INTRODUCTION TO HUMAN GEOGRAPHY:
A DISCIPLINARY APPROACH
Introduction to Human Geography: A Disciplinary Approach

Geography the Jedi Way
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PREFACE

This text was conceived and executed with several key goals in mind. The first and most obvious goal of ours was to provide a text at little to no cost to a generation of students who face exceptional and ever-rising cost constraints as they seek an education. Students should be able to acquire this text in a variety of digital and print formats so that their needs are met on terms set by the student, not administrators or bookstores and publishers.

The second critical goal set forth by the authors of this text was to introduce students to a contemporary version of geography. Instead of prompting students to remember an encyclopedia of the United States or the World, our focus is squarely on helping students learn how to think about their world as accomplished geographers think about it. We want students to learn how to “do geography”, as they learn “about geography”. We hope students will finish the semester with some disciplinary skills in addition to the more common subject knowledge associated with traditional introductory geography texts. If we are all lucky, then students will develop healthy and positive dispositions as well.

A third goal identified by the authors was to make a geography text that is exciting while academically demanding. This means that the authors have endeavored to illustrate key concepts and skills with examples and data that are contemporary, engaging and relevant. We also believe that even freshmen must be introduced to some measure of the theory that makes modern cultural geography so captivating. It seems absurd to us that all “the good stuff” is essentially reserved for graduate students, while entry-level students are fed a steady diet of intellectual filler. Lastly, we hope to introduce students to a series of hands on exercises that they find exciting and illuminating.

The U.S. focus of this text is purposeful. It is not to suggest that there is no merit in addressing international topics. Mountains of evidence points to a crippling, and one might suggest dangerous, ignorance of world geography, but nearly as much evidence exists showing that students are woefully ignorant of U.S. geography as well. American students frequently know little of the conditions in their own country, nor the processes that have created the culture in which they live. It is with these very real concerns that we suggest that students have at least two introductory human geography courses. One course should focus on domestic topics and the other on the non-Western world, perhaps using a regional approach. This text is designed to serve the former style.

The multiple links to YouTube and Wikipedia are also purposeful. Though each resource has disadvantages, we think the advantages currently outweigh the drawbacks. Wikipedia requires documentation and is open to occasionally contentious debate about its contents. Wikipedia is a living document, and continual construction/destruction functions much as knowledge as we know it or use it. Multiple links within many Wikipedia entries allow readers to explore further topics unfamiliar to them. This approach is far healthier than the standard, traditional, static encyclopedic references, and far more practical than a glossary of terms. We would like to stress however, that Wikipedia, like many online reference materials, is not a quality source for academic research because it is not peer-reviewed. There are numerous links throughout the text to academic, peer-reviewed and edited sources, allowing students to see the difference between reference materials and research materials.
Using This Textbook

Chapter Organization

Each chapter covers a thematic topic, like politics, economics, religion or language. Each of these topics is treated as a geographer is likely to approach it. Frequently, the information is presented as series of vignettes, or short stories about a handful of selected issues as they are understood through the lenses of geography. The information on economics, politics, religion or ethnicity is by no means exhaustive. Rather, it is illustrative, designed to help students understand how to think about those topics using the epistemology and methodologies of the geographer.

What is it?
Each chapter will begin with a brief overview of the topic or subject. There is a conscious attempt to keep the “what” section as small as possible to avoid a devolution into an encyclopedic “geography of everything” type text. Many links, mostly to Wikipedia serve as opportunities for students to explore content or subject with which they lack familiarity. Students should endeavor to remember vocabulary, not because it is the primary learning objective, but because a mastery of basic vocabulary provides the tools necessary to engage critical thinking and problem solving skills.

Where is it?
The second part of each chapter will answer the question, “Where?”, often using the language of geography: cartography. Each of the topics is presented whenever possible via maps. Students are introduced to maps displaying the critical data that characterizes the economic, political, linguistic, etc. conditions that frame their everyday lives. This strategy is intended to: 1) echo the epistemological foundation of geography by privileging spatial information; 2) demonstrate a common methodological practice in geography – mapping the data first to prompt data analysis; 3) increase cartographic literacy among students using this text via practice at map reading. Students will be expected to be able to critically analyze maps, so that they may also eventually learn to create maps of their own, an increasingly critical skill in our contemporary graphics-intense media age.

What does it look like?
Each chapter will feature numerous photographs of sample landscapes, so that you may begin to learn to read how the chapter’s topic matter manifests itself on the built environment. This is how we generally encounter each of the topics of concern: we move through the landscape experiencing them. However, most folks don’t actively engage the landscapes as a text, or a stage. In other words, most are generally unaware that the landscape is rich with meaning decipherable and readable like a text. The landscape is a type of data; typically overlooked and unused by non-geographers. We hope that students become far more active readers of the landscape, able to use the visual cues around them to ask questions about why things are the way they are.

Why is it here or there?
Woven through each chapter are explanations designed to explain the “why of where”. By demonstrating how geographers explain various phenomena and conditions, students are expected to learn to explain things using the same spatially sensitive logics. Answering “why?” is the key component of the modernist project: it is what social science seeks to accomplish. This book tries to answer a large number of why questions, but always by starting with “where?”
How does it fit in?
One of the coolest features of spatial thinking is the way it allows geographers to understand connections between seemingly disparate elements of our lives. There may be connections between the color of a town’s dirt and its politics. There may be a connection between a region’s weather and the sound of their music, the local economy and the religion. Geographers see those connections.

Images
There are a lot of photos and graphics this text. You’ll notice that many of them are too small for you to easily discern all the information you might like, especially the maps. This was done to minimize the space occupied by images and maps for students who are printing the text, or simply downloading it to a hard drive. Graphics use a lot of ink and a lot of memory, so almost every image is also a hyperlink to a larger version on the world wide web. If an image, graphic, table or map is too small, click on it and a larger version should appear on your screen.

Sidebar Links
Several link types are provided throughout the text. The obvious and familiar link type are the YouTube links, which take students to videos hosted by Google’s YouTube video service. YouRead links take students to academic reading materials hosted on the internet. Students who are logged on to the library on their campus, or are reading the text from an on-campus library may be able to open the text instantly, depending on the journal subscribed to by your local campus library. All links were active for students enrolled at California State University as of January 2015. The Map links generally allow students to visit websites hosting interactive mapping and data sites. The Cool Link icons are associated with webpages that the authors found interesting or useful to students in a geography course.

Material hosted by off campus servers may or may not be fully accessible for students with hearing or vision disabilities, therefore, they are not likely to be required viewing, listening or reading. Consult with your instructor for specific instructions.

Vocabulary
There are a number of terms and concepts presented in the text that you are expected to learn. Several devices are used to draw your attention to these terms and concepts. Word in bold italics are of the highest level of importance. Most words in bold italics are also hyperlinked to Wikipedia, or Wiktionary to help you explore the concept, vocabulary or issue more should you choose. The glossary at the end of the text includes simple definitions for words in bold italics. Words in simple italics are somewhat less important. They may or may not appear in the glossary and may or may not be linked to a Wiki page. Some words are simply linked to Wikipedia or Wiktionary because the author suspects that students may need assistance with the term or concept, or may just want to find more information.
ACKNOWLEDGEMENTS AND DONATIONS

This resource is made possible in part by funding from the California State University, Northridge eText Initiative. The author would like to thank the collaborative team at CSUN for their kind assistance and encouragement.

However, thanks to large number of contemporary elected officials, most of whom are beholden to the corporate interests and a vocal opposition to progressive taxation, public education has become too expensive, especially for students who are from the working class. I too was an impoverished student and struggled to pay for tuition, housing, food, and books years ago, when a college education was far cheaper than it is today. So rather than continuing to complain about the disregard of politicians for the welfare of today’s generation of students, I’m doing my part by making this eText free to the public.

In order to offset the considerable expense of constructing, maintaining and updating this free resource, I have decided to set up a donation tool, should students, faculty or random millionaires decide they have a few bucks to spare to ensure that this text retains its quality and ideal price. All donations are dedicated to the costs associated with maintaining, upgrading and improving this educational resource. I may use it to hire assistants, editors or to fund research. In the unlikely case that funds are generated beyond what is necessary to maintain this eText and the ancillary materials, I will donate the surplus toward scholarships for geography students, and occasionally to Wikipedia’s Foundation.

