrifying neighborhoods, less bohemian singles and young couples (both straight and gay) move in too. Eventually, real estate speculators and city officials take notice and encourage further development.




Figure 11-34: Philadelphia, PA - The triangle, often a symbol of gay pride or power was incorporated into an early cell phone store in Philadelphia's gay friendly, gentrified, Society Hill district.

## Economic Model –The Rent Gap Theory

Geographer Neil Smith offered a more strictly economic explanation for gentrification that he called the Rent Gap Theory. Rather than crediting bohemians and shifting demographics, Smith argues that the logic of real estate investing is mostly responsible for gentrification. According to Smith's argument, gentrification is sparked when the housing stock in urban neighborhoods deteriorates to a point where the realized value of housing (what it costs) falls so far below the potential value that investors find risk-reward ratio too attractive to ignore, and they move capital into decrepit neighborhoods in order to turn a profit.

Certainly, there are instances where both individual, corporate and even municipal investors have sought to profit from renovating derelict houses in degraded neighborhoods, but it seems unlikely that economic motives can explain all gentrification. Also, numerous gentrification projects led by corporate real estate concerns (with significant tax incentives from the government) have been failures. Despite careful economic calculations, cultivating a hip, desirable neighborhood requires an element of style that appears to elude some developers.

It's very likely that multiple forces act simultaneously encouraging gentrification. The author of this text advances a theory that TV shows airing in the early 1970s were a contributing factor in creating demand for gentrified housing. Attractive, young, endearing characters on TV were often shown living in gentrified housing, which in turn encouraged TV viewers to mimic the urban housing choices made by popular TV characters, and in the process reject both boring suburban options or glass-and-steel high rise apartments.




Figure 11-35: Los Angeles, CA. LA's decrepit Bank District has been gentrified and is now the "Gallery District". Many single room occupancy dwellings and homeless people have been displaced, but this region of downtown is revitalized.

Municipal governments, desperately seeking to rebuild crumbling tax bases, embraced gentrification wholeheartedly. During the 1960s and 70s, so many building owners abandoned decrepit rental properties that by the 1980s, many big-city governments had become the largest landowner in the city. Unscrupulous landlords were known to set fire to degraded buildings to collect insurance prior to abandoning them. Unable to collect any taxes from thousands of buildings, many cities faced serious fiscal challenges by the 1980s. New York City nearly went bankrupt in 1975, forcing severe cuts in public infrastructure projects, school funding and public safety, which in turn prompted more abandonment. Gentrification helped put a stop to the deterioration of many of America's biggest cities.

To encourage urban redevelopment and gentrification, various levels of government created numerous incentive programs to get people to buy and renovate inner-city homes. Tax breaks were common, particularly for corporate investors. One inventive grassroots incentive used by several cities was to sell city-owned houses for one dollar. In return, buyers agreed to live in the house themselves for a period of several years. By forcing buyers to live in the house, homeowners were far more likely to repair and maintain the building. The idea was to offer low-income residents affordable housing and in return, the city could stem the tide of urban decay, and maybe, some modest tax boost over the long-run. In recent years, the program has made a comeback, especially in Rust Belt cities, this time sponsored in part by the federal government's Department of Housing and Urban Development (HUD).




Figure 11-36: Downtown Los Angeles - A hipster coffee shop, a common marker of gentrification newly opened next to a Quinceañera dress shop in downtown marking the frontier of gentrification, culture, and commerce.

## Displacement

City officials and their allies in the real estate industry often overlook the downsides to gentrification, and in doing so trample on the rights of the least politically powerful citizens. If done poorly, gentrification forcibly removes poor people from their homes and neighborhoods. Often the displaced are without means of securing viable, alternative housing. Generally, people living in gentrifying neighborhoods are forced out of their homes by increases in rent. This is especially true in places without rent control ordinances. Businesses with year-to-year leases on commercial spaces are also sometimes forced out if they cannot pay higher rents, or if the customer base in the neighborhood changes radically.

All too often, gentrification is cast solely in terms of race. Unobservant critics cast gentrification as simply a bunch of white people kicking brown people out of their neighborhood. Certainly, that happens, but it is rarely that simple. Gentrification can beget violence. Many suggest that the well-known Tompkin's Square Park Riot in New York City was a product of tensions between gentrifiers and poorer, longtime residents of the area (some of whom were drug addicts, homeless, vagrants, etc.) who lived nearby or used the park frequently. During the riot, Police brutalized dozens of people, but the violence forced many to reexamine both the means and the ends of gentrification. There is some evidence emerging from new studies that gentrification done well does not result in a statistically significant increase in the displacement of local residents, and may actually improve the economic standing of those long-term residents who manage to stay in gentrifying areas.




Figure 11-37: Boyle Heights, California. The East Side of Los Angeles is perhaps America's most famous Mexican-American neighborhood. It is "threatened" by gentrification. Mom and Pop stores like the Santa Ceclia's (upper right) may give way to newer places catering to wealthier customers, who may not be long-time residents. There is resistance to gentrification in Boyle Heights, but it seems mostly directed toward non-local Anglo-American gentrifiers and less so toward than Latinx gentrifiers.

## New Urbanism

Since the 1980s, many cities and private land development corporations have sought to reinvigorate urban cores and some deteriorating suburban areas through the construction of highly engineered urban spaces that feature a robust combination of business and residential amenities. Generally falling under the rubric of New Urbanism, such neighborhoods often mimic the dense intermix of spaces for work, play, and residency that characterized cities before the age of the automobile. Mall developers now frequently build retail districts, with housing, parks and night-life districts around and within what would have been a generation ago strictly retail space. Many of new urbanist neighborhoods are anchored by a subway or other public transportation node, earning these locations the title, Transit-Oriented Development. In Los Angeles, the North Hollywood Arts District is an excellent example of how access to efficient mass transit, like the Red Line subway terminus, can spur the growth of upscale housing, businesses, and nightlife.




Figure 11-38: San Diego, CA. This redevelopment project in San Diego's Little Italy District is an excellent example of how efficient public transit (rail) can help stimulate New Urbanism development.

## Homelessness

Homelessness is another major concern for citizens of large cities. More than one half-million people are believed to live on the streets or in shelters. In recent years, about one-third of the entire homeless population are families. One-fourth of homeless people were children. In 2019, in Los Angeles County, there were nearly 60,000 homeless people, most living on the street. This figure has climbed by around 20,000 in recent years as rents have skyrocketed. Another 20,000 persons are listed as near homeless or precariously housed, living with friends or acquaintances in short-term arrangements.



Figure 11-39: Santa Monica, CA. The possessions of a homeless woman accumulate on this curbside location in Santa Monica, a city known for its large population of homeless and its exceptional tolerance of the downtrodden.

There are multiple reasons why people become homeless. The Los Angeles Homeless Authority estimates that about one-third of the homeless have substance abuse problems, and another third are mentally ill. About a quarter have a physical disability. A disturbing number are veterans of the armed forces or victims of domestic abuse. Economic conditions locally and nationally also have a significant impact on the overall number of homeless, not only because during recessions people lose their jobs and homes, but because the stresses of poverty can worsen mental illness. A vibrant economy can also spur on homelessness when the price of renting a home or apartment rises beyond people's ability to pay. This has been the case in California and New York

for some time.

The government plays a significant role in the pattern and intensity of homelessness. Ronald Reagan is the politician most associated with the homeless crisis. When Reagan became governor of California the late 1960s, the deinstitutionalization of mental patients was already a state policy. Under his administration, state-run facilities for the care of mentally ill persons were closed and replaced by private board-and-care homes. The policy was advanced to protect the rights of the mentally ill who were often detained against their will in government-run facilities that did not match the quality and cost-efficiency of privately-run boarding homes. Many private facilities, however, are badly run, profit-driven, located in poor neighborhoods and lack well-trained staff. Under new laws, patients could and did, leave these facilities in large numbers, frequently becoming homeless or incarcerated. Other states followed California's example. By the late 1970s, the federal government passed some legislation to address the growing crisis, but sweeping changes in governmental policy at the federal level during the Regan presidency shelved efforts started by the Carter administration. Drastic cuts to social programs during the 1980s dramatically expanded the number of homeless people who were mentally ill. Funding has never been restored, though the Obama administration did aggressively pursue policies aimed at housing homeless veterans. Almost all of the homeless veterans in the US were housed in numerous communities across the country during the last years of the Obama administration thanks to ample funding of rent vouchers. About 3,000 homeless vets were housed in Los Angeles from 2010-2016, but a booming economy has pushed rent prices beyond what the government was willing to pay, and the rate of homelessness among veterans began to rise. Solutions -Shelters and Housing

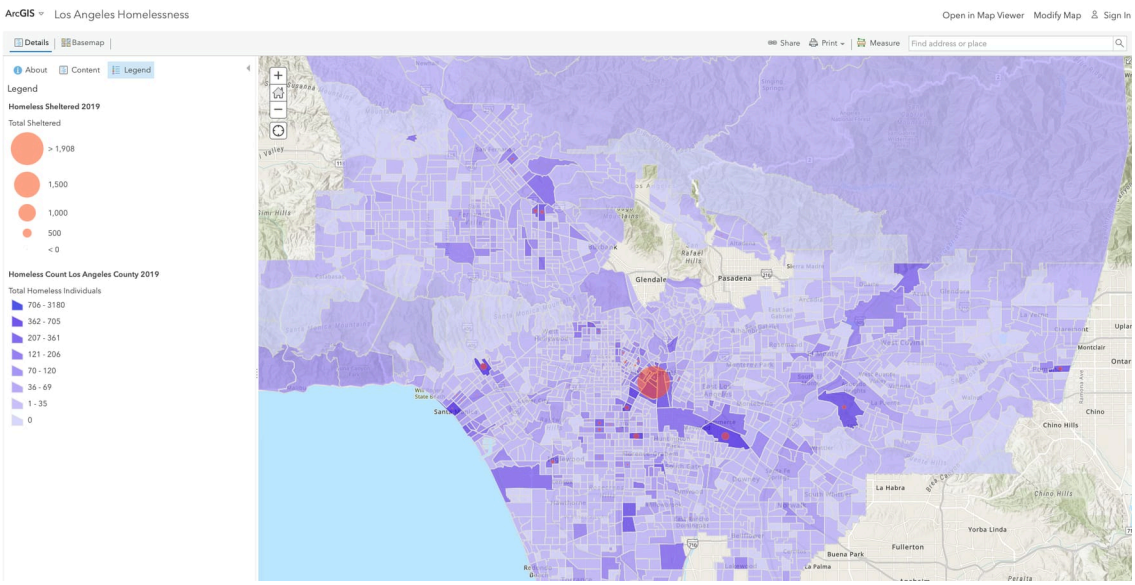



Figure 11-41: Map of Los Angeles California by number of homeless people and number of sheltered homeless persons. Interactive map.

Solutions to the crisis of homelessness have been difficult to identify, and even more difficult to fund. Addiction, mental illness, and poverty are clearly the driving forces behind homelessness, and societies have rarely been able, or willing, to adequately deal with those root problems.

Temporary shelters are a common tactic used by officials to address homelessness, but it is only a short-term solution. Shelters are just that – shelters. They generally don't have the capacity or funding to address the causes of homelessness, so they rarely help people get into permanent housings. The other problem with shelters is that, although homeless people come from many neighborhoods, homeless shelters are typically very concentrated in only a few neighborhoods. Many cities have a region known as Skid Row, a neighborhood unofficially reserved for the destitute. The expression originated as a reference to Seattle's lumber yard areas where workers used skids (wooden planks) to help them move logs to mills. Today, many of the shelters and services for the homeless are found in and around a city's Skid Row.

Los Angeles's Skid Row is one of the most famous such areas in the United States. It began simply as a place near the railroad station with a concentration of inexpensive hotels in the late 1800s, but over it, time attracted a variety of other businesses that catered to the down-and-out; and to a few of the pastimes that cause or exacerbate homelessness: drugs, prostitution, and alcohol. Over the years, city officials in LA have attempted to "clean up" Skid Row, without much success. Protecting the homeless, and ultimately the public, from outbreaks of disease, such as typhus, is occasionally necessary. However, arresting people for living in abject poverty on public spaces remain illegal, but more importantly – those actions do not address the root causes of homelessness and tend to just make things worse.

## Housing First

Most experts agree that some form of transitional housing is best for those who are made homeless by simple economic misfortune, and some form of supportive housing, the kind bundled with social services is perhaps a workable long-term strategy for the addicted and mentally ill homeless. The idea behind transitional housing is to provide some structure to people as they try to get their lives back together. That might include addiction recovery, medical recovery or just economic recovery. Many earlier efforts to provide housing for the homeless often required homeless people to be “clean” – off drugs/alcohol, or undergoing treatment for mental illness before receiving help getting housing. In recent years, homeless advocates have found addicts and mentally ill people are far more likely to seek treatment if they are housed first. These findings have been put into action in many cities in the US. In 2016, voters in Los Angeles overwhelmingly approved a bond measure to raise $1.2 billion for up to 10,000 supportive housing units, but by 2020 only a few units have been built. The hold-up seems to be the amount of bureaucratic red-tape associated with getting permits to build transitional housing, the constant threat of NIMBY backlash and the ever-rising cost of building housing. Recent audits of the bond funds for housing found that it will cost over one-half million dollars on average to build one unit of housing, although the City of Los Angeles remains committed to subsidizing the cost by $140,000. This is more than the price of many new condominiums being built and sold in Los Angeles! While it appears that the ever-increasing price of land in Los Angeles is partly responsible for the incredible cost of transitional housing for the homeless, there also appears to be some measure of corruption fueling significant cost overruns.

## LANDSCAPES OF HOMELESSNESS

Geographers with a developed awareness of landscapes may be able to read the landscape of homelessness, even when homeless people themselves are not present. Some elements are obvious and others not. As you make your way through cities, see if you can spot landscapes designed to address or undermine the needs/wants of a group of people.



"Bum Proof" benches


Tarps and Cardboard Shelters



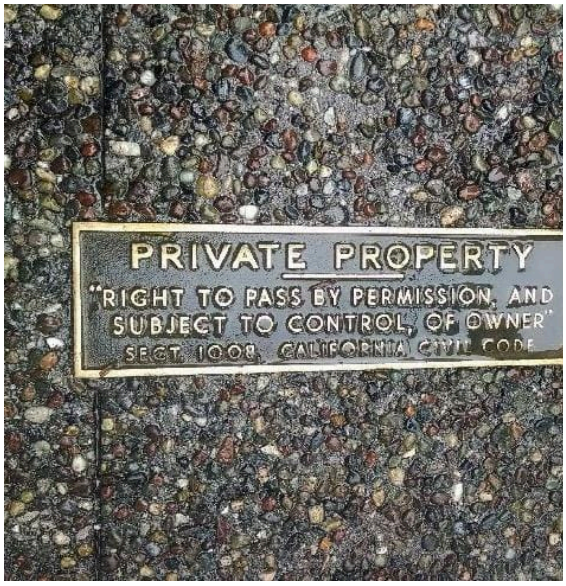
A long list of "don'ts" provided at public buildings



Abundant security cameras




tering sheltered locations, especially after a rain. The odor of urine can be




"No Trespassing" signs in public spaces

Landscape of Homelessness: Photos of Bunker Hill, a district in Downtown Los Angeles, where homelessness is largely invisible during the day provide clues to the vigilance of officials to keep homeless people out of sight. Photos: Heather McDaniel, Jason Larson, Mark Ba

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# 11.5: Cityas Place

In one way, cities are vast, complex machines that produce goods and services, but understanding cities as machines overlooks the very real emotional attachments many people develop for their place of residence. Most people would argue that cities have personalities; qualities that define them as a **place**. Some city people develop a sort of tribal attitude toward their city. This attitude is reflected most visibly in the fan behaviors and emotions people build around sports teams. It's not uncommon for citizens of a city to take great offense at derogatory remarks directed toward "their city", especially if those remarks come from an outsider. The love of a place is called topophilia.

## Symbolic Cities

How we know what we know about cities is largely bound up in symbolisms of cities provided us through countless media. Often people have impressive storehouses of knowledge, or at least opinions, about specific cities (New York, Paris, Hollywood) even though they may have never even visited. We also have powerful ideas about generic places like "small towns", "the suburbs", "the ghetto", even though we may not have visited these places. Clearly, this knowledge is imperfect and may very well be dangerously inaccurate to both us and those people who live in these places. It's important that we recognize how our knowledge of places has been constructed as we seek to understand what purposes these constructions of place serve.

## Meinig's Three Landscapes

Geographer Donald Meinig proposed that Americans have particularly strong ideas and emotions about three special, but generic landscapes: The New England Village, Small Town America, and the California Suburb. Scholars who specialize in the theory of knowledge would suggest these are landscapes are "always already" known; because the symbolism associated with them is deeply engrained in our collective thoughts, even though we are hard-pressed to identify how we came to understand the symbolism associated with these places.




Figure 11-42: Rockville, IN. Small towns across America's heartland represent a kind of generic place that evoke a specific set of notions about American values and norms.