Please consider donating a few bucks to support this resource. Options are listed below.

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Introduction to Human Geography

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WHAT IS GEOGRAPHY?

Geography is a discipline addressing a variety of subjects and topics. Geography allows those trained to use it to ask questions, to see patterns in data, to solve problems and to communicate solutions.

The popular afternoon television show Jeopardy is probably the most common way Americans are exposed to geography. This is a huge problem because although it does more than any other medium to advance geographic knowledge among Americans, it advances it 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 like that. By focusing on “geography as subject” Jeopardy continually reinforces old-fashioned notions about geography, and in the process leads many Americans to think that geographers do little more than memorize rivers, crops and capitals. This misconception is akin to suggesting that historians memorize an unending list of dates, or that English majors spend all their time preparing for spelling bees.

For generations, countless school curriculums and K-12 textbooks have mimicked the unfortunate focus upon geography-as-trivia by TV game shows over the past several generations in the U.S. As a result, the much more accurate notion of “geography as a discipline” has been all but stomped out of the American imagination. Subsequently, college students rarely consider geography as a major. Many folks, including high school guidance counselors, do not realize that one can major in geography at most large universities. Students, parents and even faculty outside of your Geography Department often don’t realize that geography provides students and scholars a robust set of analytical tools and lucrative career paths in stunning array of private industries and public sectors.

One of the primary goals of this text is to introduce readers to an updated, viable version of geography. We hope to help students to begin to see, think, solve problems and
communicate as a geographer - while at the same time learning some “old school” geography so they can defeat friends and family at trivia or Jeopardy!

**A Short History of Geography**

There are probably several reasons accounting for the sometime less-than-thrilling version of geography most Americans have experienced in school. A very brief history of the discipline helps explain how we’ve gotten to the current situation.

Certainly, geography has a long enough history. Ancient Greek and Chinese scholars wrote massive “geographies” that set a standard for centuries. Until the 1800s, geographers focused almost exclusively on writing rich descriptive narratives about a region or location. Descriptive geographies are interesting for those who have a healthy intellectual curiosity about the people and places of the world. Descriptive geography has proven to be immeasurably valuable to the cause of imperialism, colonization and the military adventures that regularly accompanied the age of exploration. However, there is a tendency for descriptive geographies to degenerate into an encyclopedic list of facts.

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 appropriate. One group of geographers tried to make the discipline more scientific by trying to make causal connections between group behaviors and local environmental conditions. Known as environmental determinism, this brand of geography, sought to demonstrate how local conditions like climate, topography and soil characteristics were key determinants in the evolution of local cultural practices. Perhaps not surprisingly, many of these scholars found that they and their culture groups were products of ideal environmental conditions. The most advanced societies (and presumably most talented individuals) were repeatedly found by environmental determinists to live in places where favorable environmental conditions existed. According to this logic, locations where it was too hot, too cold, too rainy, too dry, etc. produced inferior people and inferior societies. The bigotry implicit and explicit in environmental determinism is clearer today. Despite their inability to prove scientifically their theories, a few geographers, like Ellen Churchill Semple and Ellsworth Huntington commanded outsized audiences in the early 20th century. Most serious academics of the time forcefully rejected environmental determinism, and by the time World War II began, the implications of this pseudo-scientific scholarship had within the eugenics movement and even upon the development of fascism was clear. Geography was tainted for its involvement,
and many geographers reacted by going back to the safe “geography as rich description” approach.

In the aftermath of World War II, geography retreated toward a non-scientific niche within academia. We know this type of geography today as regional geography and it is 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 why each place on earth is different 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 far-off locations. Most school (K-12) 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 fails to train students how to discover the processes driving the creation of regions. The dominance of the regional approach has doomed the popular perception of geography, especially in America, to the intellectual backwaters and trivia contests.

This fact is a tragedy for a number of reasons. By the 1960s, geographers had begun adopting legitimate scientific methodologies via spatial statistics during a period known now as the quantitative revolution, a revolution that continues today largely among the users of Geographic Information Systems (GIS –see below). 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.

Beginning in the 1970s and accelerating rapidly in the 1990s, geographers also began playing a leading role in a thrilling expansion of spatially informed theoretical approaches to explaining how the world works. Important, economic, political and cultural theorists emerged from among the ranks of geography departments in the UK and later 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 mechanics that regulate the production and maintenance of knowledge itself, which is in some ways the final frontier of social science.

Today, geography is a very vibrant discipline offering to the uninitiated a surprising number of avenues to understand the world, as well as a pathway to get a quality, high-paying job in either the public or private sector. The next section offers a greatly reduced introduction to the ideas and strategies that make geography a very useful discipline for understanding and solving a myriad of society’s problems.
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 can be found scattered throughout the library. Geographers have written books and scholarly articles about an astounding array of subjects – far too many to consider here. A geographer can study almost anything that takes place. What are you interested in? You can probably study it as a geographer. The following paragraphs provide a basic guide to geography as a discipline. Pick the subject you’re interested in, and apply these basic guidelines to the study of that subject and you’re on your way to becoming a geographer. We call it, only half-jokingly, “the Jedi discipline”, because like the fictional characters in the fictional series Star Wars, geographers have a way of doing things that are simultaneously unique and exceptionally powerful.

Geography is a Way to See the World

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. Still, one can begin acquiring the ability to read the landscape as a geographer by developing an awareness that all landscapes, the human and physical environment all around you, can be read, somewhat like one reads text in a book. With some practice, you will develop a measure of landscape literacy, the ability to understand a significant number of messages inscribed in the environment. All landscapes tell a story, it is for us to learn to read them.

You already have some Jedi skill in this area. You have been developing your abilities since you were a small child. You probably can tell when you are in a dangerous neighborhood. There isn’t a signpost at the borders of high crime districts warning, “Caution – Lock your Car Doors Now”, but still you know. How? You have learned to read the landscape.
Rubbish on the street, graffiti, bars on windows and unkempt lawns are common markers of neighborhoods that suffer from crime; and over the years, you’ve learned to interpret the symbolism of those markers. People who are “street smart” have developed this Jedi vision well.

The first steps you must take as you develop your landscape literacy skills is to begin looking more closely at stores, streets, houses, parking lots, road signs, empty lots, farm fields and anything else that passes your windshield. Don’t simply focus on the “pretty” scenes. Don’t focus on the important or impressive any more than you focus on the common, the ordinary, or everyday elements of your world. The ordinary or 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.”

This text will help you learn to read this autobiography. You should begin to ask yourself repeatedly, “What does this landscape communicate?” Look for patterns and try to guess what forces have created the patterns you see. Ask, “Why is this here (and not somewhere else)?” Each chapter in this book features multiple images of landscapes. Most images are captioned with a quick “reading” of the landscape pictured. A large image database, available via the internet is housed at The American Landscape Project, and many hundreds of the images contained therein feature robust captions in an effort to help you learn to read the landscape confidently.

Geography is a Way to Ask Questions – Jedi Mind Tricks

Epistemology is a term that refers to how we know what we know. An epistemology is a way of thinking and a way of knowing. Most of the time, people don’t think about how they know what they know. How individuals come to know what they do is often cloudy. “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 own epistemological tendencies. It is important to know how you know what you know. Geographers have a favored epistemology—it doesn’t have a name, but it clearly favors spatial concepts. When geographers seek to understand the world around them better, they have a strong tendency to frame questions in terms of place and space. In other words, when geographers want to know “why?” or “how?”, they typically first ask the question “where?” Because geographers ask the “where?” question first, they often
come to a different answer than non-geographers about a range of questions. It is common to find that non-geographers forget to ask “where?” question altogether.

Geographers frequently lament that our unique, spatial “way of thinking”, or “habit of mind” is sorely underdeveloped in the United States. Most geography instruction in K-12 American schools favors place-name geography, which is essentially the memorization of locations, at the expense of developing spatial thinking skills, which are the foundation upon which one can build knowledge through inquiry-based learning.