Meinig's first symbolic landscape is the sleepy New England Village, with its white church and cluster of tidy homes surrounded by hardwood forests is strongly evocative of a lifestyle centered around family, hard work, prosperity, Christianity and community. He called its rival from the American Midwest Main Street USA. This landscape is found in countless small towns. Main Street USA symbolizes order, thrift, industry, capitalism, and practicality. It's less cohesive and less religious than the New England Village, and more focused on business and government. Finally, Meinig points to the California Suburb as the last of the major urban landscapes deeply embedded in the national consciousness. Suburban California symbolizes the good-life: backyard cookouts

with the family and neighbors, a prosperous, healthy lifestyle, centered on family leisure.So powerful are these images that they often appear as settings for novels, movies, television shows as well as political or product advertising campaigns. If you were a manufacturer of high-quality home furnishings, you may want to use the landscape of New England to help sell a well-built dining room table. Insurance companies, like to evoke images of Main Street USA when they want to sign you up for a policy; “like a good neighbor,” they might tell you, hoping you’ll trust the company, despite the fact that its headquarters is not in a small farming town. E.T., the famous movie about a boy who befriends a lost space alien is set in a “typical California suburb”. Like the other symbolic landscapes, movie audiences do not need to have the setting explained to them, they always already know what that place means. Certainly, there are other symbolic American landscapes. Can you think of any?

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# 11.6: Sound of the City

Music is an outstanding medium through which we can experience the sense of place associated with cities. Many songs evoke pride in a city. Others serve as reminders of well-known locations – especially to those homesick for familiar faces, streets, flavors, smells, and sounds. Cities are often anthropomorphized by songwriters who think of them as friends or even lovers. Anthony Kiedis of the Los Angeles based band, The Red Hot Chili Peppers sang, “Sometimes I feel that my only friend is the city I live in, the City of Angels. Lonely as I am, together we cry…” Although the song is about drug addiction, it serves as a powerful reminder of the emotional investment many people have with their cities. Wikipedia lists nearly 1,600 songs about Los Angeles alone, so anything more than a cursory listen is impossible. It is interesting to note that rap music lyricists often write prolifically about their cities, indicating the neighborhood/tribal origins of the music discussed earlier in this text. In the table below are a few well-known urban anthems, often heard at (tribal) sporting events to enhance the emotional bonds people have with their cities.

| | | | |
|---|---|---|---|
|  |  |  |  |
| Sweet Home Chicago<br>Buddy Guy | I Love L.A.<br>Randy Newman | New York, New York<br>Frank Sinatra | Lights<br>(San Francisco) Journey |

## ADDITIONAL LINKS

Los Angeles Homeless Services Authority, Website with data and maps:
https://www.lahsa.org/

Neighborhood Spotlight: Baldwin Hills/Crenshaw finds itself in transition again - LA Times

Los Angeles, Houston and the rise of the unreadable city

Mapping the Hidden Patterns of Cities - CityLab

Predatory Lending: Redlining in Reverse

Big backyards and pools are California’s past. Apartment buildings are its future - Los Angeles Times

See U.S. racial and ethnic diversity, mapped block by block

For many US towns and cities, deciding which streets to name after MLK reflects his unfinished work

Crime stats or coffee shops? How to spot the world's most gentrified cities | Cities | The Guardian

The Geography of U.S. Inequality - The New York Times

Opinion | The Racist Roots of a Way to Sell Homes - The New York Times

The Most Diverse Cities Are Often The Most Segregated | FiveThirtyEight

How Much Do You Love Your City? | Psychology Today

The problem with too much parking - The Washington Post

Study: Mapping Neighborhood Change in Chicago and L.A. Between 1970 and 2010 - CityLab

How railroads, highways and other man-made lines racially divide America's cities - The Washington Post

The Best and Worst Places to Grow Up: How Your Area Compares - The New York Times

Predatory 'home sale contracts' cost black Chicago homeowners billions in the 1950s and 60s: report - Chicago Sun-Times

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# 12: ECONOMIC GEOGRAPHY

**Economics is the social science focused on the production, distribution, and consumption of goods and services. It includes a wide range of our daily activities, including what we do for a living and how we spend our money. Nearly every economic exchange has a spatial dimension to it, and exchanges occur at multiple spatial scales. Economic geography helps us understand how wealth is created, distributed and moves between individuals, communities and even countries.**

A solid grasp of how the economy works is essential to understanding how almost any aspect of our society works. People who have a robust understanding of the mechanisms of our economy can often understand many issues that involve culture, politics, religion, ethnicity, and dozens of other topics. Economics was no doubt a key factor in your decision to come to college. It probably explains a significant part of why you are in this class or attending this college. If you see the power of money, and the influence of the economic system in the operation of daily life, you might find some value in the political-economic ideology of Marxism. You may find the Marxist social science methodology known as Historical Materialism useful. If you're not careful though, you might be accused of falling into the trap of economic determinism, which like some of the other deterministic views introduced elsewhere in this text, can lead to an over-reliance on a single causal variable. If you have been reading this text carefully, you will have recognized that the author is sympathetic to historical materialism as a tool for understanding social and cultural conditions. This chapter, however, focuses on applied economic geography.


12.1: Economic Sectors

12.2: Primary Sector

12.3: Secondary Sector

12.4: Free Trade and Protectionism

12.5: Business Geography

12.6: Site LocationAnalysis


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# 12.1: Economic Sectors

Nearly everyone must have a job of some sort, but what sort of jobs are available to you is often conditioned by where you live. Regions specialize in different types of industries because almost every city, town or village connected to the global economy needs to sell something of value to outsiders so things unavailable locally may be purchased. If a location is unable or unwilling to buy and sell with outsiders, it must, therefore, be able to supply all of its own needs, a condition, or economic policy, known as autarky, that requires a region to achieve complete economic self-sufficiency. Since almost no group of people is able, or willing, to live without goods and services from beyond their borders, nearly every group trades local products for imported ones. Locations unable to produce any good or service worthy of trade will be economically weak. Without an ability to engage in trade, locations face extinction.




Figure 12-1: Kahuku, HI: This sugar mill, now a tourist attraction, is a reminder of how natural resources often spur industrialization.

## Basic and Non-Basic Industries

Basic industries are economic activities that attract buyers from beyond the local region. They bringing wealth to the local region from some more distant region. These are **export industries**. A good example of a basic industry is the oil extraction in Saudi Arabia (or Texas). Essentially every local economic system must have at least one basic industry. Often this is called a **base industry**. Such industries permit a region to be economically independent from other economies. Without a local base industry, people in such a region would move away, or at least seek jobs in a neighboring region. **Non-basic industries**, on the other hand, are economic activities that do generate sales of a good or service to outsiders. For example, dentist offices are non-basic industries because dentists rarely attract customers from out of town. Most service sector jobs are non-basic in nature because they serve to circulate money within a local economy. Non-basic industries are ultimately dependent upon basic industries.

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# 12.2: Primary Sector

Traditionally, communities create economies from the ground up. Farming, mining, fishing, logging or other extractive industries that pull wealth from the earth are the basis for many local and national economies. Because the natural wealth of the earth is unevenly distributed, some places developed economically much faster than others. In locations where the earth provides opportunities to extract or harvest a particularly valuable commodity, like oil, wealth is likely to accumulate locally. Few economies thrive where the earth provides little.



Figure 12-2: Bemidji, MN - A man inspects harvested timber before it is processed into lumber for shipment in 1956. Timber sales are a basic industry in the primary sector of the economy Photo: Donald Kress

Extractive industries constitute the primary sector of the economy. The United States, like most other industrialized countries, is blessed with abundant natural resources upon which to build a prosperous economy. A principal factor in the poverty of many countries around the globe is a paucity of natural resources upon which to build the primary sector. People in many countries just can't coax or pull anything out of the ground which is valuable to outsiders.

A vibrant primary sector often provides quality jobs for locals, and brings in ample money from outside that locals are wise to invest to develop other sectors of the economy.

However, in many locations, an over-reliance on extractive industries creates as many problems as it solves. Pollution, destruction of the natural environment and ultimately, exhaustion of the natural resource, happens all too often. Sometimes, jobs in the primary sector are physical, dangerous and undermine the long-term health of those employed in this sector.

## Coal Mining

Coal mining in places like Kentucky and West Virginia is a good example of the risks associated with reliance on a sole extractive industry. Jobs in underground coal mines were especially dangerous for generations of men who braved the mines. The lack of quality career alternatives (like farming) in this region made coal mining one of the more attractive local jobs. Still, workers were recruited from Europe and the Deep South by coal companies to work in the mines of Appalachia. For many Appalachians, coal mining jobs allowed families to stay in the region, where farming was not profitable. However, coal miners often remained poor as a result of coal mining company policies. Miners often made reasonably good wages, but because many mining towns were so geographically remote, mine owners built company towns, in which the coal company owned nearly all the houses, stores and services. Some companies even paid workers using company scrip, rather than US dollars, which forced workers to shop only at company-owned stores. Massive strikes during both world wars helped coal miners increase their wages and benefits, but mine safety remains an issue. Tens of thousands were injured or killed in coal mine accidents over the years; many more contracted a variety of long-term health impairments, like black lung (see health chapter).

Compounding the personal tragedies associated with coal mining is the fact that the vast fortunes made from coal mining largely escaped Appalachia. The huge profits from coal went largely to coal company executives and company shareholders living elsewhere. The movement of profits away from the local economy is known as **multiplier leakage**. It represents the opposite economic effect of a phenomenon known as the multiplier effect in which the profit generated by one industry or activity generates additional economic activities. Because coal profits were spent or invested elsewhere, locals had less to invest in socially productive infrastructure, like schools and universities that, in turn, might have paved the way for the creation of additional economic opportunities in the region – a process known as **economic diversification**. Today, once-thriving mining towns that no longer have coal to sell are often abandoned (or nearly so). In Appalachia, the exhaustion of coal reserves, competition from cheaper alternative energy sources (e.g., natural gas, solar, wind) and environmental regulations discouraging the use of high-sulfur coal have crippled the coal economy of Appalachia in the last few decades. Similar conditions and processes often characterize long-term trends in other extractive industries, including logging, fishing, farming, and quarrying.

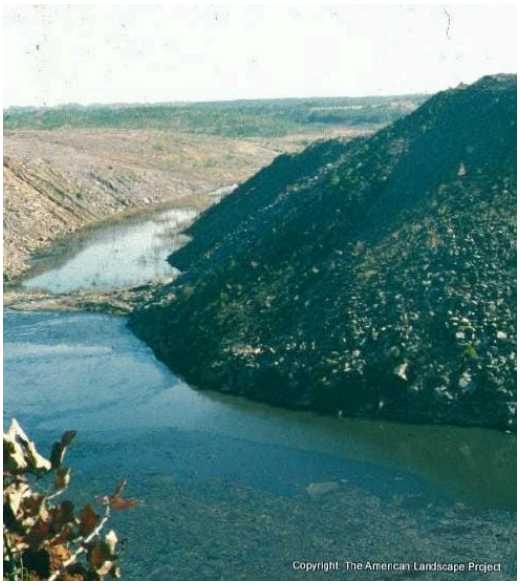



Figure 12-3: Brookwood, AL - Coal Slag. Waterways near this coal mining operation in Alabama were highly polluted by the industrial offal of the nearby mine.

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# 12.3: Secondary Sector

Under ideal circumstances, the presence of an extractive industry helps attract lucrative manufacturing jobs in the secondary sector of the economy. Secondary sector industries take materials extracted by workers in the primary sector (iron ore, crude oil, corn, fresh fish, etc.) and manufacture them into useful products (iron pipes, gasoline, cornmeal, fish sticks, etc.) Generally, the transformation of natural resources into a finished product is called “manufacturing”, but secondary industries also include things we might not consider “manufacturing”, like oil refining and food processing.

Like extractive industries, manufacturing has great benefits and dire consequences if industrialists and local politicians manage the industries poorly. Because manufacturers convert items with little use value (like logs) into something with greater use value (like a dining room table), manufacturing activity often generates large unit profits or value added per unit. Sometimes, if labor conditions are right, a substantial portion of the profits generated by added value during the manufacturing process returns to workers in the form of high wages. For much of the $20^{th}$ century, good-paying manufacturing jobs permitted millions of American workers to enjoy a very high quality of life, even though they did not require extensive education or training. Many of those jobs have disappeared; lost to international competition, stockholder greed, and pro-business (anti-union) government policies.

## Factors of Production

Land, labor, and capital traditionally constitute the main costs of building and running any business. This is especially evident for manufacturers. Together, these costs are known as the factors of production. The cost of each factor is critical to the profitability of businesses, and therefore critical in the decision-making processes that create landscapes of business and industry. The process of picking a location for a factory is known as **industrial site location** analysis, and it is a very lucrative career path for economic geographers. New factories can cost over a billion dollars, so it’s important not to put them in a location that undermines profitability!

## Labor

Industrialists would like to hire high skilled workers that work for free, but workers need to be paid, and that pay includes wages and often includes the cost of fringe benefits like health care, retirement, etc. When workers require little training or skill to master the tasks necessary to produce a product, it is known as low-skill manufacturing. Companies need mostly low-skill laborers generally seek locations with a low cost of living because workers in such locations accept lower wages. If the cost of labor contributes a significant portion of the overall cost of producing a good, and there are no significant restrictions on the movement of that industry, those industries tend to move often in search of cheaper labor. Industries that move easily, without negative consequences to their profitability are called footloose industries. The textile industry is a good example of a footloose industry. Some industries require highly skilled workers, which raises the cost of labor and reduces the number of possible locations where such industries locate. High skill labor, like computer programming, often spurs local inflation in wages, housing costs, etc. California’s Silicon Valley is an excellent example of this process.



Figure 12-4: Lowell, MA - Textile Mill. Built upon the availability of reliable water power, transport advantages and cheap labor, New England was the first industrial heart of the United States. Wikimedia

## Textile Manufacturing

In many parts of the world, the manufacture of clothing (textiles), is an important first step in the process of industrialization. Most of the first textile factories in the US were built in New England in order to take advantage of the power generated by numerous waterfalls along the region's fall line. Gravity powered water wheels provided power to factories built next to numerous mill ponds. These factories employed inexpensive female labor (mill girls) drawn from regional farming communities. Textiling endured in New England for several generations, coming eventually to rely on cheap immigrant labor after native born workers fled textile factory jobs for better-paying jobs in other industries. Eventually, waterpower gave way to electrical power, freeing factory owners to move away from fall line cities. By the 1900s, factory owners in New England began moving factories to southern cities like Charlotte, North Carolina where land and labor were cheaper. Southern factories also were closer to cotton farms in nearby states, reducing transport costs for raw materials. Unfortunately for textile workers in the southern US, the labor and transport advantages that lured factories to the South, also led them away.

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# 12.4: Free Trade and Protectionism

With the passage of the North American Free Trade Agreement (NAFTA) in 1994 an estimated 300,000 jobs in the textile/apparel industry were lost, many to Latin America and Asia where wages are much lower. Other low-skill industries moved to Mexico, China and elsewhere greater profits were available for factory owners and shareholders. The cost-benefit analyses that are generated by free trade agreements, like NAFTA, generally focus on calculating the costs associated with job loss among low-skill workers against the reduction in costs for imported goods to consumers. In the case of NAFTA, there were also a few instances of job creation in the US, even in some manufacturing sectors. NAFTA brought some manufacturing jobs from Mexico to the US. For example, Cummins, a manufacturer of diesel engines for large trucks in Mexico prior to NAFTA. After the free trade agreement eliminated the Mexican import tariffs on American-made engines, Cummins closed their factory in Mexico and production relocated to Jamestown, New York.




Figure 12-5: Niagara Falls, Canada. This tractor-trailer rig parked in Canada at the US border, was leased by NAFTA trucking company from McAllen, TX on the US-Mexico border. Ironically, it is powered by a Cummins diesel engine, which could have been manufactured in Mexico prior to NAFTA (trade agreement) but after NAFTA was surely built in the United States.

The principle of comparative advantage is the key factor driving the location and re-location of industrial operations. Essentially, the logic behind the principle of comparative advantage forces countries engaged in free trade to specialize in the production of goods they produce most efficiently. In other words, under comparative advantage, locations focus on producing things they make cheapest, fastest and best. Locations should not try to build or grow things that they cannot build/grow efficiently. Instead, they should import those things from locations that specialize in that crop or product. Industrial systems benefit because inefficient industries are abandoned in favor of ones that are more efficient. Efficiency is profitable and consumers benefit because they can buy higher-quality goods for less money. This is small comfort to workers who lose jobs to lower-wage, or more efficient rivals elsewhere.

## Containerization

Although wage competition and the declining quality of some American-made goods damaged America's manufacturing sector during the 1970s and 1980s, one of the most important, yet least discussed, factors in the downfall of US manufacturing was the widespread adoption of the humble intermodal container. Invented in the 1950s, these simple metal boxes revolutionized the shipping industry and affected competition in the manufacturing sector. These containers were designed to be easily filled with cargo, stacked quickly upon one another (almost like Legos) thereby reducing the cost of shipping. Containers are also intermodal, which means that trucks, trains, barges, and ships can all transport goods in the same steel boxes. Eventually, multiple shipping companies adopted a standardized size and design allowing competing companies to mix and match cargo on a single transport carrier. The effect on the cost and speed of delivery was profound. In the 1950s, even small cargo ships took many hours to be unloaded by a large team of dockworkers (stevedores). The process was slow, inefficient and very costly. A train or series of trucks

awaiting the cargo from the ship would then have to be reloaded by another team of dockworkers. The process is called breaking bulk. Each break of bulk represents a tax on the cost of each transported product each time it is loaded or unloaded. Breaking bulk, as you remember, was a significant factor in the creation of large cities because of the labor and warehousing needs it created. Today, thanks to containerization, a few people, with the help of large gantry cranes can unload massive container ships, and simultaneously reload containerized cargo onto intermodal trains or a fleet of trucks in a matter of hours. Thousands lost their high paying jobs at the docks thanks to intermodal containers. Hundreds of thousands lost their manufacturing jobs to overseas competition because the cost of transporting goods from places like China or Mexico fell so dramatically that goods coming from foreign factories now have shipping costs similar to goods produced locally.

## Import Substitution Development

Many countries or regions find that adhering to the principle of comparative advantage works poorly for their economies and people. Certainly, the manufacturing regions of America's Rust Belt suffered from the effects of comparative advantage as America increasingly embraced free-trade. Michael Moore's well-known documentary Roger & Me is a tragic-comedy about the consequences of General Motors' decision to move manufacturing jobs from Michigan to Mexico. Governments in places unable or ill-equipped to compete in a free-trade environment often turn to a variety of trade barriers to protect industries from outside competition. Import tariffs, import quotas, and safety measures are just a handful of strategies used by protectionists to reduce foreign competition. Many countries, particularly in Latin America, adopted a policy known as import substitution industrialization which severely limited the importation of manufactured goods. Generally, they tried to protect their so-called infant industries, at least until those industries grew enough to compete on the world stage.

The strategy had some local successes, especially in terms of encouraging the development of low-skill manufacturing (textiles, electronics, etc.). However, the small **domestic markets** of many of these countries made it difficult to develop capital intensive, heavy industries, like automobile manufacturing, even with trade protectionism policies. Import substitution policies were also discouraged by capitalist countries, like the United States, even though most economically developed countries, like the US, pursued similar protectionist policies during the 19$^{th}$ century. Many of the overt import substitution policies were abandoned by the 1990s, partly upon the insistence of the International Monetary Fund, a global finance organization that refused to lend money to governments that persisted with protectionist policies. Though officially frowned upon by nearly every industrialized country today, almost every government engages in a variety of clever protectionist practices designed to shield home industries from foreign competition. Breaking with the Republican Party, President Trump embraced numerous protectionist policies, raising tariffs on a variety of goods including washing machines, solar panels, steel, and aluminum. Imports from places like China, Mexico, and Korea fell as the prices of those goods rose for consumers. Not surprisingly, those countries retaliated by raising tariffs on American goods, especially agricultural products, shipped to those countries.

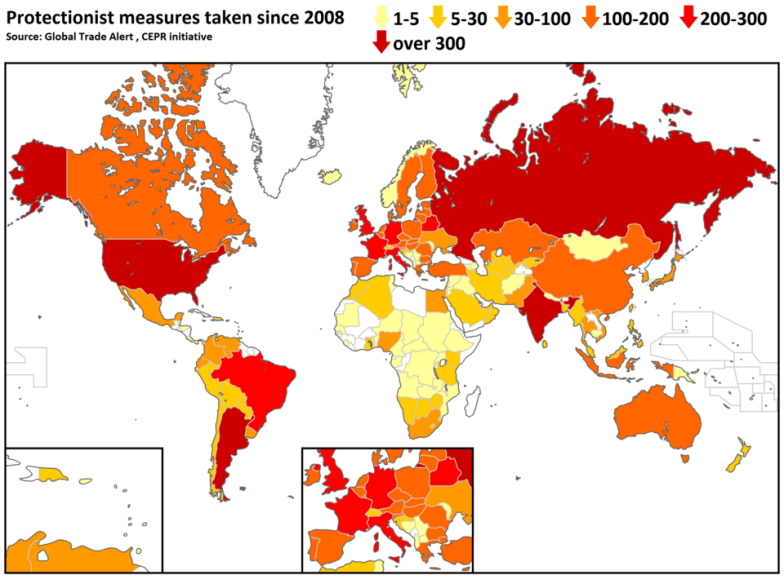



Figure 12-8: World Map - Most governments, including the United States, engages in protectionism despite repeated condemnations of the practice. Source: Wikimedia .

# Land

The cost of land is another major consideration for those who want to build a factory. When the raw materials needed at a factory are cheap to transport or widely available (like water), then factory owners have more options in terms of location. Generally, that is not the case - locations vary wildly in terms of profitability. Some land is just too expensive for industrial purposes. Factories are rarely built near downtowns, for example, because cheaper land is available at the edges of cities where land is more plentiful. Factories remaining in crowded, inner-city neighborhoods also often suffer from spatial diseconomies of scale because freight (truck) access is difficult and slow. Taking delivery of materials and shipping finished goods over congested street networks and/or jammed freeways increases costs and reduces profits. Locations near uncrowded freeways are ideal because they permit both workers and materials to easily travel to and from a factory. If rail or water transport access is available, then transport options become even more cost-effective.

## Weber's Location Model

Most manufacturers have complex sets of material and delivery costs to consider before locating a factory. Alfred Weber's Least Cost Location Model provides site location analysts with a basic tool to evaluate several weighted input considerations. In the most basic version of the model, only transportation costs are considered. Therefore, the best place for a factory is closer to the input or output with the highest transport costs. In the example illustrated on the right, the factory (F1) is located nearest supplier 4 (S4) because transport costs are highest from that location. Should the cost of transportation to T1 (the town) increase significantly, the least cost location for F1 would move toward the top of the triangle. There are, of course, other factors worthy of consideration when siting a factory, but Weber's model remains an important tool as people choose where to build factories today.

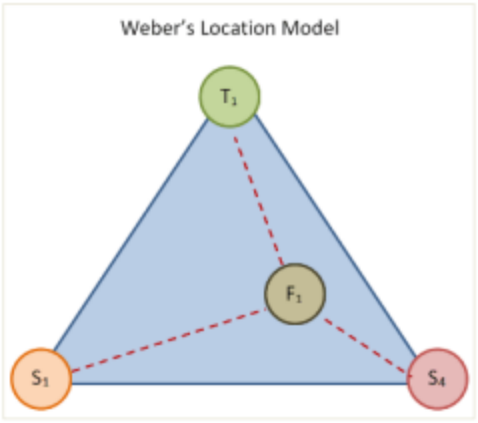



Figure 12-9: Infographic. Weber's location triangle helps us understand that the least cost location for certain economic activities is dictated by the cost of transportation.

## Bulk Reducing – Bulk Gaining

The nature of the specific manufacturing process also has implications for where some products are made. For example, if the finished product made by a factory is cheaper to ship than the raw materials, then it makes sense to manufacture the product close to the source of the raw materials. Factories that operate under this condition are called bulk reducing industries because the finished product is lighter, or cheaper to transport than the raw materials. Geographers, therefore, note that these products have a raw material orientation.



Figure 12-10: Simsboro, LA. Abundant forest lands and the difficulty of efficiently transporting logs require sawmills be placed as close to the forest (raw material) as possible.

The lumber industry is a great example. Logs are expensive to transport. It would be very inefficient to ship logs directly from the forest to your local Home Depot without cutting the logs into boards first. Instead, logs are trucked to sawmills built near the forests where trees are felled. Sawmills process logs (timber) into boards (lumber) that can be neatly stacked on a truck or train car that efficiently (cheaply) transports the lumber to market. As a bonus, portions of the log unusable as lumber, including sawdust and wood chips, that remain after milling can be used to make additional products like plywood and particleboard, which can also be stacked and efficiently shipped.




Figure 12-11: Rainier, OR - Rail cars containing logs and lumber wait delivery to the sawmill and lumber yards respectively. Milling operations co-locate here near forests and shipping opportunities to cut transport costs.

The same logic that informs the location of lumber mills push other industries to do just the opposite. These are **bulk gaining industries** that have a **market orientation**. These sorts of industries make products that get heavier and/or more expensive to transport during the manufacturing process, and the main input is widely available. Coca-Cola is a good example. The "secret recipe" for Coke is kept in a vault near company headquarters in Atlanta, Georgia, where most of the world's supply of concentrated Coca-Cola syrup is produced. Since the main ingredient in a bottle of Coke is water, which is available in all big cities, it makes no sense for Coca Cola to manufacture soda in Atlanta before shipping it to the rest of the world. Instead, Coca Cola ships only the concentrated syrup from Atlanta in large drums to thousands of bottling plants around the world, where local water, sweeteners, and carbonation are added to the syrup as the mixture is placed in cans/bottles just before the cans/bottles are sealed for shipment. Each bottling plant is franchised, and each franchise is awarded a specific geographic distribution region within which it has exclusive rights to manufacture and sell Coke products. Because each franchisee uses local water, Coke and Pepsi often taste different when you buy one in another town.

Workers employed in industries with significant location constraints often make higher wages than those working in footloose industries because industries with significant location constraints cannot profitably move production elsewhere in search of lower wages. Workers in locationally constrained industries engage in less wage competition than workers in footloose industries. For example, dockworkers at major ports can negotiate very high wages because of the great difficulty of re-locating a port.




Figure 12-12: Dublin, Ireland. Guinness Stout is brewed exclusively in Dublin to preserve the taste. This business model is highly unusual for major beer companies who chose to bottle locally rather than ship globally.

## Capital

The final factor of production and commonly considered by those making industrial site location decisions is capital, or, investment money. Investors are necessary for industrialization. Capital comes from investors, who may be wealthy individuals, groups (shareholders) or banks that specialize in investment capital. A special type of investor, known as a venture capitalist, specializes in making high-risk loans to startup companies in hopes of reaping great rewards if the fledgling company "makes it big". Some regions have many venture capitalists and/or ordinary investors, and other regions do not. California has a great number of venture capitalists, and their willingness to take chances on new ideas and technologies are partly responsible for California's robust tech industry.

Capital has other forms as well. Investments to upgrade existing factories, for example, may make workers more productive, and occasionally makes workers unnecessary when robotic machinery replaces workers. This sort of capital boosts productivity and profits, though it may eliminate jobs. Capital affects other less visible factors of production, and not all of it comes from companies who reap the rewards. Governments are a very important source of indirect capital for many companies. Because it is indirect, many Americans, conveniently (or purposefully) overlook the role of government in the establishment, promotion, and maintenance of all sorts of businesses. Highways, airports, port facilities, universities, public schools, etc. are tax-funded investments that businesses use to make a profit. In other parts of the world, especially Asia, governments work directly with businesses to promote the interest of businesses.

Indirect government capital is the reason why factories do not always locate in the locations with the cheapest labor. In recent years, many US jobs have gone to China where wages are low. But that logic doesn't compel factory owners to move to Zaire, Haiti or Guatemala where wages are even lower. Why? The answer is government capital. Efficient governments, like China's, work very closely with companies to attract the investment necessary to build and equip factories. Governments in some developing countries may not have the resources needed to attract foreign investors. Many governments are also absurdly corrupt. So, even if factory owners wanted to locate where labor is cheapest, a variety of government-supplied infrastructure investments are often absent in the regions with very low wages. Industries need quality roads, bridges and port facilities for shipping and receiving. Factories need adequate electrical power, fast and reliable internet, and phone connections. Factories need educated workers, so governments must invest in their children, and not just the boys. Workers must be reasonably healthy, so countries with government-run health care systems are attractive to factory owners because workers are healthy, and factory owners do not have to pay for expensive health care for each worker.

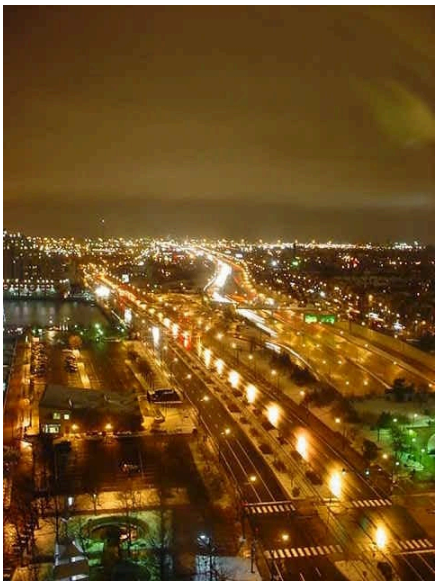


Figure 12-13: Philadelphia, PA - Miles of highways, streets, electrical lines are among the hundreds of government investments that benefit industry. Geographers see these relationships in images such as this.

Human capital is also necessary – and this may be less a factor of cash investments. Factory operators need workers who are culturally ready for the regimented grind of factory life. A very important component of industrialization appears to be the availability of a pool of qualified women to work in factory settings. This sits at the intersection of economic capital and cultural capital. If family, government and cultural systems discourage or prohibit women from engaging in wage labor, chances are poor that such locations will enter the modern world economy. In regions where conservative versions of Islam, Hinduism, and Christianity are dominant, numerous well-educated female workers can be scarce. Other cultural elements that contribute to the likelihood of industrialization are things like worker honesty, loyalty, and pliability, among others.

## MOTOWN VS SMALLTOWN

Cultural, political and economic conditions have contributed to the redistribution of the industry within the United States as well. Automobile manufacturing, for example, was for many years, the most important US industry. Detroit, Michigan was the headquarters of automobile manufacturing giants Ford, General Motors and Chrysler. In the early years of the Automobile Age, Detroit had several geographic advantages over other cities that built cars. Detroit had plenty of industrial laborers and vast hardwood forests that supplied wood for car bodies and wheel spokes. They luckily also had some human capital as well. Entrepreneurial engineer types, particularly Ransom Olds (Oldsmobile) and Henry Ford, pioneered manufacturing strategies in Detroit that helped their companies build reliable, inexpensive cars for a mass market. Other companies soon emerged from the original companies and competition bred innovation.




Figure 12-14: Tuscaloosa, AL - Daimler-Benz built a factory in Central Alabama where they could take advantage of a quality but placid work force, access to domestic and overseas transportation network and generous subsidies from local and state government.

By the 1970s, Detroit's dominance in the automotive market and a lack of competition within the industry had allowed the auto industry to become a three company oligopoly, that bred industrial complacency. American cars in the 1970s were poorly built, overpriced, gas-guzzlers. After the price of gasoline skyrocketed Japanese cars became popular. Japan had been making small cars that were fuel-efficient for many years. Honda and Toyota also had pioneered several manufacturing techniques and strategies that allowed them to make cars that were more reliable and cheaper than those that were built in Michigan.

A significant retooling of the American automobile industry occurred in the 1980s, and a key element of it was a spatial reorganization of the industry. American, Japanese and German auto companies all built new factories in the US, but no new factories were built in Detroit. Instead, auto factories closed in Michigan. The new factories were often built in small towns within about 200 miles of Cincinnati, Ohio because that area is the least-cost location for both the receipt of parts into factories and the shipment of new cars to American consumers(see figure above: Weber's Triangle). BMW, VW, and Mercedes Benz built factories further south because more of their parts and customers were international, and being closer to ports was important. None of the post-1980 car factories were built in large cities. Automobile companies sought rural, or small-town employees because they sought workers who were anti-union, pliable, hardworking and happier with their pay in a low wage environment. Small town plants became the rule. Marysville, Ohio; Georgetown, Kentucky and Spartanburg, South Carolina got new factories, while cities like Detroit, Cleveland, and Buffalo lost them. Even the Chevy plant in Van Nuys, California was closed.




Figure 12-15: Map of automobile assembly plants in the Eastern United States. Tesla is the only car factory on the West Coast.

In the 1980s, American car manufacturers adopted another key Japanese business innovation called just in time delivery. Rather than building warehouses to store car parts (bumpers, tires, fenders) near main assembly plants, companies like Honda have the parts they plan to use assembling cars delivered daily thereby eliminating most warehousing jobs in the supply chain. Quality control is better with just-in-time delivery because if a supplier is sending defective parts the problem is evident immediately before thousands of defective parts are shipped to the main assembly plant. Suppliers to the main manufacturing plant, therefore, must be within one day's drive of the main assembly point. As a result, in the 1980s, numerous parts factories were built in small-towns surrounding main assembly plants. Various sub-assembly plants compete to win contracts with the main manufacturer and driving them to seek low-cost, non-union labor. Generally, this puts downward pressure on wages, benefits; undermining gains made by union workers and others.

Just-in-time manufacturing was very different from the supply chain strategies used by most American factories in the 1970s. Consider that Ford's River Rouge factory at one time was the largest integrated factory in the world, at over one-mile in length and over a mile wide. Iron ore was delivered to one side of the factory and finished Ford Mustangs came out the other. One hundred miles of railroad tracks inside the mill helped keep production rolling. Workers used bikes to pedal from one part of the factor to the other. Almost all who worked there were well-paid members of the United Auto Workers union.

However, the spatial economics of the plant were less efficient than just-in-time manufacturing, so Ford's River Rouge plant was shut down in 2004, after nearly 80 years of operations.

Just-in-time production allows car companies to outsource a lot of the work once done by union workers to non-union plants scattered around the Midwest. Union workers lost leverage in their struggle for good benefits and higher wages. However, just-in-time delivery created opportunities for workers in some parts plants (e.g., brakes manufacturer) to interrupt the entire supply chain. Since no large inventory of any single part is kept at the main assembly plant, workers in a parts sub-assembly plant can go on strike, which forces not only the main assembly plant to stop but all the other parts suppliers must stop as well because suppliers do not produce parts without an order from the main plant. Workers in a unionized factory in Dayton, Ohio did just that in the mid-1990s, causing nearly all of the General Motors assembly plants, and numerous sub-assembly plants to shut down.