Ignoring questions of space and place has consequences. For instance, the author of this text once overheard a conversation on a large college campus centered on the question of why the most African-American students rode elevators in campus buildings and white students climbed the stairs. This pattern was reasonably obvious, but the causal reasons for it were not. Some people were quick to assign ethnicity as the primary causal factor motivating students to use or avoid elevators. Geographers would not make this mistake because they probably would have thought about the spatial aspects of the phenomenon first, and would have realized that ethnicity was probably not as important (or important at all). Instead, a geographer would have asked, “where did these students grow up?” Had they asked that question, it may have occurred to them that many of the black students on that campus grew up in a large metropolitan area, in the inner city where using elevators to reach the upper floors of residential buildings was common. Behavioral habits developed at home in high-rise apartments accompanied students to campus where students from the inner city used these habits to navigate buildings. Students from rural and suburban locations mostly grew up in single story or two-story houses, and they were more likely to use stairs. The behavioral differences were not black and white – they were spatial. Geography matters.

By privileging matters of place and space in their quest for knowledge, geographers may bias their conclusions – arguing that location is a significant causal variable in causing whatever phenomena is under investigation. Favoring one epistemology over others is nearly unavoidable. Historians, sociologists, political scientists, economists and other scholars have their own epistemological biases. As long as these competing means to comprehend reality can be given a fair audience, then a more robust, multi-perspectival understanding of our life world can be achieved. There is danger in discounting epistemologies and perspectives unfamiliar to you – and that’s another reason to love geography. Knowing about other places, makes you not only more knowledgeable, but permits you to develop greater sympathy for others for those in situations different from your own, and empathy with those with whom you can find common ground.

**Geography is a Way to Solve Problems – Light Sabers**

Geographers have a very powerful toolbox of problem solving tactics, largely built upon the spatial epistemology of our discipline. The tools in the geographer’s toolbox are our methods. There are many, many dozens of methods at the disposal of the geography student.
Geographers share many methods with other disciplines in the sciences, social sciences and even in the humanities. The scientific method is prominent among geographers, but humanistic methods, similar to those employed by historians, are also used by geographers. Taken together, the methods and the epistemology give geographers a series of methodologies, which are essentially a set of rules that govern both the collection of data and the analysis of the data. Generally, geographers tweak the methods and methodologies a little in order to fit in with the spatial epistemology used in the discipline. For example, if a geographer were to go to the student union to survey students about a new campus policy, many of the questions included in the survey would be the same as a survey administered by a political scientist, historian or sociologist. However, a geographer would insist that the survey have a spatial element included among the demographics. Instead of simply asking about a survey respondent’s age, gender, ethnicity, the geographer would surely also insist on getting data about respondents’ address, ZIP code, or at least “hometown”. Like many other disciplines, geographers use statistics; often in a manner that is indistinguishable from other disciplines. Once again, though, geography has a separate set of spatially-aware statistical tools that are uniquely suited to answering spatial questions. For example, social scientists from other disciplines might start a statistical inquiry by calculating mean, median and standard deviation. Geographers other the other hand, might begin a similar inquiry by mapping the data and then calculating a spatial mean, spatial median and standard distance of the same data. There are a vast number of spatial statistics, some of them exceptionally complex and some far less so. The laboratory exercises accompanying this course introduce students to a few basic statistical methods used in geography.

The primary tool in the geographer’s toolbox for the past few decades has been Geographic Information Systems software or GIS. GIS is the “light saber” of the modern geographer. GIS software allows geographers to analyze data in a fashion that is unique, allowing geographers to ask questions prompted by our unique spatial epistemology. It allows geographers to solve problems that prove intractable to those who don’t use GIS. People from other fields have embraced GIS in recent years, but it has become a fundamental methodological tool in geography.

**Geography is a Way to Communicate – 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, indicating that you are literate: you can communicate with words. You probably are reasonably adept at communicating with numbers as well – so you may be numerate as well. Without these two key skillsets, you probably would not be in college. Geographers are textually literate and numerate, but they also have a heightened ability to communicate with non-textual visual imagery, or graphics. If you can “read” graphics and create “readable” graphics, then you have graphicacy skills and may be considered graphicate. If you can read and create legible, communicative maps, then you can be considered cartographicate.
**Cartography** is the science and art of map making. It is the specialized language of the geographer. The ability to communicate a large amount of information, and/or ideas 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 reentered 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 a welcome coping mechanism. Not only are they cool, but they allow our brains to process very rapidly a far greater amount of data than we could if we encountered the same data as a textual narrative or in a massive spreadsheet. Maps allow us to see patterns and process that we would be hard-pressed 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 both an art and a science, taught in most college’s geography departments, and professional cartography is a great career path for a talented few. All geographers, even those whose specialty is not cartography, should endeavor to become reasonably adept at making maps. Luckily, most people can now create a tolerably good map using GIS software that has built-in cartography templates.

*Good Cartography?*
Throughout this text, you will notice that 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 “work”, and for those that work less well. Consider elements of color, scale, projection and text that work to enhance or degrade the communicative ability of maps in this volume.

*Core Concepts*
Now that you understand that geographers have a special way of 1) seeing, 2) thinking, 3) solving problems and 4) communicating – it is time to move on to learning some of the core concepts that will appear throughout this text.

*Location*
Geographers have a number of basic concepts that function effectively as tools in the main problem solving strategies used by geographers. First among these are the
concepts associated with idea of location. Each physical object has an **absolute location**. There are a variety of strategies for expressing or communicating absolute location. If you order a pizza, you will provide the delivery person your address, including an apartment number – and maybe even some additional details. 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 figure out where we’re going, 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 we have in America.

Another common system for expressing absolute location is by using a grid **geographic coordinate system**, that we generally express as “latitude and longitude”. 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 common system we use today was invented by Eratosthenes, vastly improved by Ptolemy and formalized into something we’d recognize today by Englishman Sir George Airy in 1851. Many folks own smart phones that have **global positioning system** (GPS) software pre-installed. These phones, and other GPS devices (handheld, in-car, in cameras) use the basic logic of the ancient coordinate system to help you find your way. GPS devices express latitude and longitude coordinates using a specific style formalized in 1984 called the **World Geodetic System**. Hence, this system is called WGS1984.

Most folks don’t need to know the details of how GPS works, but you should be able to recognize the basics of latitude and longitude, and be able use it to navigate the streets, hiking trails or other places you frequent. You surely use WGS1984 more often than you realize. For example, if you have a pizza delivered to your house, the driver may enter your address on his GPS device or phone, and his software translates your address into latitude and longitude coordinates. In turn, the coordinates appear on the on-screen map of the phone/GPS unit as a **point location**. The software then uses a computerized algorithm to find the shortest route between the delivery person’s latitude/longitude coordinates (another point location) and the coordinates associated with your address. If you order enough pizzas from the same store, your address is likely to be placed in a database with a **geotag**, containing the latitude and longitude coordinates for your house. If you have a smart phone, or smart camera, then you probably have the option of turning on or off the geotagging feature that assigns geographic coordinates to each photo you take.

**Region**

Another common device to express location is idea of a **cultural region**. Each absolute location, a **point**, like your address or latitude/longitude coordinates, is situated within multiple larger locations - 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
city, a county, a state, a country, etc. These locations are two-dimensional regions, so geographers map regions using **polygons** on paper or in a GIS.

Regions are not all created equal. States, counties and cities all have very specific boundaries. Regions that have very defined boundaries are called **functional regions**. They are easy to map. When you cross the boundary into or out of a functional region, some sort of rule changes. Laws are different. Even the boundaries used by pizza franchises, like Dominos or Pizza Hut, have rules. If you do not live inside the functional region designated by a polygon on a map used by the pizza franchise, you may not be able to get a pizza delivered to you from that location.

**Formal regions** have less well-defined boundaries or fuzzy boundaries, so the term “formal” is a bit misleading. Formal regions are harder to map. Nevertheless, these regions can be identified by some trait commonly exhibited within the region. Most often, formal regions have a **core** area, where the trait is most evident or abundant, and then a **peripheral** area where the trait is less evident or abundant. An example would be the Mormon region in the United States. The core area would be around Salt Lake City, where a large majority of people belong to the LDS Church. As you progress outward from Salt Lake City, the percentage of people who identify with the LDS church decreases until at some distance, it becomes illogical to call the region “Mormon” any longer.