## Tertiary Sector

Jobs in the service industries have grown faster than any other part of the American economy since 1970. These jobs are in the tertiary sector and people working in these jobs handle the products created in the primary and secondary sectors of the economy. So you work in the service sector if you transport goods, sell goods or somehow help others use those goods. Service sector jobs include things like flipping hamburgers or selling shoes, but it involves a lot more. Entertainment, tourism, media, healthcare, financial and legal industries, and education are all in the broadly defined service sector. Before the 1980s, far more Americans worked in the primary and secondary sectors of the economy. Around 1970, a dramatic increase in the service sector, which now accounts for more than three-fourths of all jobs in the US. In some regions, that percentage is even higher.




Figure 12-16: Ruston, LA - Wal-Mart has come to dominate the retail landscape of many small towns in the US, and their treatment of employees embl of the post-industrial, service economy of the US.

Some service sector jobs are well-paying, but others are not. The growth of the service sector has been in part responsible for a bifurcation of the American economy. In the 1950s, nearly one-third of all US jobs were in manufacturing. Many of those jobs were relatively low skill, not requiring a college degree, but still paid good wages. As those jobs disappeared in the 1970s, Americans turned to service sector jobs. For workers in some places, manufacturing jobs were replaced by clean, safe, well-paying service sector jobs, like computer programming. Many regions in the US haven't been so lucky. Workers in those locations were forced to either move or to accept low-paying service sector jobs, like working at Wal-Mart. As a result, since the early 1980s, the lower middle class has gotten much smaller, while the size of the lower class (working poor) has exploded. At the same time, pay for people in the upper-middle class has grown somewhat. The wealth of the tiny upper class, or so-called "one percent" has skyrocketed. The result is a widening gap between the haves and the have-nots.

## Gini coefficient

Social scientists measure wealth inequality with a statistic called the **Gini coefficient** and graphing the change in the Gini coefficient shows how the gap between the rich and poor has widened over time. The Gini coefficient is a relative measure of wealth not an absolute measure of income. In other words, the average American may or may not be poorer than they used to be. They may even make a bit more money, or have a few more things. What is certain though is that average Americans are poorer relative to the wealthiest among us.

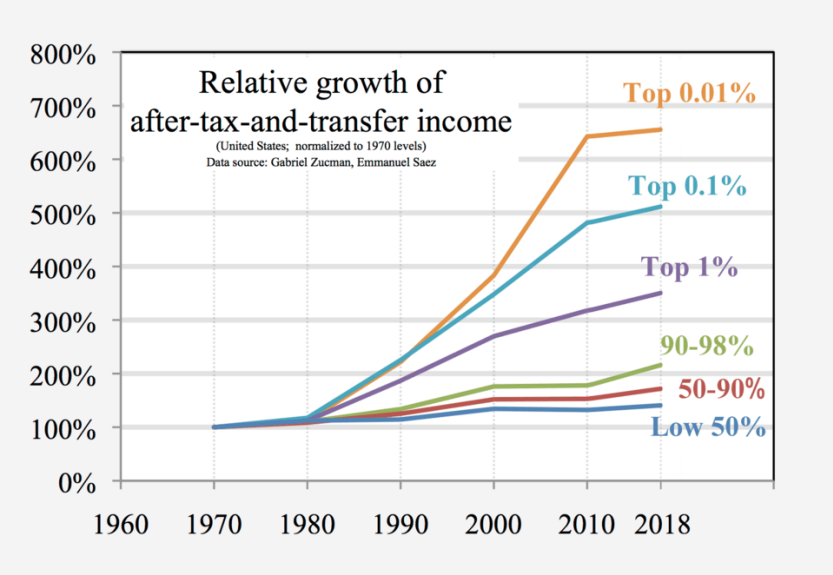



Figure 12-17: Infographic. Households in the top percentiles of the economy have made great strides in improving their situation, while those at the bottom of the social ladder have improved only marginally (inflation adjusted to 1970 dollars). Source: US Census, Wikimedia.

The gap has grown much faster since 1980, as the United States underwent both economic restructuring away from manufacturing and adopted the logic of **supply-side economics** (Reaganomics) to restructure both the tax structure and how we spending tax money. The economy has grown greatly since 1980, but little of the benefits of this growth has gone to average Americans. The Great Recession of the late 2000's made it worse. Most Americans therefore just feel poorer, which may seem a silly thing to worry about, but feeling poor has significant effects on things like health outcomes, crime, and psychological health. In recent years the pattern of income equality in the United States has come to look much less like the pattern found in Europe, and more like that found in developing economies of Latin America.

The Gini coefficient also varies considerably within the United States. As noted earlier in this text, income inequality is lower in many of the farming states where the national grid system created a vast array of equal-sized farms. Utah, with its unique religious, cultural and ethnic profile has the lowest (most equitable) Gini coefficient. Other states with homogeneous populations also have low Gini coefficients. In some wealthy states (New York, California Connecticut), where great there is a great variety in ethnicity, religion, and culture coupled with exceptionally lucrative industries (software, banking, entertainment, etc.) wealth inequality is high. States in the Deep South (Louisiana, Mississippi, Alabama, Florida) with a strong legacy of racism and minimal government investment in education also rank high in terms of inequality; while at the same time counting among the poorest states in absolute terms.

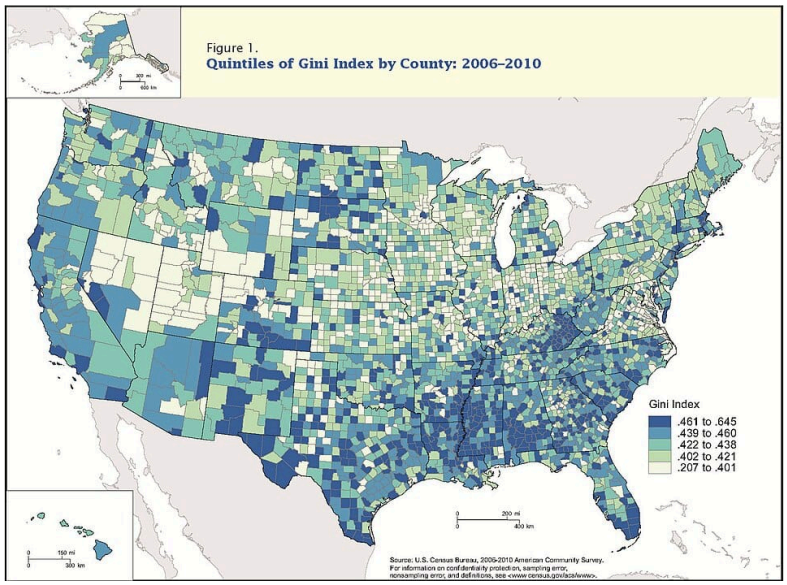


Figure 12-18: Gini Coefficient by County. Source: Wikimedia

In many of the poorest regions of the United States, low-paying service sector jobs dominate the local economy. Most of these service sector jobs, especially in retail, are non-basic, which you will recall, indicates that they do not bring money in from outside the local area. Depending on the ownership of the retail operation, some retail stores, like Wal-Mart effectively remove more money from the local economy than the jobs create helping impoverish local people via a process opposite the multiplier effect.

## Wal-Mart

Locally owned and operated businesses tend to circulate money within a local economy. Large retail chain stores, though they may employ many dozens of people, often pay little and rarely do their profits stay local. This effect has been called the **Wal-Martization** (sometimes Wal-Marting) of the economy by some observers because Wal-Mart pays poor wages and provides few benefits.

Wal-Mart's business model has negative consequences for the economic structure of many small towns. Wal-Marts are accused of bleeding local economies dry by squashing locally owned (mom and pop) competition in the retail sector using their massive advantage in economies of scale. Wal-Mart also undermines businesses that do business with locally owned rivals of Wal-Mart. Manufacturers, transportation workers, and even local radio/newspaper businesses often suffer when Wal-Mart comes to town.

A large service sector can be beneficial if jobs are well-paying quality and/or function as generators of basic income. Los Angeles, for example, has a large service sector. A significant number of service sector jobs in L.A. are in the entertainment industry. People that work in television, movie, and music production are numerous and many are well-paid. Tourism also thrives in Los Angeles and though there are many more low paying jobs (hotel workers, e.g.) within the tourism industry, these jobs represent a significant source of basic income for the economy of Southern California, which generates a multiplier effect.




Figure 12-19: Natchitoches, LA - This general store manages to remain open in this small town in Louisiana, thanks to its touristy appeal. Most similar "mom and pop" operations fail competing with Wal-Mart.

## Tourism

Tourism is likely the world's largest industry, employing more people and generating more revenue than any other economic activity. Locations attracting numerous visitors are lucky. Not every place is attractive to tourists. Tourism can be great because it functions as a valuable source of basic income, especially in locations where extractive industries and/or manufacturing is not possible or profitable. Remote locations, in mountains or along seacoasts with nothing but great scenery and relaxation can attract visitors and their money.

Tourists are defined by their spatial behavior. Generally, if you stay more than 24 hours in a location outside your hometown, then you are considered a tourist. California is, by a wide margin, the top destination for Americans traveling within the US. If you stay a day or more in another country, then you are an international tourist. While European countries rank consistently high for the total number of international tourists, the United States easily outpaces all other countries in terms of the amount of money spent by international tourists. International tourists favor New York, Florida, and California by wide margins. Domestic tourism is important as well.

Tourism geography is an exciting sub-discipline within geography. Part of what makes it so interesting is analyzing the variety of strategies and tactics used to attract visitors. Nice beaches and warm weather are major attractors(Hawaii, Florida, California), but people also will visit a desert wasteland if the right type of entertainment can be provided (Las Vegas). Amusement parks (Disney), historic sites (the Alamo, the Washington Monument), unusual natural features (Niagara Falls, Grand Canyon) sporting venues, and even museums can be major attractors. In recent years, festival mall spaces, like the Mall of America near Minneapolis, Minnesota have become significant tourist hot spots, attracting tens of millions of visitors annually. Small towns and locations without exceptional natural resources frequently market themselves as "historic" or "quaint", or rely upon themed festivals to attract people from out of town. Most are not successful.

Tourism, if well managed, may also be minimally damaging to the environment and even promote ecosystem conservation (ecotourism). Yosemite National Park, for example, draws nearly four million visitors yearly, and in turn, generates millions of dollars for the regional economy all the while ensuring the maintenance of an exceptional natural resource. Meanwhile, the neighboring Hetch Hetchy Valley, damned by the Federal Government in 1923, attracts only a few visitors (though it does supply water to the Bay Area). Ecotourism may serve to help protect endangered rainforests, the Serengeti Plains in Africa, glacial regions of the Arctic and Antarctica, among others.




Figure 12-20: Ft. Stockton, TX - Paisano Pete, a statue of a roadrunner, serves as a tourist attraction in a remote town in West Texas. It reminds us of the lengths some locations will go to attract tourist dollars.

Poorly managed, tourism fails to benefit local economies, causes environmental havoc and endangerslocal cultural traditions. Tourist destinations in many developing economies are almost completely run by outside interests. If you were to visit Cozumel, Mexico for example, you might arrive on an American-owned cruise ship or airline. You might go snorkeling, but you may find the coral reefs damaged by the construction of the deep-water port where your cruise ship docked, and the effluent from an overtaxed sewage system not designed to handle thousands of tourists. If you stay in an "All-Exclusive" resort (and there are many), your vacation dollars probably pay local housekeepers, kitchen workers, and maintenance men, but the profits probably go back to the ownership group in the US or Europe. This is part of a classic economic problem known as the **multiplier leakage**. The overall benefit to locals might be minimal or even harmful in the long-run. Still, most locations work very hard to establish a vibrant tourist economy.

## Quaternary Sector

Around 1970, advances in communication technology touched off an information revolution that today is an integral part of all industries. So important is the collection, management, and analysis of data, that some have suggested that this part of the service industry should be removed from the tertiary sector and placed in the quaternary sector of the economy. Education, government and financial planning are part of the quaternary sector, but most of the focus is on high-tech software and information technology jobs.

High-skill information sector jobs come with good pay, solid benefits, little pollution and a generally higher quality of life. Although these kinds of jobs require a substantial investment in human capital by local governments (i.e. education), generating information sector jobs has become a key objective of many local/regional economic development efforts. California's Silicon Valley, unofficially headquartered in Palo Alto, is the model high-tech region that other regions try to copy. The evolution of Silicon Valley into the high-tech capital of the world has been a topic of intense study by geographers, economists, and historians for many years. Most agree that pre-existing aerospace and defense industries located in California were a key starting point for the semi-conductor industry that gave birth to the computing revolution. Fueling the high-tech industries in the region were several universities, chief among them Stanford, which actively engaged in partnerships with local businesses, like Hewlett-Packard, Xerox and Bell Telephone. There was also an ample pool of venture capitalists willing to take chances investing in experimental electronics. However, those factors alone don't seem to explain the extraordinary success enjoyed by tech companies in the Bay Area. After all, lots of places have elite universities, defense industries, and venture capitalists. California's peculiar cultural climate appears to have played a significant role in the evolution of Silicon Valley into the pre-eminent center of high-tech innovation in the world.



Figure 12-21: Palo Alto, CA - Stanford University was a key element in the development of the Silicon Valley high tech region in California.

## THE CREATIVE CLASS

A series of spatially-informed research studies by Richard Florida suggests that culture is especially important in the development of high tech and other high-end service sector jobs. He calls the people who work in these industries "The Creative Class". Florida analyzed the growth of the quaternary sector of the economy and found that some regions were leaping ahead. In addition to California's Silicon Valley, The "128 Corridor" near Boston; Austin, Texas, and Seattle, Washington stood out as hubs for high tech innovation.




Figure 12-22: Austin TX - This billboard proclaims Austin as the City of Ideas - and quirkily notes "Planet Earth". Bumper stickers around town urge residents to "Keep Austin Weird" and "Live Music Capital of the World" all speak to this city's embrace of difference – a characteristic especially unusual in Texas where social conservative dominate.

Florida argued that these locations stood out because each had permissive cultural environments that allowed the creative energy of individuals to flourish. Essentially, he argued that in places where people are free to be weird, cultural innovation is encouraged and economic success follows. Florida's position stands in stark contrast to most neoclassical economists who argue that economic development is best promoted through tax breaks and business incentives, along with government deregulation (lax environmental, bureaucratic rules).

By studying the characteristics of the high-tech cities, like San Jose, Richard Florida found little evidence that neoclassical economic principles promote business growth. Instead, he identified a strong relationship between the quality of life in various locations and the ability of employers in those regions to attract high and nurture talented people. The central part of his argument was that talented people were attracted to places with a good quality of life; things like good schools, parks, health care, and entertainment. More controversially, Florida posited that tolerance of diversity was a secret ingredient in the business formula of places like Silicon Valley. He argued that creative, talented people tend to embrace ideas and lifestyles out of step with the mainstream, so places that permitted individuals to express their individuality (and creativity) without fear of personal, societal or

industrial condemnation, attracted and nurtured talent.

A key indicator of a region's tolerance of diversity and/or its openness to creativity was its gay friendliness, which, of course, was interpreted by some as a threat to family values, etc. Florida argues that gay-friendly places also welcome a great variety of lifestyles, ethnicities and cultural orientations. Still, it is worth noting that Tim Cook, CEO of Apple Inc., perhaps the most emblematic of all creative class companies is openly gay. What is evident is that locations where social conservatives discourage or "squelch" personal and/or industrial innovation, high tech innovation is rare. The prevailing culture in some locations encourages creative people to either abandon their ideas or to move elsewhere. So, according to this argument, eccentric people with big ideas migrate to places like San Francisco, Boston or Austin, where fellow citizens embrace eccentricity and diversity of opinion and lifestyle. Entire companies may move to creative cities to attract workers with creative ideas. The implications of these migration patterns are significant over time. One analyst called the process, The Big Sort, a process in which thousands of individual migrations have created increasingly different cultural conditions in various parts of the US. This process led another observer to predict that intolerance of diversity will lead some places to enter into a "dumb state death spiral" – where all the smart, creative, tolerant people move away, and only the less talented, less creative and less tolerant people remain.




Figure 12-23: Portland, OR - By embracing its quirkiness, Portland has managed to attract business investment and thousands of new residents. Its growth threatens Portland's unique cultural life.

## FIRE Industries

Finance, Insurance and Real Estate (FIRE) industries also have a definite spatial logic. New York City is the headquarters for a lot of companies in this sector, but Chicago, San Francisco, Boston, and other cities have large FIRE sectors as well. The most obvious reason is that these locations function as service centers for large metropolitan areas and they have massive economic hinterlands. People and businesses require banking services, so populous regions generate many FIRE jobs. The internet has eroded some of the spatial logic of the FIRE industries, but for many people, personal networking still matters, so face-to-face interaction is still common in FIRE industries, and that is facilitated by agglomeration.

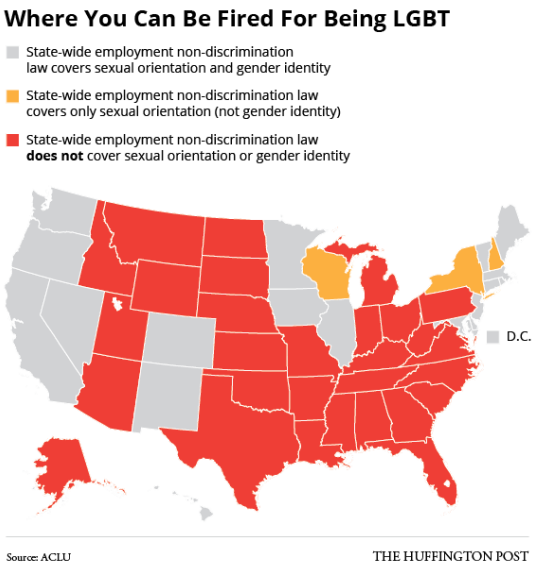



Figure 12-24: Map of LGBTIQ+ rights in the United States (2014). Note the correlation between business innovation and tolerance of sexual difference. In 2020, the US Supreme court struck down these laws nationwide. Source: ACLU / Huffington Post.