Even less well defined than the formal region is the **vernacular region**, a region that exists mostly in the imagination of people. Such regions are hard to identify a core or a periphery, but they remain important because people believe they exist. A good example of a vernacular region is **“Dixie”**, a 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”. Still, “Dixie” exists in the minds of millions of Americans.
Diffusion

The core-periphery pattern that characterizes formal regions is the result of the friction of distance, perhaps the most fundamental principle shaping the spatial behavior of people, ideas and institutions. In the simplest terms, there exists what might be best thought of as a force, somewhat like gravity, that impedes the spread or diffusion of ideas, behaviors, people, etc. The friction of distance creates patterns on the landscape characterized by distance decay. These patterns are so pervasive and predictable that it lead geographer Waldo Tobler to call the process the first law of geography. Tobler argues that “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 more often similar than things that are far apart. According to Tobler, the idea was self-evident to him that he didn’t realize that he had captured the essence of something so fundamental 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 – and operates regularly in your daily life.

The process of diffusion is a prime example of how the first law of geography works. 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 synonym for “home” – especially the fire place.

CASE STUDY: DIFFUSION AND 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.

It took some years for people outside the Bronx to discover hip hop, but once discovered, hip hop music spread or diffused around the globe. The diffusion of hip hop demonstrates several key spatial patterns recognized by those who study the diffusion of culture. 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 they kept the music of Black and Latino youths living in the Bronx from reaching the ears of music fans (and music executives) in Manhattan, and beyond for nearly a decade.

During the 1970s and early 1980s, hip hop diffused slowly, spreading mostly to nearby locations, like the other boroughs of New York City and to northern New Jersey. This pattern of diffusion is a very common type of expansion diffusion known as contagious diffusion because the pattern is reminiscent of the way a contagious disease spreads from person to person. Almost all early rap acts from outside the Bronx were from Queens, Harlem, Brooklyn and Long Island, but all were from Greater New York City.

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. The next year, a bunch of hip hop acts had hit records, almost all of them from Los Angeles, America’s second largest city. This phase of hip hop expansion followed a pattern known as hierarchical diffusion, where innovations are adopted in the largest cities first, and smaller cities or rural areas 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 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 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 include musicians playing traditional instruments. Instead hip hop acts utilized a disc jockey or DJ who manipulated turntables and records to create musical accompaniment for the rapper or MC. 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 musicians rather than a DJ for the background music. The alteration of the original style created in the Bronx, but modified in New Jersey is a great example of stimulus diffusion. This kind of diffusion occurs when the central core of an idea or behavior spreads, but is significantly modified by those who adopt it elsewhere. Rappers and DJs in places beyond the Bronx 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, some local rappers produced music that glorified gang membership and gang violence. As ideas or practices spread, they adapt and change to fit local conditions or local preferences.

Had an MC or DJ from the Bronx moved themselves from the Bronx to New Jersey or Los Angeles, rather than just their music, then the process of spreading hip hop would have been characterized by geographers as an example of relocation diffusion. This kind of diffusion happens when an idea or practice moves with a person rather than through media, like records or MTV. Relocation diffusion is not a type of expansion diffusion.
There were a number of impediments or barriers to the diffusion of hip hop from the Bronx. In addition to the simple ignorance (people didn’t know about hip hop), there were significant biases against hip hop because of its association with one of America’s most infamous ghettos. The spatial segregation of specific ethnicities in the Bronx (African-Americans, Puerto Ricans, Haitians, Jamaicans, etc.) is an effective barrier to diffusion, and as you’ll read in later chapters functions effectively as a barrier to the movement of people and ideas on a number of fronts. It is worth noting that Motown Records, the most successful of all black-owned recording companies, eschewed hip hop for many years, which in turn helped doom its survival. It was eventually acquired by hip hop specialty company Defjam records.

Though hip-hop is essentially an international phenomenon today, a few locations have witnessed the construction of effective impermeable barriers to the diffusion of hip-hop. The places where hip hop cannot be heard, would largely be where very serious religious or political costs are attached to hip hop fans or musicians. Record stores have been bombed in Pakistan by supporters of the Taliban. More often than not though, the music “gets through” and becomes a source of resistance to authority. Other barriers to diffusion that might prevent adoption innovations might include technology, cultural incompatibility, or some measure of bigotry or bias that prevents or slows adoption of new ways.

Cause and Effect

Geographers are exceptionally interested in patterns or regularities on the landscape. All scientists look for regularities and they try to figure out the causal forces behind them. Our goal is to understand why the things are the way they are, so that we may better understand how to change what we dislike, or maintain that we love. Geographers are no different, but we have a tendency 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. More often, geographers use maps to plot whatever they are observing, or trying to observe. Once the map is constructed, then we begin to try to identify what is causing the pattern on the map.

Cultural Ecology

Perhaps the most common strategy that geographers use to determine causality is begin looking at the physical environment, which includes things like climate, weather, water, rocks, soils, rivers, etc. The study of the interaction between human culture and the environment is commonly referred to as cultural ecology.
Sometimes the relationships between cultural practices and the natural environment are easy to identify, like the relationship between the sport of hockey and long winters. More often though, relationships between cultural practices and the environment are difficult to fully understand.

**Cultural Integration**

A more holistic approach to understanding why things are as they is generally necessary. The argument that the natural environment as well as other cultural ideas, practices and traditions affect every other cultural practice is the basic principle of the concept known as *cultural integration*. You can think of any cultural practice as a cog in a complex machine in which alterations in one cog, or gear, wheel or spring is likely to result in changes in other cogs, gears, wheels and springs elsewhere in the mechanism.

**PLANKTON AND OBAMA**

An excellent example of the complex nature of cultural integration was uncovered and explained by several clever geographer-types during the presidential elections of 2008 and 2012. The stunning findings were that plankton were helping Barak Obama get elected. Preposterous? Not to geographer. More than 100 million years ago the shoreline of the Atlantic and the Gulf of Mexico was far inland from what it is today. In the shallow seas that were once where parts of Alabama, Mississippi, Georgia and the Carolinas are today, floated trillions of tiny plankton, that upon dying created a rich chalky dirt along the ancient beaches (see image). This dirt, millions of years later became a key ingredient in a narrow region of agriculturally rich soils stretching across the American South, splitting areas generally 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 was the richest cotton farming region in the United States. Because African-Americans, enslaved on plantations grew most of the cotton, the term old term, *black belt*, acquired a new layer of meaning that it maintains to this day. In those counties, where the descendants of slaves often outnumber white people by a large margin, Barak Obama won far more votes than his challengers John McCain and Mitch Romney.

![Map showing the approximate shoreline of the ancient Gulf of Mexico and overlay map showing cotton production and election results](image-url)

Figure 0:11: In the map on the left, the red line indicates the approximate shoreline of the ancient Gulf of Mexico responsible for the 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 to explain patterns, on the landscape but also to make predictions about how those patterns change, which firmly places geography in the realm of nomothetic science, while not removing it from the humanities altogether. Geographers often classify patterns in terms of the degree of observed clustering. Many phenomena cluster in space because the friction of distance affects everything, as suggested by the first law of geography. One way to observe clustering is to plot data on a map with points, as is done in the accompanying figures.

Consider the map below. Here payday lenders, represented by red triangles, appear to cluster in large numbers near the entrance of McCord Air Force Base / Fort Lewis in Washington. The pattern on the map strongly suggests that the payday lending industry were focused on military personnel as an attractive target demographic. This industry denied this accusation in congressional testimony, but this map helped convince legislators in both Washington D.C. and Seattle, Washington that stricter regulation of the payday lending industry was necessary to protect service members.

Figure 0.12: 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.

Often, it is easy to identify the clustering of points on a map, as is the case in the map in Figure 1:13, above. However, it is also common difficult to determine how intensely clustered a group of points might be on the landscape.
When patterns are difficult to see, geographers turn to spatial statistics to measure the distribution of points in space. One technique, known as nearest neighbor analysis, compares the average distance between actual points on a map against an equal number of randomly dispersed points. GIS software then compares the two patterns and calculates the likelihood that the observed pattern is more (or less) clustered than a random distribution. The image in Figure 1:14 is a graphical report from a statistical test of payday lenders in the San Fernando Valley. As you can see, the clustering of this type of business is far more clustered than random. Therefore, we can be quite certain that the locations of payday loan operations are not due to random processes. Clustered patterns of diseases, crimes, tornados, or any other phenomena are of great interest because such patterns help us identify causes, and hopefully, solutions. A dispersed pattern is nearly as interesting. Geographers will map nearly anything, and explaining the causes behind the patterns is a key goal of geographers.