## Hartford – The Insurance Capital

Some locations specialize in particular types of FIRE industries. Hartford, Connecticut for example, was for many years known as the "Insurance Capital of the World". It may or may not have deserved the title, but Hartford is home to an unusually large number of insurance companies. Nearly one-tenth of Hartford's population works in the insurance industry.

Hartford's location near the coast and on the navigable Connecticut River helped make it both a manufacturing center and a port during the colonial period. Locals interested in protecting the value of their cargo being shipped across the Atlantic established one of the country's first insurance companies. That company made a lot of money and dozens of spin-off companies were started by employees of the first company established competing companies (contagious diffusion). Over the years, other insurance companies moved to Hartford to take advantage of the existing pool of workers with advanced knowledge of the insurance industry. In recent years, some insurance companies have moved from away from Hartford. Some simply moved to nearby locations where real estate was cheaper, and quality-of-life issues were better. Like many other cities with a lot of FIRE industry workers, a huge gap evolved separating Hartford's richest and poorest residents. While Hartford is one of the wealthier American metropolitan areas in terms of Gross Domestic Product per Capita (GDP), it also suffers from a high poverty rate.

## Dover – The Credit Card Capital

As you begin to develop a geographer's habit of mind and begin thinking spatially, you may notice things like the fact that the return address on some of your least favorite pieces of US mail is Dover, Delaware – the credit card capital of the United States. You may ask yourself, "Why do I send so much of my money to Delaware?" The answer isn't quite as rooted in geography, as it was for Hartford or Detroit. Delaware doesn't have a long history of banking. Credit cards are a recent invention as well. Bank of America (now VISA) first introduced credit cards in Fresno, California in 1958. Delaware became the credit card capital of the world when their state legislature eliminated almost all its traditional usury laws in the state in 1981. Because in Delaware there's virtually no cap on interest rates and few other rules regarding how they can treat customers, credit card companies in Delaware quickly became far more profitable than those operating elsewhere. Many banks quickly moved their credit card divisions to Delaware. Utah and South Dakota have tried to emulate Delaware's success by weakening laws protecting credit card users as well. Variations in usury law in the United States create a wildly uneven distribution of predatory lending companies engaged in payday lending, car title lending and check cashing services.

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# 12.5: Business Geography

Setting up a new business, or expanding existing operations is an expensive proposition. Even slight mistakes in locating a new store can result in the loss of millions of dollars. Even more money is lost by companies that do a poor job locating factories or warehousing facilities. Geography offers many protections against costly mistakes. Geography is also a key element of strategies aimed at expanding customer bases for companies that engage in marketing geography, a growing field that overlaps with advertising and business informatics.

## Economic Base Analysis

One of the most useful methodologies available to business geographers is called economic base analysis, a technique devised to determine whether or not any particular economic activity functions as a basic or non-basic industry. A standard mathematical formula, called the location quotient is most often used to identify economic bases for places at various scales. In other words, you can learn which industries in the local economy are bringing in money from outside, and which serve mostly a local population. By mapping the location quotient, you can identify which counties, cities or even ZIP codes specialize in specific industries. You can also use the location quotient formula to map locations saturated with specific industries/businesses, as well as places with a deficit of specific industries or businesses. It's a good first step for anyone interested in opening a new business because it helps identify locations with too much competition.

## Location Quotient

Say, for example, there are 10 hotels in your town and 100 total businesses. Ten percent of your town's businesses are hotels. However, in your entire state, there are 3,000 hotels and 50,000 businesses. Statewide, 6% of all businesses are hotels, which is less than the ratio in your town. The location quotient for hotels in your town is therefore equal to 1.667. (.10/.6 = 1.667). Any location quotient greater than 1.0 indicates concentration. Therefore, you could argue that the hotel industry is stronger in your town than one would expect based on statewide trends. This might indicate that your town's tourism industry is doing well. It might mean there are too many hotels in your town, and that some are destined to go out of business. You could repeat this calculation for every town in the state and then repeat it for things like restaurants or other tourism-related industries. You could get a clear picture of where tourists are spending money, and where business opportunities may arise.

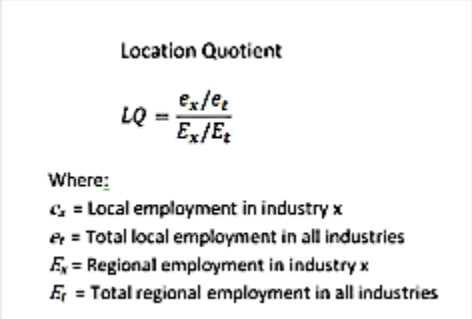



Figure 12-25: Location Quotient Formula.

Sometimes the most useful statistics are the simplest ones because they are easy to use, which makes them available to lots of people, but simple statistics are also easier to understand. There's less chance of a simple statistic being cast into the "lies, damn lies, and statistics" category. Of course, there are criticisms of the location quotient, and more sophisticated analyses are possible, but this is a great starting point for those wanting to do geography. Besides, there are numerous uses for this simple formula because it can show concentrations of just about any phenomena across space.

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# 12.6: Site LocationAnalysis

As the saying goes, “the three most important words in business are ‘location, location, location!’” Finding an ideal site for a new business is a key element in the success, or failure, of many businesses. Site location analysis is the primary job of geographers working in location intelligence jobs; a major source of high-quality employment for those with a geography degree. Many companies, including McDonald’s, Kohl’s, Wal-Mart, and Walgreens employ geographers to help them select optimal site locations for both retail and warehousing operations. Governments also need geographers to select ideal sites for schools, police departments, airports and fire stations. Sometimes geographers help decide where to close a business or public service facility. The process can be quite complex because multiple factors must be considered at each location. GIS is an indispensable tool for analyzing the interplay of multiple factors simultaneously. A site location analyst analyzes things like traffic patterns, real estate costs, zoning laws, economic competition, as well as the socio-economic, ethnicity and age structures of nearby customers/ citizens among other things. Doing fieldwork to collect data about potential site locations is another important step in the decision-making process of location analysts.

## Hotelling Model

Harold Hotelling developed the most basic site location model in the late 1920s. It is useful for understanding some basic patterns of retail in many cities. Hotelling’s basic premise was that when competing firms sell a similar product, customers will travel the shortest distance possible to purchase that product. Since competitors frequently sell products that are virtually indistinguishable from each other (gasoline, aspirins, Coca-Colas, etc.), the behavior of customers creates an incentive to agglomerate at a point that maximizes the potential number of customers.

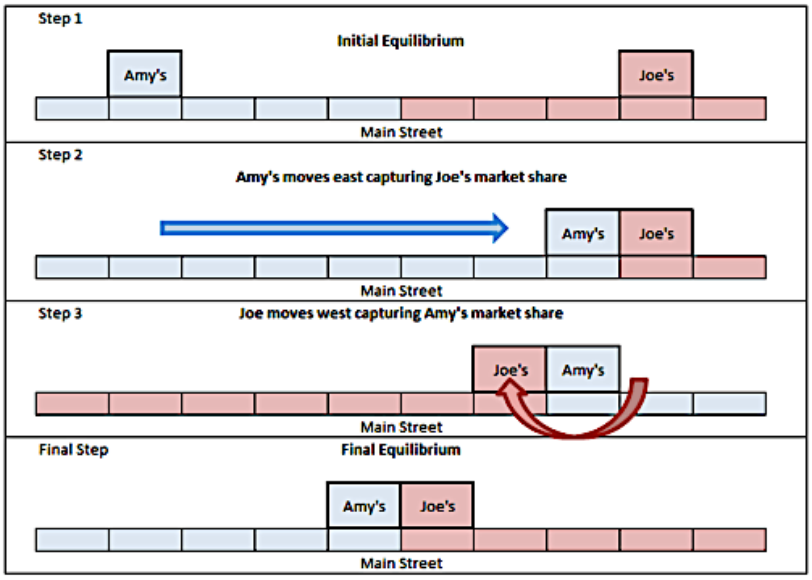



Figure 12-26: Infographic. The logic of the Hotelling Model plays out in a series of moves and counter-moves by competitors arranged in a linear market, like a street or on a beach. Eventually agglomeration will occur.

Suppose there are two competing firms on Main Street in some small town. Each firm has an incentive to capture the market share of its competitor by moving into the territory of the other. To capture the maximum number of customers, Firm A (Amy in the graphic) should move next door to Firm B (Joe), thereby making Amy’s store an **intervening opportunity**. By moving, Firm A (Amy) will capture the maximum number of customers traveling along Main Street. If Firm B (Joe) is smart, he will leapfrog Firm A (Amy), thereby capturing the maximum number of customers. Under this logic, after a series of moves and counter moves, a state of equilibrium will be reached that finds Firm A and Firm B located adjacent to each other, with each firm capturing nearly fifty percent of the customers. Of course, most businesses try to distinguish themselves from their competition through price, service, and product. Still, if you are the type of person that notices patterns on the landscape, you will have recognized that certain businesses (gas stations, pharmacies, etc.) cluster together in the fashion predicted by this simplistic model, and it’s generally a sign that such businesses are not competing primarily on price, service or quality.

# Huff Model

Another of the measures frequently used by retail site location analysts is the Huff Model. It is used to predict the likelihood of a customer at any distance from a proposed store is likely to shop there. It rests on the premise that people won't drive very far to shop unless the store is worth the effort. Successful stores, according to the model are bigger, have highly desirable goods and lack competition. Those three elements are all calculated using the formula in the figure at right. To those with math phobias, the formula may look daunting, but it's nothing more than a series of basic math operations (multiplication, division, exponents, subtraction). Luckily, GIS and spreadsheet programs do most of the work, and software can calculate the formula millions of times over, permitting geographers to estimate the number of customers for many stores simultaneously. Not only could this single formula help a geographic information analyst decide the feasibility of a store (or hospital, etc.), but it also indicates to the marketing department where advertising dollars should be spent; a business geography tactic from the realm of marketing geography.

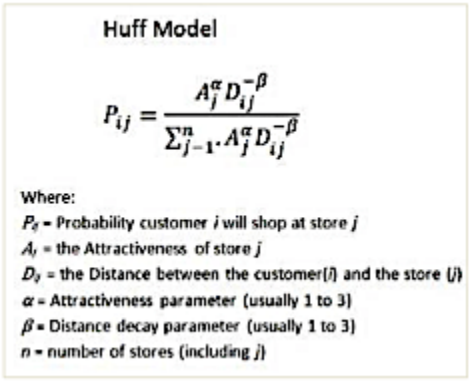



Figure 12-27: Huff Model Formula. See ESRI David Huff

# Marketing Geography

Business geographers also are very good at helping companies identify customers and sell products. Spatial analysts, equipped with sophisticated databases about customers' income, lifestyles, and shopping tendencies can identify locations where marketing dollars can be most wisely spent, as well as where advertising (or even stores) dollars are wasted. Marketing geographers rely on a number of the same tools as the site location analysts, they just use them for different ends; and they often work for marketing firms rather than for retailers.

Landscape geography, a humanities-flavored component of cultural geography, figures prominently in many contemporary marketing campaigns. Landscapes, because they are saturated with meaning, form an important component of most visual advertisements today. Consider for example, that only 30 years ago, if you watched a car commercial on TV, a spokesperson would generally extoll the virtues of the automobile; its safety features, horsepower, ride characteristics, etc. Nowadays, it is not uncommon to see a TV ad for a car that mentions none of that. In the 2000s Volkswagen had an entire series of car commercials featuring nothing more than cool people riding around VW's in cool places. If you saw these ads, you may not have even known what product being advertised until the very end, when the VW slogan flashed across the TV screen. The message VW was sending was "buy this car and you could be like the cool, youthful, urban people in this commercial." Many marketing campaigns use this technique. Alcohol advertisements are especially fond of using landscape to see beer, wine, and liquor. Corona Beer's long-time marketing campaign is a classic example. Corona ads never tell you the beer tastes great, they only try to get you to imagine yourself on a secluded, tropical beach. Corona wants you to associate luxurious relaxation with a relatively inexpensive beer. Those ads help Corona drinkers to project, or at least think they are projecting, an identity connected to wealth and leisure.

## ABERCROMBIE & FITCH

Abercrombie & Fitch, a popular clothing brand trademarked the slogan "casual luxury" to sell their line of slightly upscale jeans, sweaters, and other outerwear. One of the most powerful marketing tools used by this clothier was the landscape imagery of the East Coast yacht club.




Figure 12-28: Hyannis Port, MA. Elitist landscapes frequently serve as backdrops in advertising campaigns because they evoke desires for wealth, exclusivity, sex and comfort. The Kennedys seem to have inspired Abercrombie & Fitch. Photos: PBS

An argument can be made that the Kennedy Family supplied the prototype A&F models. Landscapes are like the setting of a movie that helps frame the plot. Even their company CEO characterized the in-store experience as a movie, noting that shoppers "...buy into the emotional experience of a movie...And that's what we're creating. Here I am walking into a movie, and I say, 'What's going to be [at] the box office today?" (Time, 2/14/2000). Those who have been to an A&F store would suggest that their"movie" is set on Martha's Vineyard in Massachusetts, or perhaps The Hamptons on Long Island. Both places are historic coastal playgrounds for New England's "blue blood" families, like the Kennedys.

## Place Product Packaging

Landscape geography figures prominently in marketing places in the physical world. Many chain stores use what geographer John Jakle calls place-product-packaging to help sell goods and services. Essentially, the goal of place product packaging is to customers to visit chain or franchise stores repeatedly by using the architecture and landscape of the store itself. Chain restaurants started this practice first in the 1950s. By using consistent architectural designs, interior décors, worker uniforms, logos, and even parking lot layouts, customers are conditioned to expect uniform service, product, and price. Tourists traveling far from home quickly learn that restaurants that look exactly like those back home offer a safe and entirely "predictable oasis ... away from home". Hotels (especially Holiday Inn) followed suit because their operators knew that most travelers are not interested in experimenting with food or lodging. This is especially true for families traveling with children. Scads of other commercial interests followed suit. This strategy contributes greatly to the creation of placelessness discussed in an earlier chapter. Strict conformity to corporate designs and architecture have loosened in recent years. McDonald's and Holiday Inns don't all look exactly the same today the way they did in the 1970s. Those chains long ago established their reputation and no longer need to aggressively remind customers what they are getting. New chains are wise to use place product packaging as they build a customer base and a brand identity.

Architecture, landscape design, and product logos also function to evoke emotional or cognitive responses that advance company interests. Clever business people understand that their customers "read" the landscape, and so strive to design their stores or advertisements in a way that allows the subtext of the landscape to help sell their product or service. These strategies are found at the intersection of psychology, geography, and business. A couple of examples below are presented to help you recognize how landscape can be used to manipulate you as a consumer.

### HAM BURGER STANDS

Fast food joints are a nearly ubiquitous element of the American landscape. Many franchises employ similar architectural design

formulas to sell burgers and fried food. One of the most instructive design strategies was borrowed from modernist architecture more than 100 years ago. Today, many Americans read the modernist landscape of a hamburger chain like In-N-Out Burger, as an evocation of the 1950s, which is tied to an atmosphere of nostalgic fun. However, the white porcelain, glass, and stainless steel motif pre-dates the 1950s and is rooted in the suspicions Americans had about hamburger meat 100 years ago. Americans first began eating hamburgers, as fast food around the turn of the 20$^{th}$ century. Though hamburgers were ideal for factory workers who often had no other option for a hot lunch, people were apprehensive about the quality of ground meat with good reason.

Landscape and architecture were two potent ways hamburger restaurant owners convinced the public that ground beef was safe. First, the kitchen areas were kept in plain sight of customers. Glass, stainless steel and white porcelain were liberally incorporated into the design of buildings to project a modern, hygienic look. Hamburger joints were designed with a dentist's office aesthetic to assure the public that the food was safe. Even the cooks wore all-white uniforms, to mimic the uniforms worn by medical professionals.

During the early 20th century restaurateurs hoping to convince customers that their food was safe also borrowed design elements from, what was at the time, extremely high-tech machinery:steamships and streamliner trains. Actual dining cars from railroads were used for several decades as hamburger restaurants. Today we call these places diners. Others tried to evoke, through architecture, the slick and luxurious oceangoing streamliners of the day by putting port-hole windows on buildings. After the war, airplanes and spaceships served as inspiration for a period and buildings sprouted angular features that evoked jet aircraft.




Figure 12-29: Winchester, VA - This hamburger joint appeals to nostalgia today, but when it was built shortly after World War II, the design was futuristic, hygienic and modern, assuring customers that the sandwiches were safe to eat.

for several decades as hamburger restaurants. Today we call these places diners. Others tried to evoke, through architecture, the slick and luxurious oceangoing streamliners of the day by putting port-hole windows on buildings. After the war, airplanes and spaceships served as inspiration for a period and buildings sprouted angular features that evoked jet aircraft.

Once Americans were assured that hamburgers were indeed reasonably safe to eat, restaurant owners no longer needed to design restaurants that evoked high-tech machinery or hygienic places like hospitals. Eventually, the hyper-modern stainless steel, glass and porcelain buildings began to look outdated, and perhaps unclean. Around 1970, McDonald's abandoned the hygienic-modern look for an "environmental" themed landscape that featured weathered brick and mansard roofs; all painted in brown, burnt orange and yellowish earth tones. Burger King, Wendy's, Pizza Hut and a host of other retail chains followed suit.



Figure 12-30: West Hills, CA (left) and Warsaw, VA (right). The environmental look (left) replaced the glass-steel-porcelain look of the post-war era around 1970s, only to fall out of favor by the 1990s. The building on the right is an attempt to recover the 1950s look with a 1970s era building (mansard roof, brick, etc.)

By the 1990s however, the 1970s "environmental" look itself faded from fashion and several fast food chains adopted nostalgic looks, mostly to evoke the wholesome fun of the 1950s America. Some of the attempts at leveraging 1950s imagery have been blatant and perhaps over-done, but others like In-N-Out Burger are subtler, because they never really abandoned the 1950s motif in the first place. Today, many newer restaurant chains appear to once again be borrowing from high-tech industries by adopting what might be called the "iPhone" or "Apple" aesthetic, with clean, simple lines that suggest quality and wholesomeness. Think about that the next time you visit a Pinkberry or a Chipotle restaurant.

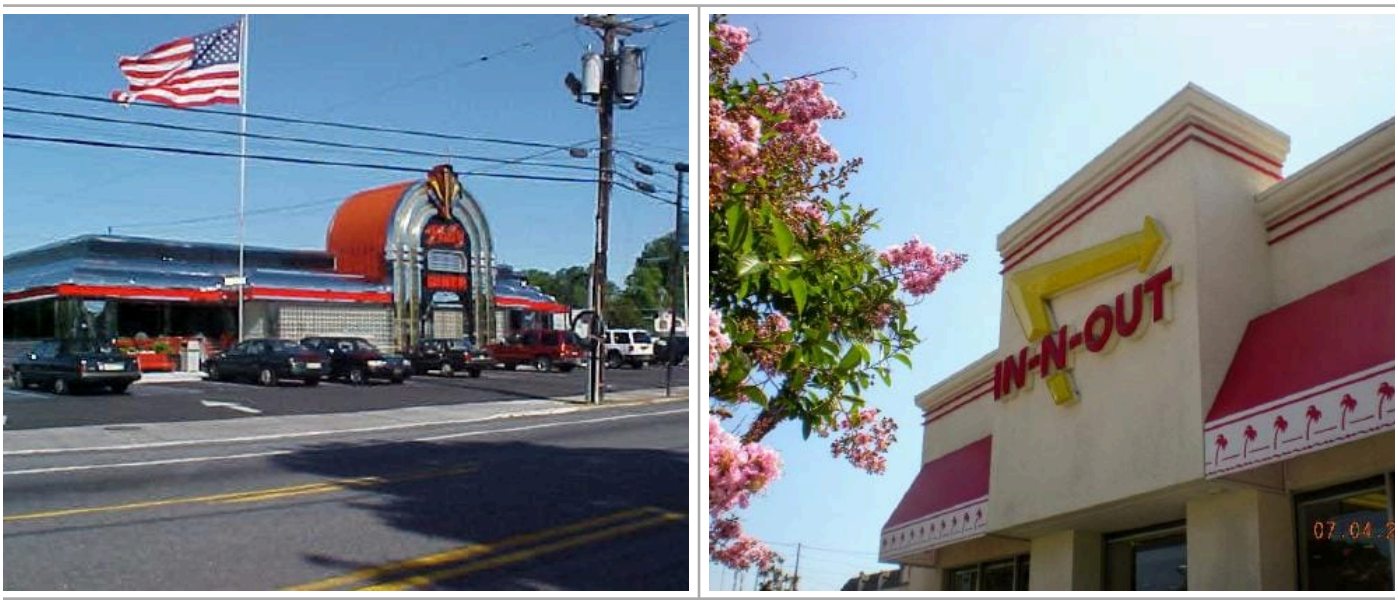



Figure 12-31: Runnemede, NJ (left) and Canoga Park, CA (right). The post-war 1950s era is used to evoke nostalgia among customers, but the hygienic motif at one time was very forward looking and helpful to assure customers of food safety.

## ADDITIONAL LINKS

Directions Magazine. GeoInspirations: Ken Smith's Passion for Area Research and Retail Analytics. https://www.directionsmag.com/article/7257 - A great summary of the role of geography in business analytics.

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# INDEX


## A

abortion
*10.2: Evolution of Gender Roles*
*6.7: Cultural Ecology of Religion*

Abrahamic faiths
*6.6: Cemeteries*

academia
*1.2: Geography as Discipline –Key Aspects of the "Jedi Way"*

academic disciplines
*1.1: A Short History of Geography*

accent
*5.1: Introduction*

activism
*10.1: Gender and Identity in San Francisco, California*

Affordable Care Act
*4.3: Geography of Care*

AffordableCareAct
*4.4: Regional Variations in Health Care*

African Americans
*9.11: Black Ghetto Typology*

agency
*2: Culture and Cultural Practices*

agriculturalproduction
*3.4: Von Thünen's Model*

agriculture
*3: Agriculture and Foodways*
*3.3: Agricultural Regions*
*3.5: Agriculture around the World*
*3.6: Agricultural Landscapes*

alcohol
*8.3: Illegal Substances*

Aldo Leopold
*1.3: Geography is a Way to See the World- Jedi Goggles*

amenities
*11: Urban Geography*

american
*2.2: Folk Regions*
*9.6: American-American?*

American culture
*9.8: Ethnic Regions*

American diet
*3.1: Why do we eat this stuff?*

American English
*5.3: American Languages*

American folklife
*2.1: Folk Culture*

American foodways
*3.2: The Geography of Barbecue (BBQ)*

American identity
*9.4: National Heritage*

American Revolution
*7.6: Political Landscapes*

American values
*11.5: Cityas Place*

analysis
*1.2: Geography as Discipline –Key Aspects of the "Jedi Way"*

analytical tools
*1: What is Geography?*

ancestral homeland
*9.4: National Heritage*

ancestry
*9.5: Region*

Anthony Kiedis
*11.6: Sound of the City*

anthropology
*5.6: Language and the Environment*

Appalachia
*12.2: Primary Sector*

architectural designs
*2.3: Folk Housing*

architecture
*10.5: Gendered Landscapes*
*2.3: Folk Housing*
*7.6: Political Landscapes*

artifacts
*5.4: Language on the Landscape*

athletes
*2.5: The Geography of Sports*

Australian Aboriginals
*5.6: Language and the Environment*

autism
*4.1: Health Metrics*

autonomy
*7.2: Separatist Movements*

## B

basic industries
*12.1: Economic Sectors*

basketball
*2.5: The Geography of Sports*

BBQ
*3.2: The Geography of Barbecue (BBQ)*

beef
*3.2: The Geography of Barbecue (BBQ)*

behavioral tendencies
*2: Culture and Cultural Practices*

belief systems
*6.3: The Landscapes of Religion*

beliefs
*2.2: Folk Regions*
*6: Religion*

biases
*1.4: Geography is a Way to Ask Questions – Jedi MindTricks*

bilingual
*9.2: Language*

Bossier City
*5.4: Language on the Landscape*

branding
*12.6: Site LocationAnalysis*

Brexit
*7.2: Separatist Movements*

Buddhism
*6: Religion*
*6.1: Religious Realms*
*6.2: Diffusion of Religion*

burial
*6.6: Cemeteries*

business
*12.5: Business Geography*
*12.6: Site LocationAnalysis*

business informatics
*12.5: Business Geography*

## C

Cajun
*5.3: American Languages*

Cajuns
*9.9: Processes*

California
*10.1: Gender and Identity in San Francisco, California*
*7.4: Electoral Politics -Boundary Drawing*

cancer
*4.2: Geography of Disease*

Cantonese
*5.2: World Languages*

career paths
*1: What is Geography?*
*9.13: Ethnicity and the Economy*

cartogram
*7.5: Electoral Cartography*

cartography
*1.6: Geography is a Way to Communicate – Cartography the Jedi Language*

cash crops
*3.5: Agriculture around the World*

Catholicism
*6.4: Shrines and other Sacred Spaces*

cattle ranching
*3.3: Agricultural Regions*

causal relationships
*1.8: Cause and Effect*

cemeteries
*6.6: Cemeteries*

centralGovernment
*7.1: Federalism vs. the Unitary State*

challenges
*11: Urban Geography*

Chicago
*9.9: Processes*

cholera
*4: Health and Disease*

Christian churches
*6.3: The Landscapes of Religion*

Christian tradition
*6.5: Religious Holiday Space*

Christianity
*6: Religion*
*6.1: Religious Realms*
*6.2: Diffusion of Religion*

Christmas
*6.5: Religious Holiday Space*

church and state
*9.3: Religion*

church controversy
6.3: The Landscapes of Religion
cities
11: Urban Geography
11.2: Birth of Cities
11.5: Cityas Place
11.6: Sound of the City
city
11.1: Defining Cities
city layout
11.3: Urban Morphology
civic disamenities
9.12: Environmental Racism
civil rights
6.7: Cultural Ecology of Religion
9.5: Region
civil war
9.3: Religion
civilrights
10.1: Gender and Identity in San Francisco, California
CivilWar
7.1: Federalism vs. the Unitary State
climate
3.3: Agricultural Regions
coal mining
12.2: Primary Sector
cognitive
2: Culture and Cultural Practices
cognitive psychology
5.6: Language and the Environment
college
1: What is Geography?
communication
1: What is Geography?
1.2: Geography as Discipline –Key Aspects of the "Jedi Way"
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
5.1: Introduction
5.6: Language and the Environment
communities
11.1: Defining Cities
community
10.5: Gendered Landscapes
11.4: City Life
11.5: Cityas Place
2.5: The Geography of Sports
community safety
8.4: CrimeMapping and Analysis
comparative advantage
12.4: Free Trade and Protectionism
competition
12.5: Business Geography
conservatives
7.3: Political Cultures
consumer behavior
12.6: Site LocationAnalysis
consumption
12: Economic Geography
8.3: Illegal Substances
Contemporary
2.2: Folk Regions
cooking methods
3.2: The Geography of Barbecue (BBQ)
corn
3.3: Agricultural Regions
creole
5.3: American Languages
Creoles
9.9: Processes
crime
1.2: Geography as Discipline –Key Aspects of the "Jedi Way"
8: Crime and Punishment
8.1: Spatial Patterns of Crime
8.4: CrimeMapping and Analysis
crime analysis
8: Crime and Punishment
crime mapping
8.4: CrimeMapping and Analysis
crime prevention
8.2: Geography of Punishment
crime rates
8.1: Spatial Patterns of Crime
8.2: Geography of Punishment
crime trends
8.4: CrimeMapping and Analysis
criminal activity
8.3: Illegal Substances
criminal justice
8: Crime and Punishment
8.2: Geography of Punishment
criminal profiling
8.4: CrimeMapping and Analysis
critical geography
1.1: A Short History of Geography
critical thinking
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
culinary traditions
3.1: Why do we eat this stuff?
cultural beliefs
6.1: Religious Realms
cultural context
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
cultural diversity
10: Gender and Sexual Identity
6.2: Diffusion of Religion
cultural dynamics
2.5: The Geography of Sports
cultural ecology
1.8: Cause and Effect
cultural evolution
2.1: Folk Culture
cultural geography
1.1: A Short History of Geography
11.3: Urban Morphology
2.3: Folk Housing
3.6: Agricultural Landscapes
cultural heritage
5.5: Toponyms –Place Name Geography
9.2: Language
cultural histories
1.3: Geography is a Way to See the World- Jedi Goggles
Cultural Hybridity
9.7: Space Makes Race
cultural hybridization
5.5: Toponyms –Place Name Geography
cultural identity
9.5: Region
cultural practices
3.1: Why do we eat this stuff?
6.6: Cemeteries
9.7: Space Makes Race
cultural preservation
7.2: Separatist Movements
cultural region
1.7: Core Concepts
cultural traditions
9.8: Ethnic Regions
culture
10.4: Sex Ratio
11.5: Cityas Place
2: Culture and Cultural Practices
5: Language and Dialect
5.1: Introduction
5.4: Language on the Landscape
5.6: Language and the Environment
6: Religion
6.7: Cultural Ecology of Religion
7: Politics and Power
9: Ethnicity
9.14: Ethnic Landscapes
9.9: Processes
cultures
2.2: Folk Regions
customs
2.1: Folk Culture

## D

dark tourism
6.4: Shrines and other Sacred Spaces
data analysis
1.5: Geography is a Way to Solve Problems – Jedi Weapons
data visualization
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
1.8: Cause and Effect
death
6.6: Cemeteries
death penalty
8.2: Geography of Punishment
democracy
7.4: Electoral Politics -Boundary Drawing
7.6: Political Landscapes
Demographic Transition Model
10.3: Demographic Transition Model
demographics
11.1: Defining Cities
dialect
5: Language and Dialect
5.1: Introduction
9.6: American-American?
dialects
5.2: World Languages
5.3: American Languages
diets
3: Agriculture and Foodways
diffusion
1.7: Core Concepts
discrimination
9.11: Black Ghetto Typology
disease
4.2: Geography of Disease
disease patterns
4: Health and Disease

distribution
12: Economic Geography
diversity
10.1: Gender and Identity in San Francisco, California
9.1: Race
9.12: Environmental Racism
9.14: Ethnic Landscapes
9.5: Region
9.7: Space Makes Race
drug laws
8.3: Illegal Substances
drug trade
8.1: Spatial Patterns of Crime

## E

eating habits
3.1: Why do we eat this stuff?
Ebonics
5.3: American Languages
ecology
2.2: Folk Regions
economic activity
12.5: Business Geography
3.6: Agricultural Landscapes
economic analysis
12.5: Business Geography
economic competition
12.6: Site LocationAnalysis
economic conditions
3.5: Agriculture around the World
economic decisions
10.4: Sex Ratio
economic development
10.3: Demographic Transition Model
11.2: Birth of Cities
economic disparity
11.4: City Life
economic diversification
12.2: Primary Sector
economic factors
8.3: Illegal Substances
economic geography
12: Economic Geography
economic impact
4.1: Health Metrics
economic opportunities
10.4: Sex Ratio
economic policies
12.4: Free Trade and Protectionism
economic security
2.5: The Geography of Sports
economic system
10.3: Demographic Transition Model
economicgeography
3.4: Von Thünen's Model
economics
12: Economic Geography
6.7: Cultural Ecology of Religion
9: Ethnicity
economy
12.1: Economic Sectors
3: Agriculture and Foodways
education
1: What is Geography?
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
10.3: Demographic Transition Model
election analysis
1.8: Cause and Effect
elections
7.4: Electoral Politics -Boundary Drawing
electoral college
7.5: Electoral Cartography
electoral districts
7.4: Electoral Politics -Boundary Drawing
electoral politics
7: Politics and Power
electoral votes
7.5: Electoral Cartography
emergency care
4.3: Geography of Care
emotional investment
11.6: Sound of the City
emotions
11.5: Cityas Place
English
5.3: American Languages
English origins
5.5: Toponyms –Place Name Geography
entrepreneurship
12.5: Business Geography
environment
3: Agriculture and Foodways
5: Language and Dialect
5.6: Language and the Environment
6.7: Cultural Ecology of Religion
environmental challenges
2.1: Folk Culture
environmental concerns
10.5: Gendered Landscapes
environmental determinism
1.1: A Short History of Geography
1.8: Cause and Effect
environmental health
4.2: Geography of Disease
environmental impact
3.6: Agricultural Landscapes
environmental issues
3.5: Agriculture around the World
environmental justice
7.3: Political Cultures
Environmental Racism
9.12: Environmental Racism
epidemiology
4.2: Geography of Disease
epistemology
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
Equal Rights Amendment
10.2: Evolution of Gender Roles
ethics
6: Religion
ethnic bias
9.1: Race
ethnic employment niches
9.13: Ethnicity and the Economy
ethnic groups
6.2: Diffusion of Religion
9.12: Environmental Racism
9.5: Region
ethnic identity
5.3: American Languages
9.3: Religion
9.4: National Heritage
9.9: Processes
ethnic regions
9.10: Enforced Ethnic Regions
9.9: Processes
ethnicity
3.1: Why do we eat this stuff?
6.7: Cultural Ecology of Religion
9: Ethnicity
9.13: Ethnicity and the Economy
9.14: Ethnic Landscapes
9.2: Language
9.5: Region
9.6: American-American?
9.7: Space Makes Race
9.8: Ethnic Regions
European descent
9.4: National Heritage
evangelical
6.7: Cultural Ecology of Religion
Evangelical Christians
6.3: The Landscapes of Religion
export industries
12.1: Economic Sectors
extensveagriculture
3.4: Von Thünen's Model
extractive industries
12.2: Primary Sector
extractive industry
12.3: Secondary Sector