Random, clustered and dispersed patterns each tell a story about the interaction of the phenomena being mapped. Examples abound. Gas stations cluster, as do car dealerships. Donut Shops and pharmacies tend to be dispersed, as are franchised stores like McDonald’s.

Regions also exhibit clustering. You can observe clustering on a choropleth map, when data values associated with

Figure 0:13: The pattern of phenomena on the landscape may help us understand causality. Clustered, random and dispersed patterns can be measured statistically by GIS software.

Figure 0:14: GIS Software output window indicating a statistically significant clustering of points. Clusters of crime, disease or businesses provide decision makers with important tools.

Figure 0:15: US Presidential Election Map, 2000: Red and blue states cluster together pointing to the friction of distance in political attitudes.
neighboring polygons are more similar than the data values associated with non-adjacent polygons. Put more simply, clustering is evident when similar regions are next to each other more often than they are not. A special term, spatial autocorrelation is often applied to such patterns. Like the point clustering patterns above, spatial statistic are available to geographers seeking to measure the degree of clustering, dispersion or randomness in a choropleth map. Moran’s I is a common statistic used to measure spatial autocorrelation, or clustering on a choropleth map.

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

Figure 0:16: 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.

Co-location
Clustering is a type of co-location. Generally, we think of it as occurring when a thing or behavior (e.g., voting for George Bush, payday lenders, night clubs) cluster or agglomerate. Co-location also describes the spatial pattern when different things appear in close proximity to each other (e.g., payday lenders and soldiers). When that happens, one can say there is a spatial relationship between the two things. Occasionally, this indicates a causal relationship; one thing (pollution) is causing the other thing (cancer) to happen in the same location. Uncovering causal relationships is a significant goal of geographers.

Hypothetically, you may notice that there seems to be an unusual number of obese people living in neighborhoods that host many fast-food restaurants. You may

Figure 0:17: Scatterplot diagram - This diagram displays the same data in the maps below. The correlation coefficient is \( r = .55 \), indicating a moderately strong relationship.
hypothesize that living near fast-food restaurants increases one's chance of gaining weight. You could test this hypothesis by collecting data from the local health department. Next, you would map the obesity rate by neighborhood (census tract or ZIP code perhaps). Then, you would plot all the fast-food restaurants in the study area so that a count of the fast food outlets per neighborhood was possible. Then you would run some statistical tests on the data.

Generally, geographers begin analyzing relationships by testing for the degree of correlation between something variables (fast food vs. obesity rates), 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. If you find strong negative or positive correlation between two variables in space, then you may have grounds to argue there is a spatial

Figure 0:19: 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.

Figure 0:18: 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.
relationship.

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 neighborhoods because they locate where the population has unhealthy diets. Maybe fast food restaurant densities and obesity rates are both a product of a third confounding factor, like poverty.

Maybe they are completely unrelated, or have a spurious relationship, and just happen to rise and fall together. In any case, you may want to test the relationship using regression analysis, a more complex statistical technique that helps researchers determine both the strength and direction of causality between two or more independent variables (fast food, ethnicity, income, access to parks, etc.) and a dependent variable (obesity). Regression analysis, done with GIS software also allows geographers to see quickly where trends are “as predicted” by the variables, locations that are “better” or “worse” than the regression model predicts.

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.
CULTURE AND CULTURAL PRACTICES

Culture is like an elusive set of rules that govern the way we act. It is a product of location, subject to significant changes in space and time. This chapter explores the idea of culture and how place and space shape the way we think and how we act.

Does Culture Exist?

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, books simply note that culture is a collection of socially created rules that govern people’s thoughts and actions. Culture, they often argue, is 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 dangerous 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. Culture doesn’t exist. 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 individuals. We, and the societies we live in, 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 dangerous to assume that 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. In addition, by keeping in mind that culture is an idea, we are reminded that the rules of society are formed, reformed, contested, tossed out and replaced. Doing so also reminds us of balance between society’s rules, known as structures, and agency, which is the power of the individuals and institutions to navigate those rules. With this warning in mind, the misused term “culture” appears nevertheless in this text to refer behaviors and ideas that characterize or identify groups discussed throughout the book.

Folk Culture

Almost nobody living in the United States today adheres to a folk culture. Generally, folk culture is practiced by groups 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 folk life existence today, but even that is doubtful. Much of American folk life disappeared in the mid-19th century when the telegraph and the railroad began invading spaces once isolated from the culture and economics of the rest of the world. Folk cultures require a significant degree of isolation from the rest of the world to persevere. Geographers tend to see culture spatially. Therefore, in this text, folk culture is understood to be those practices and behaviors unique to a small region. Such practices tend to be non-commercial, passed down through word of mouth, etc. Once non-local practices significantly alter what was once unique to the region, and/or local people alter their practices to suit non-local conditions or markets, then those practices cannot be accurately labeled “folk” any longer. Instead, those practices should be recognized as elements of popular culture. Often the distinction between the folk and pop culture is blurred.

Folk culture represents a long-standing fascination among geographers. Part of the attraction is a certain sentimentality or nostalgia for past landscapes. Geographers write entire books about mundane things like old houses, barns, and banjo playing styles. Some might find this kind of study worthless, but that criticism is probably unwarranted. It is worth noting that academics are entitled to study phenomena they and the public find interesting. Not all research need be applied research. If it were, entire humanities departments might not exist on campuses across the globe.

More importantly, an understanding of folk practices in other times and places helps us understand the evolution of modern or popular culture that characterizes the lives of nearly all of us today. Many of the daily behaviors we exhibit are traceable to the folkways of our ancestors. Investigations into folk ways and folk landscapes also help us better understand the evolution of complex interactions between people and their physical environment. Advanced technologies mask many of these interactions today, isolating people from their physical environment. Understanding how people adapted to the constraints and challenges presented by the climate, soils and topography proves both illuminating and practical as we face significant environmental challenges in our time.

**Folk Regions**

In the United States, there are essentially four major, and several additional less well-known cultural regions identifiable by mapping various folk practices. Though the folk cultures that created these regions are largely extinct, the long-term effects of those folk cultures are still...
very prominent in the everyday lives of Americans living within each region today. Modern religious practice, politics, music preferences, and foodways are but a few of the legacies of the folk cultures that once dominated various regions of the US.

The Yankee, Midwest/Mid-Atlantic, Upland South and Lowland South regions displayed on the map above have had the most lasting impact on our contemporary cultural practices. The exact boundaries of these regions are fuzzy. They are formal regions because they have areas of greater intensity, known as cultural cores or cultural hearths, whose intensity decreases as the behaviors diffuse outward. There is substantial overlap at borders.

Cultural sub regions are easy to find. Consider the map of Louisiana’s folk life regions (see right). Even within a small state like Louisiana, a rich tapestry of

Figure 0:2: US Map - Significant Folk Regions of the United States

Figure 0:3: Map - Folk Regions of Louisiana. Source: Louisiana Folklife Program
different folk practices evolved, thanks in large part to successive waves of immigration. It’s a reminder to avoid the ecological fallacy in your reasoning about place. That is, in other words, do not assume that sub regions are like the parent region, much the same way you should not assume that individuals reflect accurately the culture of their ethnicity/gender/religion/geography etc.

**Folk Housing**

The type of houses Americans built before the introduction of mass produced housing is an excellent medium through which students can begin to investigate folk culture practices using the observational skills of the geographer discussed in the introductory chapter. Folk housing offers students learning to read the landscape an accessible and fun way to interpret the effects of the natural environment, economics, ethnicity and even religion on the production of something as ordinary – but vitally important – as the house. The following sections introduce the four major regional folk cultures and the most common housing types associated with those regions.

**Yankee**

The northernmost folk culture dominated by New Englanders, and headquartered probably in Boston was the Yankee subculture. The term *Yankee* is used frequently to reference to any American, particularly by persons not from the US. Americans also occasionally refer to themselves as “Yanks” or “Yankees”, but in this context, the term is applied only to people from the northeastern reaches of the United States. Yankees can be found in New England, but also are dominant in northern Ohio, northern Indiana, northern Illinois and parts of Michigan and maybe Wisconsin. The culture fades in strength the further west one goes, and disappears almost completely in Minnesota.
Yankee subculture tapers off by the time it gets to Minnesota partly because of the effects of **distance decay**. Places distant from the Yankee **cultural hearth** in Boston, were less likely to adopt Yankee practices. People from the Upper Midwest (Minnesota, Dakotas, etc.) were also less likely to be of English-descent. Instead, they were often descendants of German, Russian, Ukrainian and Scandinavian immigrants. In addition, by the time the Upper Midwest was open for settlement in the early 19th century, many folk practices, including housing, were beginning to give way to popular culture. This meant mass-produced, architecturally designed housing.

Folk housing in the Yankee region evolved over several generations to help the largely English settlers cope with the harsh winters of the region, many of which were especially brutal during the 17th and 18th centuries. New Englanders during this period built houses with steeply pitched roofs, massive central chimneys and extra-large rooms. Ponder how the design of these houses responded to the climatic conditions of that time and place. Keep in mind that the families that lived in these houses were largely farmers, and needed space to complete a variety of chores necessary to their survival, like preparing food, sewing, craftworks, etc.

Yankee folk houses are variations on a single floor plan featuring a large central chimney. The smallest version is called a **Cape Cod House**, and is, not surprisingly, very common in and around **Cape Cod, Massachusetts**. The **New England Large** house is in many ways a two-story version of the Cape Cod and is still common around New England. A later, stylized version of it, known as a **Temple (or Gable) Front House** and its close cousin called an **Upright and Wing** are found further west as popular style elements crept into the more purely functional folk house designs of earlier years. Finally, Yankees built a model called a **Salt Box House**. It’s odd name comes from the unusual, asymmetrical roof line that characterizes the gable ends of the house.
**Midlands and Midwest**

Immigrants that came to the Middle Atlantic states, like Delaware, Pennsylvania, Virginia and Maryland were more likely to come from continental Europe (Germany, Scandinavia, Holland, etc.) than their Yankee and Southern counterparts. As a result, folk housing in this region had more diverse cultural inputs than other American folk regions. As you will learn, diversity of cultural input makes the Midland folk region the most mainstream region of the US in terms of politics, religion and cultural practices.

Though the folk housing of the Midlands evolved in the Middle Atlantic, good examples of it are easy to find in the Piedmont as well. This is a clue to past migrations. Westward bound pioneers, leaving the Atlantic seaboard often found their migration blocked by the Appalachian Mountains, and so turned south, through valleys like the great Shenandoah. Much of the folk housing of the lower Midwest originated due east in the Middle Atlantic.

Folk housing of the Midlands is simple and there are only a few types. There are a few log house models, but by far the most common are the single story hall and parlor and the two-story I-house. Both hall and parlor and I houses are only two rooms wide with gable end chimneys. The hall and parlor may be the archetype of housing worldwide because its basic size and room layout is common internationally and has an ancient history.

The I-house, is a very common folk house in the Midwest and the Piedmont regions. Reputedly, the I house was named by folk geographer Fred Kniffen after he noticed how common this house type was in Iowa, Indiana and Illinois. Though you can find them in urban areas, during the 18th and 19th centuries, the I-house was essentially synonymous with “farm house” in the Midwest. It signaled membership in agricultural middle class for those who lived in one. Its unusual dominance on the landscape in the Midwest is highly suggestive of the massive size of the middle classes during the 19th and 20th centuries. The I house can be read as an important landscape symbol that communicates much about the culture, economics and politics of the region where it is so very common.
Upland South

Appalachia and the more northerly parts of the American South, where soils are poor and African-American influence is reduced, is known as the **Upland South**. Upland Southerners can be found in the hilly regions of the South, but also in the Southern US where poor soil conditions discouraged plantation agriculture (and therefore slavery).

This is the “white” South, though by no means is this region devoid of black folks. One might also call it the **Hillbilly South**, though some might find the term offensive. In any case, the Upland South is similar to, but distinct from the Lowland or Deep South in a variety of ways – beginning with the earliest European immigration sources: Scotland, Ireland, England, with some Germans as well. People of the Upland South tended to be poor, so their folk dwellings were modest and largely built of locally abundant timber. As is the case elsewhere, there is a base model from which houses that are more elaborate were built using a common floor plan or theme.

The simplest Upland South house is known as a **cabin and porch**. Essentially, it is a one-room house, with a porch and single chimney. Presumably, settlers on the frontier would construct a single room or “single pen” cabin upon setting up a homestead. If conditions proved ideal enough to remain in the location, additional rooms or “pens” were added, and in the process different house types emerged from the single pen “starter home”.

If the settler built a second pen, with a second chimney, but connected the two pens with a single porch featuring a breezeway between the two rooms, then the house is called a **Dogtrot House** or cabin. Dogtrots seem to get their colorful name because a hound could walk, or trot, between the two rooms of the house. Southern climates make central breezeways ideal “rooms” where family members could do chores, or simply relax.
Sometimes, the owner of a single pen cabin would adjoin a second room, but attach it directly to the first room so that a single central chimney could serve both rooms, and one wall was shared. This type of house, called a **Saddlebag House**, references the appearance of a packhorse laden with cargo. Visualize the chimney as the horse and the rooms the bags. Interestingly, most saddlebag houses did not have an *internal* door connecting the two rooms, forcing inhabitants to go outside to go from one room to the next. Luckily, the weather is mild in the South and most saddlebag houses come equipped with a porch.

**Lowland South**

The part of the American South where slavery was prevalent is known in academic circles as the **Lowland South**, more colloquially it is known as the **Deep South**. In some areas, African Americans constitute over 90 percent of the population, and therefore blacks have had a massive effect on a variety of cultural practices: religion, language and the economy, etc. Today, the legacy of these folkways remains strong, especially in those locations that have remained somewhat cut-off from outside influences and in-migration.

The economic structures of the Deep South, deeply intertwined with the history of slavery and **Jim Crow Laws** are reflected in the folk housing of the region. Unlike the Midlands region, where the most common folk house (the I house) was a substantial two home, or New England where even larger, more comfortable houses were the norm; the Deep South features only two types of housing - those for rich people and those for poor people. The housing built for rich folks largely falls outside the realm of “folk housing” because professionals generally designed and built these houses.
Folk housing in the Deep South, like New England, evolved in a climatic extreme. Building techniques, before the age of advanced chemistry, air conditioning – or even electricity had to account for the unique challenges of heat and humidity. In order to combat termites, wood rot and flooding, houses were frequently constructed using **pier and beam** construction, a technique that raises the floor of houses several feet off the earth, thereby keeping the wood elements from contacting bare earth (see figure 2:16). There may also be some cooling effects generated by building houses above ground, though this may make floors cold on the rare chilly winter days in the South.

The 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 material. Cypress wood is found in some abundance in the Deep South and it’s naturally resistant to rot and insects, unlike the more abundant, inexpensive pine wood that most were forced to use to build houses. This explains why many examples of folk architecture in the South have disappeared from the landscape.

The most common folk house of the Lowland South is the **Shotgun House**. Experts argue about the origins of this house’s colorful name, though none satisfies completely. One theory stems from the fact that if you open the front door and each interior door of a shotgun house, you often can see through to the backyard. Theoretically, you could fire a
shotgun through the front door and pellets would fly out the backdoor. English speakers may have misinterpreted as "shotgun" the African-Haitian word for house: “togun”.

The design of the shotgun house is simple. It’s one room wide, generally one story tall and has multiple rooms stretching away from the street. Long and skinny, these houses seem to have African origins, but they were perfectly adapted the long lot cadastral system common in the French regions of Louisiana.

There are multiple variations on the shotgun house. For the most part, they are very modest because they were generally houses for the working poor. Shotgun houses proved so versatile and utilitarian, they diffused outward to many other parts of the United States, and can be found where large numbers of African-American migrated and also where “company housing” was built to attract and retain workers in industrial districts across the country. Some folks modified Shotgun houses by building a second attached house in parallel, sharing a common center wall, roof and porch to produce a double shotgun. For extra space, some folks added a second story to the rear rooms of the house, creating what is known as a camelback shotgun. The second story rooms were only added to the rear portions of the houses in order to avoid incurring additional property taxes, which in certain locations were collected based on the area of the house facing the street.