## F

fair representation
7.4: Electoral Politics -Boundary Drawing
family size
10.3: Demographic Transition Model
family tree
9.6: American-American?
fandom
2.5: The Geography of Sports
farming
3: Agriculture and Foodways
3.3: Agricultural Regions
3.5: Agriculture around the World
farming techniques
3.6: Agricultural Landscapes
farmland
3.6: Agricultural Landscapes
farmpolicy
3.4: Von Thünen's Model
federalism
7: Politics and Power
7.1: Federalism vs. the Unitary State
feminist geography
10.5: Gendered Landscapes
folk culture
2: Culture and Cultural Practices
2.1: Folk Culture
2.3: Folk Housing
folk practices
2.1: Folk Culture

food
3: Agriculture and Foodways
3.1: Why do we eat this stuff?
food insecurity
3.5: Agriculture around the World
food processing
12.3: Secondary Sector
food shortages
3.5: Agriculture around the World
food systems
3: Agriculture and Foodways
food traditions
3.2: The Geography of Barbecue (BBQ)
foodways
2.2: Folk Regions
9.8: Ethnic Regions
forensic geography
8.4: CrimeMapping and Analysis
free trade
12.4: Free Trade and Protectionism
French influence
5.5: Toponyms –Place Name Geography

## G

gang activity
8.1: Spatial Patterns of Crime
gayrights
10.1: Gender and Identity in San Francisco, California
gender
10: Gender and Sexual Identity
10.1: Gender and Identity in San Francisco, California
gender biases
9.13: Ethnicity and the Economy
gender equity
10: Gender and Sexual Identity
gender roles
10: Gender and Sexual Identity
10.2: Evolution of Gender Roles
10.4: Sex Ratio
10.5: Gendered Landscapes
gendered spaces
10.5: Gendered Landscapes
genetics
9.1: Race
gentrification
11.4: City Life
Geographer
1.3: Geography is a Way to See the World- Jedi Goggles
geographers
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
9.11: Black Ghetto Typology
Geographic Information Systems
1.1: A Short History of Geography
1.5: Geography is a Way to Solve Problems – Jedi Weapons
geographic profiling
8.4: CrimeMapping and Analysis
geographical influence
3.1: Why do we eat this stuff?
geography
1: What is Geography?
1.1: A Short History of Geography
1.2: Geography as Discipline –Key Aspects of the "Jedi Way"
1.5: Geography is a Way to Solve Problems – Jedi Weapons
1.7: Core Concepts
1.8: Cause and Effect
11: Urban Geography
11.1: Defining Cities
11.2: Birth of Cities
11.5: Cityas Place
12.5: Business Geography
12.6: Site LocationAnalysis
2: Culture and Cultural Practices
3.2: The Geography of Barbecue (BBQ)
4.3: Geography of Care
5: Language and Dialect
8: Crime and Punishment
9: Ethnicity
9.7: Space Makes Race
9.9: Processes
geolinguistics
5.1: Introduction
germ theory
4: Health and Disease
German settlement
5.5: Toponyms –Place Name Geography
gerrymandering
7.4: Electoral Politics -Boundary Drawing
ghettos
9.10: Enforced Ethnic Regions
9.11: Black Ghetto Typology
9.12: Environmental Racism
GIS
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
12.6: Site LocationAnalysis
8.4: CrimeMapping and Analysis
global trade
12.4: Free Trade and Protectionism
globalization
9.7: Space Makes Race
goods
12: Economic Geography
governance
7: Politics and Power
government
7.6: Political Landscapes
government intervention
7.3: Political Cultures
GPS
1.7: Core Concepts
graphics
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
Greek Revival
7.6: Political Landscapes

## H

health
3: Agriculture and Foodways
4.1: Health Metrics
health care
4: Health and Disease
4.3: Geography of Care
health disparities
4.1: Health Metrics
4.2: Geography of Disease
4.3: Geography of Care
health geography
4: Health and Disease
health issues
9.12: Environmental Racism
health statistics
1.8: Cause and Effect
healthcare
4.4: Regional Variations in Health Care
healthcare access
4.3: Geography of Care
healthcarecosts
4.4: Regional Variations in Health Care
heritage
9: Ethnicity
9.8: Ethnic Regions
high skilled workers
12.3: Secondary Sector
Hinduism
6.1: Religious Realms
hip hop
1.7: Core Concepts
hispanic
9.2: Language
historical architecture
7.6: Political Landscapes
historical cities
11.2: Birth of Cities
historical influence
2.3: Folk Housing
historical landscapes
2.1: Folk Culture
historical narratives
10.5: Gendered Landscapes
history
5.5: Toponyms –Place Name Geography
holy sites
6.4: Shrines and other Sacred Spaces
homicide rates
8.1: Spatial Patterns of Crime
hospitality industry
9.13: Ethnicity and the Economy
housing discrimination
11.4: City Life
9.10: Enforced Ethnic Regions
housing projects
9.11: Black Ghetto Typology
housing traditions
2.3: Folk Housing
humanitarian
3.5: Agriculture around the World
hyphenated terms
9.4: National Heritage

## I


identity
- 10: Gender and Sexual Identity
- 11.4: City Life
- 11.5: Cityas Place
- 5: Language and Dialect
- 5.1: Introduction
- 6: Religion
- 7: Politics and Power
- 9: Ethnicity
- 9.1: Race
- 9.2: Language
- 9.6: American-American?
- 9.7: Space Makes Race

identity politics
- 7.2: Separatist Movements

illegal drugs
- 8.3: Illegal Substances

immigrant
- 9.2: Language

immigrant cultures
- 2.3: Folk Housing

immigrant experiences
- 9.14: Ethnic Landscapes

immigrant skills
- 9.13: Ethnicity and the Economy

immigration
- 2.2: Folk Regions
- 5.1: Introduction
- 9.8: Ethnic Regions
- 9.9: Processes

immigration history
- 3.1: Why do we eat this stuff?

incarceration
- 8: Crime and Punishment

incarceration rates
- 8.2: Geography of Punishment

inclusion
- 9.6: American-American?

income inequality
- 1.8: Cause and Effect
- 8.1: Spatial Patterns of Crime

Indian Removal Act
- 9.10: Enforced Ethnic Regions

individualism
- 2: Culture and Cultural Practices

Industrial Revolution
- 10.3: Demographic Transition Model

industrialization
- 12.1: Economic Sectors

industry
- 11.2: Birth of Cities

inequality
- 10.2: Evolution of Gender Roles

infant mortality
- 10.4: Sex Ratio

infectious
- 4.2: Geography of Disease

infrastructure
- 11: Urban Geography

innovation
- 1.2: Geography as Discipline –Key Aspects of the "Jedi Way"

intensiveagriculture
- 3.4: Von Thünen's Model

interdisciplinary
- 1.4: Geography is a Way to Ask Questions – Jedi MindTricks

intermarriage
- 9.4: National Heritage

interpretation
- 1.3: Geography is a Way to See the World- Jedi Goggles

intersex
- 10: Gender and Sexual Identity

Iraq
- 9.3: Religion

irrigation
- 3.3: Agricultural Regions

Islam
- 6: Religion
- 6.1: Religious Realms
- 6.2: Diffusion of Religion


## J


Japan
- 6.5: Religious Holiday Space

Jedi
- 1.3: Geography is a Way to See the World- Jedi Goggles

Jewish communities
- 6.2: Diffusion of Religion

Jews
- 9.3: Religion

Jim Crow
- 9.1: Race
- 9.11: Black Ghetto Typology

job loss
- 12.4: Free Trade and Protectionism

jobs
- 12.1: Economic Sectors
- 12.2: Primary Sector

John Snow
- 4: Health and Disease

Judaism
- 6.1: Religious Realms

Judgment Day
- 6.6: Cemeteries


## K


knowledge
- 1.4: Geography is a Way to Ask Questions – Jedi MindTricks

knowledge production
- 1.1: A Short History of Geography

Kurdish rights
- 7.2: Separatist Movements


## L


labor costs
- 12.3: Secondary Sector

Labor Economics
- 12.4: Free Trade and Protectionism

land division
- 3.6: Agricultural Landscapes

landscape
- 1.3: Geography is a Way to See the World- Jedi Goggles
- 5: Language and Dialect
- 5.4: Language on the Landscape

landscapes
- 10.5: Gendered Landscapes
- 11.5: Cityas Place

language
- 5: Language and Dialect
- 5.1: Introduction
- 5.3: American Languages
- 5.5: Toponyms –Place Name Geography
- 5.6: Language and the Environment
- 6.7: Cultural Ecology of Religion
- 9: Ethnicity
- 9.2: Language

language families
- 5.2: World Languages

languages
- 5.2: World Languages

latino
- 9.2: Language

law enforcement
- 8.2: Geography of Punishment
- 8.4: CrimeMapping and Analysis

Legalization
- 8.3: Illegal Substances

LGBTIQ
- 10.1: Gender and Identity in San Francisco, California

LGBTQ+
- 10: Gender and Sexual Identity

libertarians
- 7.3: Political Cultures

life expectancy
- 4.1: Health Metrics

linguistic differences
- 9.3: Religion

linguistics
- 5.1: Introduction
- 5.2: World Languages
- 5.6: Language and the Environment

literacy
- 1.3: Geography is a Way to See the World- Jedi Goggles
- 1.6: Geography is a Way to Communicate – Cartography the Jedi Language

livestock
- 3.3: Agricultural Regions

livestock production
- 3.5: Agriculture around the World

local economies
- 12.2: Primary Sector

local economy
- 12.1: Economic Sectors

local food
- 3: Agriculture and Foodways

localgovernment
- 7.1: Federalism vs. the Unitary State

location
- 1.7: Core Concepts
- 12.6: Site LocationAnalysis

Los Angeles
- 11.6: Sound of the City
- 9.9: Processes


## M


malaria
- 4.2: Geography of Disease

malnutrition
- 4.1: Health Metrics

Mandarin
*5.2: World Languages*

manufacturing
*12.4: Free Trade and Protectionism*

manufacturing jobs
*12.3: Secondary Sector*

maps
*1.6: Geography is a Way to Communicate – Cartography the Jedi Language*

Mardi Gras
*6.5: Religious Holiday Space*

market research
*12.5: Business Geography*

marketgardening
*3.4: Von Thünen's Model*

marketing
*12.6: Site LocationAnalysis*

mass incarceration
*8.2: Geography of Punishment*

Mecca
*6.6: Cemeteries*

media
*11.5: Cityas Place*

Medicaid
*4.3: Geography of Care*
*4.4: Regional Variations in Health Care*

medical facilities
*4.3: Geography of Care*

medical geography
*4: Health and Disease*

medicalgeography
*4.4: Regional Variations in Health Care*

Medicare
*4.4: Regional Variations in Health Care*

memorial gardens
*6.6: Cemeteries*

memorials
*6.4: Shrines and other Sacred Spaces*

men
*10.4: Sex Ratio*

men's rights
*10.2: Evolution of Gender Roles*

Mestizo
*9.2: Language*

methods
*1.5: Geography is a Way to Solve Problems – Jedi Weapons*

Metropolitan
*11.1: Defining Cities*

miasma
*4: Health and Disease*

Middle East
*10.4: Sex Ratio*

migration
*3.1: Why do we eat this stuff?*
*6.2: Diffusion of Religion*
*9.7: Space Makes Race*

migration patterns
*9.9: Processes*

migration streams
*11.3: Urban Morphology*

minorities
*9.10: Enforced Ethnic Regions*

minority groups
*9.11: Black Ghetto Typology*
*9.14: Ethnic Landscapes*

minority neighborhoods
*9.12: Environmental Racism*

minority rights
*7.2: Separatist Movements*
*9.8: Ethnic Regions*

misleading signs
*5.4: Language on the Landscape*

mixed ancestry
*9.6: American-American?*

money
*12: Economic Geography*

monumental architecture
*6.3: The Landscapes of Religion*

motel
*5.4: Language on the Landscape*

mourning
*6.4: Shrines and other Sacred Spaces*
*6.6: Cemeteries*

multiculturalism
*9.1: Race*

music
*11.6: Sound of the City*
*2.2: Folk Regions*

music history
*1.7: Core Concepts*

Muslims
*9.3: Religion*

**N**

NAFTA
*12.4: Free Trade and Protectionism*

nation
*7: Politics and Power*

national origin
*9.6: American-American?*

nationalism
*7.1: Federalism vs. the Unitary State*
*7.2: Separatist Movements*

nationality
*9.4: National Heritage*

Native American
*9.14: Ethnic Landscapes*

Native American names
*5.5: Toponyms –Place Name Geography*

nativity scenes
*6.5: Religious Holiday Space*

NBA
*2.5: The Geography of Sports*

negative stereotypes
*9.12: Environmental Racism*

neighborhood
*11.4: City Life*

neighborhoods
*8.1: Spatial Patterns of Crime*
*9.14: Ethnic Landscapes*

New York City
*1.7: Core Concepts*

NFL
*2.5: The Geography of Sports*

North American Indians
*9.10: Enforced Ethnic Regions*

nostalgia
*2.1: Folk Culture*

numeracy
*1.6: Geography is a Way to Communicate – Cartography the Jedi Language*

**O**

obesity crisis
*3.1: Why do we eat this stuff?*

observation
*1.2: Geography as Discipline –Key Aspects of the "Jedi Way"*

oil refining
*12.3: Secondary Sector*

organized crime
*8.1: Spatial Patterns of Crime*

Oxnard
*5.4: Language on the Landscape*

**P**

pandemic
*4.2: Geography of Disease*

pay gap
*10.2: Evolution of Gender Roles*

personal liberty
*7.3: Political Cultures*

photography
*1.3: Geography is a Way to See the World- Jedi Goggles*

pilgrimage
*6.4: Shrines and other Sacred Spaces*

policing
*8: Crime and Punishment*

political beliefs
*7.3: Political Cultures*

political culture
*7.3: Political Cultures*
*7.6: Political Landscapes*

political geography
*7.5: Electoral Cartography*

political landscapes
*7.6: Political Landscapes*

political polarization
*7.5: Electoral Cartography*

political power
*7.4: Electoral Politics -Boundary Drawing*

political redistricting
*7.4: Electoral Politics -Boundary Drawing*

politicalsystems
*7.1: Federalism vs. the Unitary State*

politics
*6.7: Cultural Ecology of Religion*
*7: Politics and Power*
*9: Ethnicity*

pollution
*12.2: Primary Sector*

pop music
*1.2: Geography as Discipline –Key Aspects of the "Jedi Way"*

population
*11: Urban Geography*
*11.1: Defining Cities*

population growth
*10.3: Demographic Transition Model*
*11.2: Birth of Cities*

pork
*3.2: The Geography of Barbecue (BBQ)*

poverty
4.1: Health Metrics
4.3: Geography of Care
8.1: Spatial Patterns of Crime
power
7: Politics and Power
practices
2.2: Folk Regions
prenatal care
4.3: Geography of Care
preservation
3.2: The Geography of Barbecue (BBQ)
presidential election
7.5: Electoral Cartography
pride
11.6: Sound of the City
primary sector
12.2: Primary Sector
12.3: Secondary Sector
problem solving
1: What is Geography?
production
12: Economic Geography
8.3: Illegal Substances
Progressives
7.3: Political Cultures
property lines
3.6: Agricultural Landscapes
Protectionism
12.4: Free Trade and Protectionism
public health
4.1: Health Metrics
4.2: Geography of Disease
public housing
11.4: City Life
public safety
8: Crime and Punishment
public space
10.5: Gendered Landscapes
6.5: Religious Holiday Space
public transit
11.3: Urban Morphology
publichealth
3.4: Von Thünen's Model
punishment
8: Crime and Punishment
8.2: Geography of Punishment

## Q

quantitative revolution
1.1: A Short History of Geography

## R

race
9: Ethnicity
9.1: Race
9.2: Language
9.5: Region
9.7: Space Makes Race
racial differences
9.3: Religion
racial groups
9.5: Region
racism
8: Crime and Punishment
9.1: Race
rap music
11.6: Sound of the City
real estate marketing
5.5: Toponyms –Place Name Geography
recidivism
8.2: Geography of Punishment
Red Hot Chili Peppers
11.6: Sound of the City
red states blue states
7.5: Electoral Cartography
regional dialects
5.3: American Languages
regional differences
2.3: Folk Housing
regional geography
1.1: A Short History of Geography
regional practices
2.1: Folk Culture
regional styles
3.2: The Geography of Barbecue (BBQ)
regions
11.1: Defining Cities
rehabilitation
8: Crime and Punishment
8.2: Geography of Punishment
religion
6: Religion
6.1: Religious Realms
6.2: Diffusion of Religion
6.6: Cemeteries
6.7: Cultural Ecology of Religion
9: Ethnicity
9.3: Religion
religious beliefs
9.6: American-American?
religious holidays
6.5: Religious Holiday Space
religious minorities
6.2: Diffusion of Religion
religious practice
6.3: The Landscapes of Religion
religious practices
6.1: Religious Realms
religious texts
6.3: The Landscapes of Religion
religious tolerance
6.1: Religious Realms
representation
7.4: Electoral Politics -Boundary Drawing
reproductive rights
10.2: Evolution of Gender Roles
10.3: Demographic Transition Model
research
1.2: Geography as Discipline –Key Aspects of the "Jedi Way"
research methods
1.5: Geography is a Way to Solve Problems – Jedi Weapons
reservations
9.10: Enforced Ethnic Regions
residential separation
9.12: Environmental Racism
restaurant
5.4: Language on the Landscape
retail
12.6: Site LocationAnalysis
riskpools
4.4: Regional Variations in Health Care
rituals
6: Religion
rural
11.1: Defining Cities
rural development
3.6: Agricultural Landscapes
rural population
7.5: Electoral Cartography