**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 regions, or enclaves and each offers interesting clues into the broader cultural values and norms of the ethnicity that constructed them, as well as differences ethnic adaptive strategies.

**Franco-American Landscapes**

A variety of landscape clues tell of the significant legacy of French speakers in North America. In addition to the habits of naming nearly every town after a saint, and carving up property into narrow strips called long lots, the French also built houses, barns and other domestic structures in a style unique among European settlers in North America.
The French settled in many parts of North America, settling parts of 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 the St. Lawrence River Valley, Nova Scotia and along the shores of Lake Ontario. Because the British also claimed much of this territory, the two colonial powers fought several wars. The easternmost parts of Canada, known as The Maritimes, fell under British control in 1710. French settlers there, known as Acadians were allowed to remain, but most refused to sign a loyalty oath to Britain. Others aided the French in their struggle with the British for control of Quebec, and other parts North America. Angry with the loyalist Acadians, the British expelled thousands from the Maritime Provinces in 1755. Known today as the Great Expulsion, thousands of French speakers were deported from Canada. Many were moved to the “American” colonies where they were often unwelcome. Some from a second wave of deportations, went to Louisiana, another former French colonial possession that had become Spanish colony. Many others arrived in Louisiana after a slave revolt in the French colony of Saint-Domingue, in late 1790s. Saint-Domingue became Haiti, and South Louisiana has a number of cultural elements common in Haiti as well.

The scattering of French across North America invited the invention of a number of folk house types. The Québécois developed unique folk adaptations to combat the harsh local climate using local materials. The French who migrated to Louisiana built houses with similar features, altered houses significantly to meet needs of a very different climate.

The Acadians that settled much of southern Louisiana, along with those that married into, or adopted their French-speaking sub-culture, are known today as Cajuns. They along with people that call themselves Creoles constitute a vibrant and unique ethnic subculture in Louisiana. Because many Cajuns and Creoles were isolated by the swampy conditions of southern Louisiana, many of their folk practices survive today. Alongside Cajun and Creole foodways, music and language patterns, architecture is a key feature distinguishing the French regions from the rest of the Lowland South.

French speakers that moved to Louisiana developed yet another series of house types.
that proved well adapted to the radically different climate of the hot and humid south. The most common of the Louisiana house types is the *Creole Cottage* also known occasionally as a *Grenier House*. The distinctive feature of the Creole House is its *ensconced porch*, built as an integral part of the house, rather than an addition on the front of the house. Many have two front doors and are built on post-and-beam like their southern neighbors. Early models often employed *post-in-ground* or *poteaux en terre* construction where the supporting vertical timbers were buried in the ground. Many French built houses also feature walls filled with a mud and straw (or Spanish Moss) mixture called *bousillage*.

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 in are the common use of dormers, little windows cut into the roof to 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, there were a large variety of *hipped-roof* construction techniques employed by the French builders. Most roofs did cover large gallery or *veranda porches*, sometimes wrapping around the entire house. Large floor-to-ceiling doors / windows were also common, like the other features an adaptation to the heat and humidity of the Deep South.

**Germanic-American Folk Landscapes**

Germans came to the United States in large numbers, constituting America’s largest single ethnic group. Because Germanic people came so early, and in such great numbers, their impact on the landscape is at once profound and a bit hidden because many elements were adopted by other ethnicities and spread across the entire country.

Germans and Scandinavians introduced several house types, but the most common surely is the quintessential home of the American frontier, the *log cabin* (and their more permanent cousin the *log house*) to the American colonies early in the colonial period. These simple houses were built where lots of timber was available, but little in the way of metal nails. Logs were stacked horizontally upon, secured at the corners by a variety of interlocking notching.
techniques, and the cracks were filled with chinking, a mud/straw/corn cob mixture. So well adapted to the frontier and the American environment was log construction that it was adapted for use by a variety of other ethnicities in the 18th and 19th century. The log cabin became an important landscape symbol, and for many years, it was symbolically important for populist politicians to claim a log cabin birth. Andrew Jackson, Abraham Lincoln and U.S. Grant were among those proudly announced their log cabin roots.

Germans also brought a significant presence to the agricultural landscape, building massive *Pennsylvania Forebay* barns that dwarf barns built by immigrants from most other parts of Europe. These barns reflect a Germanic commitment to the long-term husbandry of farmland. Their large size allowed Germanic farmers to keep most of their activities (animal husbandry, dairying, crop storage, food processing) all in a single building. This fact also makes these barns immoveable, unlike smallish Scots-Irish barns that could be dismantled and transported. Pennsylvania forebay barns were also frequently built into an embankment, allowing farmers to access both ground floor (stables) and an upper floor where the *threshing* floor was often located. A hayloft generally occupied the top floor. The “forebay” is an extension (overhang) of the lower floor over the ground floor, providing shade, and perhaps some protection from the elements for the livestock stabled or penned on the ground floor. Pennsylvanian has perhaps the *greatest collection of barns* in the US. Pennsylvania’s state government even has a commission to inventory and protect a variety of folk landscape elements, partly because these building attract tourists.

*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 Anglo Europeans 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 are found scattered in other locations in the South. Sometimes, Spanish landscapes are mistakenly attributed to the French, as is the case in New Orleans’s French Quarter.
Founded in 1565, Saint Augustine, Florida is the oldest town in the United States. A number of Spanish elements are visible on the landscape there. Certainly, the massive *Presidio* bears the mark of Spanish design. Local materials, especially *coquina* was used in true folk fashion to construct some of the homes and other buildings in Saint Augustine.

The Spanish also occupied for a several decades following the defeat of France in the Seven Years’ War before it returned to France, and ultimately became part of the United States. During that time, the Spanish left a number of marks on the landscape. Most famously, the numerous wrought iron balconies that grace the numerous facades of the *Vieux Carré* or *French Quarter* of New Orleans are actually Spanish.

The peculiar cemeteries of New Orleans, dominated by *above-ground vaults* are also often mistakenly associated with the French. The historical and geographical evidence though strongly suggests that the Spanish brought this burial technique to the New World. It is also worth noting that this burial style, though commonly believed to be a local adaptation to the high water tables in southern Louisiana is not. Rather, above-ground burial tombs can be found in desert locations and on high ground where the water table would not interfere with in-ground burial. The common element is that *above-ground burials* are found in many locations in the United States where the Spanish settled.

![Figure 0.26: Natchez, LA – Above-ground burials are common in French settled areas, and mistakenly thought to be a product of high water tables. They seem to be Spanish in origin, and have little to do with flooding.](image)

Spanish influences on the landscape are most profound in California. Folk housing of the American Southwest was largely constructed of *adobe*, and the Spanish can only take partial credit for its popularity, because although sun-dried mud brick is a common building material in Spain, most of the Indians of the American Southwest and MesoAmerica already built things with adobe. Houses made from adobe are also often called “adobes”.

Adobe construction makes sense in both desert and hot Mediterranean climates of the American Southwest. The walls of adobe houses are generally several feet thick and windows are small. These features help insulate the interior from the hot winds and burning sun during the day, while storing heat that is radiated into the house during the evening, when it gets colder.
Traditional adobe houses usually have flat roofs built by laying timber beams across the top of the walls. Roofs are flat because there is little threat of snow collapsing them, and the lack of roof pitch makes catching water from the occasional rain shower easier. Besides, a steeply pitched roof captures heat unnecessarily, and uses scarce lumber resources wastefully. The exterior walls need to be painted, or whitewashed to prevent erosion, but generally this needs done only every few years because rain is the main erosive element. In California, earthquakes have also proven a major threat to the long-term survival of adobe buildings.

Perhaps the biggest contribution made by the Spanish is not the functionality of folk architecture type, but rather an architectural style known as Mission Revival. This style of architecture was applied to 23 the 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 adobes, and created a style. Mission Revival style has been applied to everything from the simplest of homes, to fast-food restaurants to major urban landmarks, subtly reminding passers-by of the romantic era of California’s colonial past. Today Mission Revival is evocative of the high quality of life enjoyed by many Californians living in upscale locations, like Santa Barbara.

Poem
Give me neither Romanesque nor Gothic; much less Italian Renaissance, and least of all English Colonial—this is California—give me Mission.