## S

sacred architecture
6.3: The Landscapes of Religion
sacred spaces
6.4: Shrines and other Sacred Spaces
safety
8.1: Spatial Patterns of Crime
sanctification
6.4: Shrines and other Sacred Spaces
SanFrancisco
10.1: Gender and Identity in San Francisco, California
Santa Claus
6.5: Religious Holiday Space
scholarship
1.2: Geography as Discipline –Key Aspects of the "Jedi Way"
science
1.8: Cause and Effect
secession
7.2: Separatist Movements
secondary sector
12.3: Secondary Sector
secularization
6.1: Religious Realms
segregation
9.10: Enforced Ethnic Regions
9.11: Black Ghetto Typology
separatism
7.2: Separatist Movements
separatist movements
7: Politics and Power
service sector
12.1: Economic Sectors
services
12: Economic Geography
settlement patterns
2.3: Folk Housing
sex ratio
10.4: Sex Ratio
sexual orientation
10: Gender and Sexual Identity
sexuality
10.1: Gender and Identity in San Francisco, California
slavery
9.1: Race
soccer
2.5: The Geography of Sports
social equality
7.3: Political Cultures
social ills
9.12: Environmental Racism

social issues
8.3: Illegal Substances
social movements
1.7: Core Concepts
social rules
2: Culture and Cultural Practices
social science
12: Economic Geography
social sciences
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
1.5: Geography is a Way to Solve Problems – Jedi Weapons
social stratification
11.3: Urban Morphology
society
11: Urban Geography
2: Culture and Cultural Practices
2.2: Folk Regions
songwriters
11.6: Sound of the City
Southern cuisine
3.2: The Geography of Barbecue (BBQ)
southern culture
2.3: Folk Housing
SouthKorea
4.4: Regional Variations in Health Care
Spanish
5.3: American Languages
spatial analysis
1.8: Cause and Effect
12.6: Site LocationAnalysis
spatial behavior
7: Politics and Power
spatial data
1.6: Geography is a Way to Communicate – Cartography the Jedi Language
spatial epistemology
1.5: Geography is a Way to Solve Problems – Jedi Weapons
spatial patterns
4: Health and Disease
spatial questions
1.4: Geography is a Way to Ask Questions – Jedi MindTricks
spatial statistics
1.5: Geography is a Way to Solve Problems – Jedi Weapons
spatial thinking
1.7: Core Concepts
5.6: Language and the Environment
spirituality
6: Religion
sports
2.5: The Geography of Sports
St. Patrick's Day
6.5: Religious Holiday Space
statesrights
7.1: Federalism vs. the Unitary State
statistical
11.1: Defining Cities
statistical analysis
1.5: Geography is a Way to Solve Problems – Jedi Weapons
stereotypes
9.14: Ethnic Landscapes
strategy
12.5: Business Geography
structure
2: Culture and Cultural Practices
students
1: What is Geography?
supply chain
12.4: Free Trade and Protectionism
surveying
3.6: Agricultural Landscapes
survival
5.6: Language and the Environment
sustainability
3: Agriculture and Foodways
3.3: Agricultural Regions
3.4: Von Thünen's Model
sustainable farming
3.5: Agriculture around the World
systemic inequality
11.4: City Life

**T**

thyroidcancer
4.4: Regional Variations in Health Care
timber
12.2: Primary Sector
tolerance
10.1: Gender and Identity in San Francisco, California
toponyms
5: Language and Dialect
5.5: Toponyms –Place Name Geography
tourism
12.5: Business Geography
9.14: Ethnic Landscapes
trade
11.2: Birth of Cities
12.1: Economic Sectors
traditionalists
7.3: Political Cultures
traditions
2.1: Folk Culture
Trail of Tears
9.10: Enforced Ethnic Regions
transgender
10: Gender and Sexual Identity
transnationalism
9.7: Space Makes Race
transportation
11: Urban Geography
11.2: Birth of Cities
11.3: Urban Morphology
8.3: Illegal Substances
transportationcosts
3.4: Von Thünen's Model
trivia
1: What is Geography?

**U**

uninsured
4.4: Regional Variations in Health Care
unitarystate
7.1: Federalism vs. the Unitary State
United States
6.2: Diffusion of Religion
7.6: Political Landscapes
9.11: Black Ghetto Typology
9.3: Religion
urban
1.3: Geography is a Way to See the World- Jedi Goggles
11: Urban Geography
11.1: Defining Cities
11.4: City Life
11.5: Cityas Place
urban anthems
11.6: Sound of the City
urban architecture
9.14: Ethnic Landscapes
urban areas
7.5: Electoral Cartography
urban crime
8.4: CrimeMapping and Analysis
urban design
10.5: Gendered Landscapes
urban development
11.3: Urban Morphology
urban growth
11.2: Birth of Cities
urban history
9.11: Black Ghetto Typology
urban models
11.3: Urban Morphology
urban morphology
11.3: Urban Morphology
urban planning
11.3: Urban Morphology
11.4: City Life
7.6: Political Landscapes
urbanization
10.3: Demographic Transition Model
11: Urban Geography
11.2: Birth of Cities
US history
9.1: Race
USDA
3.3: Agricultural Regions
USgovernment
7.1: Federalism vs. the Unitary State

**V**

vaccinations
4.1: Health Metrics
Victorian Era
10.2: Evolution of Gender Roles
Virgin Mary
6.4: Shrines and other Sacred Spaces
visual cues
1.3: Geography is a Way to See the World- Jedi Goggles
vocabulary
5.1: Introduction
VonThunenModel
3.4: Von Thünen's Model
voter turnout
7.4: Electoral Politics -Boundary Drawing
voting power
7.5: Electoral Cartography

## W

water sanitation
*4: Health and Disease*
wealth
*12: Economic Geography*
western
*5.4: Language on the Landscape*
wheat
*3.3: Agricultural Regions*
women
*10.4: Sex Ratio*
women's empowerment
*10.2: Evolution of Gender Roles*
women's rights
*10.2: Evolution of Gender Roles*
*10.3: Demographic Transition Model*
worldview
*5: Language and Dialect*
worship activities
*6.4: Shrines and other Sacred Spaces*
worship services
*6.3: The Landscapes of Religion*

## X

xenophobia
*9.6: American-American?*

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# GLOSSARY

## S

**Sample Word 1** | Sample Definition 1

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    - 2.2: Folk Regions - *CC BY-NC 4.0*
    - 2.3: Folk Housing - *CC BY-NC 4.0*
    - 2.4: Folk Music to Popular Music - *CC BY-NC 4.0*
    - 2.5: The Geography of Sports - *CC BY-NC 4.0*
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    - 3.1: Why do we eat this stuff? - *CC BY-NC 4.0*
    - 3.2: The Geography of Barbecue (BBQ) - *CC BY-NC 4.0*
    - 3.3: Agricultural Regions - *CC BY-NC 4.0*
    - 3.4: Von Thünen’s Model - *CC BY-NC 4.0*
    - 3.5: Agriculture around the World - *CC BY-NC 4.0*
    - 3.6: Agricultural Landscapes - *CC BY-NC 4.0*
  - 4: Health and Disease - *CC BY-NC 4.0*
    - 4.1: Health Metrics - *CC BY-NC 4.0*
    - 4.2: Geography of Disease - *CC BY-NC 4.0*
    - 4.3: Geography of Care - *CC BY-NC 4.0*
    - 4.4: Regional Variations in Health Care - *CC BY-NC 4.0*
  - 5: Language and Dialect - *CC BY-NC 4.0*
    - 5.1: Introduction - *CC BY-NC 4.0*
    - 5.2: World Languages - *CC BY-NC 4.0*
    - 5.3: American Languages - *CC BY-NC 4.0*
    - 5.4: Language on the Landscape - *CC BY-NC 4.0*
    - 5.5: Toponyms –Place Name Geography - *CC BY-NC 4.0*
    - 5.6: Language and the Environment - *CC BY-NC 4.0*
  - 6: Religion - *CC BY-NC 4.0*
    - 6.1: Religious Realms - *CC BY-NC 4.0*
    - 6.2: Diffusion of Religion - *CC BY-NC 4.0*
    - 6.3: The Landscapes of Religion - *CC BY-NC 4.0*
    - 6.4: Shrines and other Sacred Spaces - *CC BY-NC 4.0*
    - 6.5: Religious Holiday Space - *CC BY-NC 4.0*
    - 6.6: Cemeteries - *CC BY-NC 4.0*
    - 6.7: Cultural Ecology of Religion - *CC BY-NC 4.0*
  - 7: Politics and Power - *CC BY-NC 4.0*
    - 7.1: Federalism vs. the Unitary State - *CC BY-NC 4.0*
    - 7.2: Separatist Movements - *CC BY-NC 4.0*
    - 7.3: Political Cultures - *CC BY-NC 4.0*
    - 7.4: Electoral Politics -Boundary Drawing - *CC BY-NC 4.0*
    - 7.5: Electoral Cartography - *CC BY-NC 4.0*
    - 7.6: Political Landscapes - *CC BY-NC 4.0*
  - 8: Crime and Punishment - *CC BY-NC 4.0*
    - 8.1: Spatial Patterns of Crime - *CC BY-NC 4.0*
    - 8.2: Geography of Punishment - *CC BY-NC 4.0*
    - 8.3: Illegal Substances - *CC BY-NC 4.0*

- 8.4: CrimeMapping and Analysis - *CC BY-NC 4.0*
- 9: Ethnicity - *CC BY-NC 4.0*
  - 9.1: Race - *CC BY-NC 4.0*
  - 9.2: Language - *CC BY-NC 4.0*
  - 9.3: Religion - *CC BY-NC 4.0*
  - 9.4: National Heritage - *CC BY-NC 4.0*
  - 9.5: Region - *CC BY-NC 4.0*
  - 9.6: American-American? - *CC BY-NC 4.0*
  - 9.7: Space Makes Race - *CC BY-NC 4.0*
  - 9.8: Ethnic Regions - *CC BY-NC 4.0*
  - 9.9: Processes - *CC BY-NC 4.0*
  - 9.10: Enforced Ethnic Regions - *CC BY-NC 4.0*
  - 9.11: Black Ghetto Typology - *CC BY-NC 4.0*
  - 9.12: Environmental Racism - *CC BY-NC 4.0*
  - 9.13: Ethnicity and the Economy - *CC BY-NC 4.0*
  - 9.14: Ethnic Landscapes - *CC BY-NC 4.0*
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  - 10.1: Gender and Identity in San Francisco, California - *CC BY-NC 4.0*
  - 10.2: Evolution of Gender Roles - *CC BY-NC 4.0*
  - 10.3: Demographic Transition Model - *CC BY-NC 4.0*
  - 10.4: Sex Ratio - *CC BY-NC 4.0*
  - 10.5: Gendered Landscapes - *CC BY-NC 4.0*
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  - 11.1: Defining Cities - *CC BY-NC 4.0*
  - 11.2: Birth of Cities - *CC BY-NC 4.0*
  - 11.3: Urban Morphology - *CC BY-NC 4.0*
  - 11.4: City Life - *CC BY-NC 4.0*
  - 11.5: Cityas Place - *CC BY-NC 4.0*
  - 11.6: Sound of the City - *CC BY-NC 4.0*
- 12: Economic Geography - *CC BY-NC 4.0*
  - 12.1: Economic Sectors - *CC BY-NC 4.0*
  - 12.2: Primary Sector - *CC BY-NC 4.0*
  - 12.3: Secondary Sector - *CC BY-NC 4.0*
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    - 1.5: Geography is a Way to Solve Problems – Jedi Weapons - *CC BY-NC 4.0*
    - 1.6: Geography is a Way to Communicate – Cartography the Jedi Language - *CC BY-NC 4.0*
    - 1.7: Core Concepts - *CC BY-NC 4.0*
    - 1.8: Cause and Effect - *CC BY-NC 4.0*
  - 2: Culture and Cultural Practices - *CC BY-NC 4.0*
    - 2.1: Folk Culture - *CC BY-NC 4.0*
    - 2.2: Folk Regions - *CC BY-NC 4.0*
    - 2.3: Folk Housing - *CC BY-NC 4.0*
    - 2.4: Folk Music to Popular Music - *CC BY-NC 4.0*
    - 2.5: The Geography of Sports - *CC BY-NC 4.0*
  - 3: Agriculture and Foodways - *CC BY-NC 4.0*
    - 3.1: Why do we eat this stuff? - *CC BY-NC 4.0*
    - 3.2: The Geography of Barbecue (BBQ) - *CC BY-NC 4.0*
    - 3.3: Agricultural Regions - *CC BY-NC 4.0*
    - 3.4: Von Thünen's Model - *CC BY-NC 4.0*
    - 3.5: Agriculture around the World - *CC BY-NC 4.0*
    - 3.6: Agricultural Landscapes - *CC BY-NC 4.0*
  - 4: Health and Disease - *CC BY-NC 4.0*
    - 4.1: Health Metrics - *CC BY-NC 4.0*
    - 4.2: Geography of Disease - *CC BY-NC 4.0*
    - 4.3: Geography of Care - *CC BY-NC 4.0*
    - 4.4: Regional Variations in Health Care - *CC BY-NC 4.0*
  - 5: Language and Dialect - *CC BY-NC 4.0*
    - 5.1: Introduction - *CC BY-NC 4.0*
    - 5.2: World Languages - *CC BY-NC 4.0*
    - 5.3: American Languages - *CC BY-NC 4.0*
    - 5.4: Language on the Landscape - *CC BY-NC 4.0*
    - 5.5: Toponyms –Place Name Geography - *CC BY-NC 4.0*
    - 5.6: Language and the Environment - *CC BY-NC 4.0*
  - 6: Religion - *CC BY-NC 4.0*
    - 6.1: Religious Realms - *CC BY-NC 4.0*
    - 6.2: Diffusion of Religion - *CC BY-NC 4.0*
    - 6.3: The Landscapes of Religion - *CC BY-NC 4.0*
    - 6.4: Shrines and other Sacred Spaces - *CC BY-NC 4.0*
    - 6.5: Religious Holiday Space - *CC BY-NC 4.0*
    - 6.6: Cemeteries - *CC BY-NC 4.0*
    - 6.7: Cultural Ecology of Religion - *CC BY-NC 4.0*
  - 7: Politics and Power - *CC BY-NC 4.0*
    - 7.1: Federalism vs. the Unitary State - *CC BY-NC 4.0*
    - 7.2: Separatist Movements - *CC BY-NC 4.0*
    - 7.3: Political Cultures - *CC BY-NC 4.0*
    - 7.4: Electoral Politics -Boundary Drawing - *CC BY-NC 4.0*
    - 7.5: Electoral Cartography - *CC BY-NC 4.0*
    - 7.6: Political Landscapes - *CC BY-NC 4.0*
  - 8: Crime and Punishment - *CC BY-NC 4.0*
    - 8.1: Spatial Patterns of Crime - *CC BY-NC 4.0*
    - 8.2: Geography of Punishment - *CC BY-NC 4.0*
    - 8.3: Illegal Substances - *CC BY-NC 4.0*

- 8.4: CrimeMapping and Analysis - *CC BY-NC 4.0*
- 9: Ethnicity - *CC BY-NC 4.0*
  - 9.1: Race - *CC BY-NC 4.0*
  - 9.2: Language - *CC BY-NC 4.0*
  - 9.3: Religion - *CC BY-NC 4.0*
  - 9.4: National Heritage - *CC BY-NC 4.0*
  - 9.5: Region - *CC BY-NC 4.0*
  - 9.6: American-American? - *CC BY-NC 4.0*
  - 9.7: Space Makes Race - *CC BY-NC 4.0*
  - 9.8: Ethnic Regions - *CC BY-NC 4.0*
  - 9.9: Processes - *CC BY-NC 4.0*
  - 9.10: Enforced Ethnic Regions - *CC BY-NC 4.0*
  - 9.11: Black Ghetto Typology - *CC BY-NC 4.0*
  - 9.12: Environmental Racism - *CC BY-NC 4.0*
  - 9.13: Ethnicity and the Economy - *CC BY-NC 4.0*
  - 9.14: Ethnic Landscapes - *CC BY-NC 4.0*
- 10: Gender and Sexual Identity - *CC BY-NC 4.0*
  - 10.1: Gender and Identity in San Francisco, California - *CC BY-NC 4.0*
  - 10.2: Evolution of Gender Roles - *CC BY-NC 4.0*
  - 10.3: Demographic Transition Model - *CC BY-NC 4.0*
  - 10.4: Sex Ratio - *CC BY-NC 4.0*
  - 10.5: Gendered Landscapes - *CC BY-NC 4.0*
- 11: Urban Geography - *CC BY-NC 4.0*
  - 11.1: Defining Cities - *CC BY-NC 4.0*
  - 11.2: Birth of Cities - *CC BY-NC 4.0*
  - 11.3: Urban Morphology - *CC BY-NC 4.0*
  - 11.4: City Life - *CC BY-NC 4.0*
  - 11.5: Cityas Place - *CC BY-NC 4.0*
  - 11.6: Sound of the City - *CC BY-NC 4.0*
- 12: Economic Geography - *CC BY-NC 4.0*
  - 12.1: Economic Sectors - *CC BY-NC 4.0*
  - 12.2: Primary Sector - *CC BY-NC 4.0*
  - 12.3: Secondary Sector - *CC BY-NC 4.0*
  - 12.4: Free Trade and Protectionism - *CC BY-NC 4.0*
  - 12.5: Business Geography - *CC BY-NC 4.0*
  - 12.6: Site LocationAnalysis - *CC BY-NC 4.0*
- Back Matter - *CC BY-NC 4.0*
  - Index - *CC BY-NC 4.0*
  - Glossary - *CC BY-NC 4.0*
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