—Anonymous
Folk Music to Popular Music

Music is another significant part of our lives that is heavily affected by the folk ways of our ancestors. Folk music is homemade music, produced by largely unschooled musicians for local audiences (see discussion of hip hop in Introduction). The instrumentation, lyrical content and performance techniques are, like other folk practices rooted in the 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. This text will explore briefly only 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 called *lining out* or “line singing”. Associated originally with New England where it died out, but not before it spread to other more remote parts of the US where it can be still found in a few churches. Lining out, and its southern cousin *call and response* are products of an earlier time when few people in a church congregation could read a hymnal, and therefore had to rely upon a preacher or leader to sing the line first. The congregation would sing it back, repeating the lyrics and melody. White churches and black churches both adopted this style of singing in the Deep South.

Work songs and spiritual tunes crafted by slaves and free blacks of the South, typically with an African emphasis on percussion and *syncopated* rhythms also had 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. From the earliest forms, evolved better known musical genres, like jazz, blues and gospel.

In almost all folk environments, lightweight, homemade instruments or *a capella* singing is the norm. Pianos and other large and/or expensive instruments are rarely used in folk music, except by musicians 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 delivered with relative ease.

In mountains regions or out on the plains, easy-to-carry instruments are the norm. 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 certain instruments functioned better than others in poor acoustics of a barn. Drums were too big to carry, so they used banjos (they have a resonator to make them louder), fiddles (violins) and guitars. The *dulcimer*, was a common...
Appalachian instrument, but it couldn’t be heard at a barn dance, so it never really survived as part of the bluegrass music tradition. The mandolin was similarly quiet, so players began to use it more as a rhythmic, percussion instrument, rather to carry the melody. 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 the occasional Latin American input. Perhaps the earliest example of this All-American hybridization came from Stephen Foster of Pittsburgh. As a youth, Foster would hang out along the boat docks in Pittsburgh where he became enamored with the music of the Lowland South, sung and played by African American boatmen who had come north on steamboats from New Orleans. He blended those sounds with what he learned taking music lessons from his classically trained, German music teacher to come up with something uniquely American and wildly popular during his day. Though technically not “folk music”, because it became internationally famous, the manner in which Foster blended African and European elements established a template that essentially all musical innovations to come followed.

Memphis – The Crossroads Home of Rock n’ Roll
The most famous American musical invention is, without a doubt, rock n’ roll music, and like all other musical forms, it was rooted in the time and place of its invention. Rock n’ roll was invented in Memphis, Tennessee, a crossroads location, where youth living there in the aftermath of World War II could be influenced by the various musical traditions popular both locally, and regionally. There was blues of the nearby Mississippi Delta, bluegrass from Kentucky, jump from St. Louis and swing from Texas. Of course, gospel singing was ubiquitous. All of these musical styles could be heard on radio programs in Memphis, and if you lived in the right neighborhood as a kid, you probably had friends whose parents listened (or played) any one or more of these musical styles.

Elvis Presley is the most famous of the kids to come out of Memphis, blending gospel, blues, bluegrass, country, western and R&B music. Presley’s first record released in 1954 had only two songs. On the “A Side” was “That’s All Right”, an R&B tune previously released by Arthur “Big Boy” Crudup (1946). On the “B Side”, was another song from 1946 called “Blue Moon of Kentucky”, but it was a bluegrass song by Bill Monroe, himself the inventor of that genre of music. In hindsight it is an incredible mish-mash of musical inheritance that may have been nearly impossible to create in another location.
Presley was a musical genius in his own right, but clearly, geography played a role allowing that genius to develop. Geographers would point to the number of other notable rock n’ roll stars that emerged from essentially the same location in the same year. Carl Perkins, Johnny Cash and Jerry Lee Lewis were also famous early rockers that got their start in Memphis and recorded for Sun Records. Additionally, each of these performers’ biography includes accounts of significant contact with African American musical mentors, without which rock n’ roll may not have emerged when it did. Special circumstances in the Memphis region may have allowed for a greater musical interaction between blacks and whites than elsewhere in the United States – fermenting musical innovation.

Carl Perkins, for example, grew up the son of 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 “Uncle” John Westbrook, a black man who was a fellow sharecropper. At nights he listened to the “Grand Ol’ Opry” the nation’s most famous country and western radio program, broadcast from Nashville, Tennessee. 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).
A similar process shaped African American musicians from the Mid-South as well. Chuck Berry, the most famous and influential black rocker of the early era of rock n’ roll was from St. Louis, another river town rich with opportunities for young musicians to absorb musical influences from contrasting, nearby, regional styles. Berry simply reversed the standard pattern of influence (white boys listening to black blues) and adopted western swing (white) elements into his own blues-based sound. “Maybellene”, a huge early rock n’ roll hit for Berry was essentially an R&B adaptation of Bob Wills’ Western Swing tune “Ida Red”, itself a traditional mountain song of unknown origins, but recorded in the 1920s.

Seattle’s Grunge Rock – Geography of Isolation
A more contemporary example of a folk-like, regional musical innovation becoming international is Seattle’s so-called grunge rock that enjoyed exceptional popularity during the early 1990s.

The Pacific Northwest had earlier produced a few bands during the mid-1960s with a specific approach to popular music. According to music geographers that have researched the evolution of the sound, the dance hall environment where many dozens of bands competed for audiences found that singers couldn’t be heard, so lyrics or even singers themselves grew increasingly less important. 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.
In 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. No popular bands had come from that region in a generation. The bands that remained in the Seattle area, like their brethren from the 1960s, began creating a sound, lyrical and visual style designed to please local audiences, with little reference to the sound and style considered marketable by music executives. After a number of years of incubating in isolation, a remarkable number of bands emerged from the region playing a brand of hard rock that included a punk aesthetic. Lyrically, these bands eschewed themes common to Los Angeles-based hard rock (girls/cars/partying). Instead, their lyrics took political stances, and discussed things like mental illness, childhood or drug dependency. Sonically, there wasn’t a strict formula, although many Seattle guitarists detuned (lowered) their guitars to get a heavier sound. Many bands featured baritone vocalists, while playing more slowly than their up-tempo counterparts in Los Angeles. Seattle bands also looked different. They grew their hair long, but avoided hairspray. They grew beards and wore decidedly unremarkable clothing (flannels, boots, jeans). Their collective look and sound was labeled grunge rock.

After the Seattle-based band Soundgarden proved the sound and look marketable to a national audience, a slew of other Seattle bands (Nirvana, Pearl Jam, Alice in Chains) signed major label record contracts. Company executives clearly were using location to evaluate these new artists’ chance for success in the marketplace. Talent scouts seemed to argue, “…if one new band from Seattle sold millions of records, there must be more bands there!” Quickly, the isolation that had been critical in the development of the Seattle scene was replaced by intense attention to bands in the Pacific Northwest who now found themselves no longer playing solely for local audiences. Now bands might play for record executives and ultimately the chance to play for international audiences, and millions of dollars. Aspiring rock artists from all over the US moved to Seattle, hoping to land a recording contract. Bands from all over the world began aping the grunge sound and look in hopes of attracting attention from record company talent scouts. The local had become global.

**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. It’s a multi-billion dollar industry worldwide. A number of professional soccer teams in Europe alone are worth several billion dollars, generally more valuable than American sports franchises like the New York Yankees, Dallas Cowboys or Los Angeles Lakers – each worth well over a billion dollars. The reason why sporting teams is so valuable lies beyond their simple entertainment value, and extends into how association with a team help builds people’s identity. Ball teams, for many people, function as their tribal affiliation. They bring pride in place, and therefore sports are eminently geographical.
Participation in Sports

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 a number of important cultural dynamics. Sports offer 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 in the northern climates, though 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, water and beach sports are more popular where warm winters permit year-round play.

Participation in some sports is conditioned by topography. The Austrians and Swiss dominate Olympic downhill skiing. Olympians from flat countries wouldn’t have much chance to practice those sports, so it make sense that a Ukrainian has never won a downhill skiing medal.

Space is another key geographic element. Some sports require enormous amounts of space. Equestrian events, especially cross-country, but also polo require huge fields of play, and so would be an unlikely sport to occur in either mountainous areas, or urban areas; though it should be noted that one of the most famous polo series is played at 12,200 feet in the Shandur Pass in Pakistan. On the other side of the coin are the world’s most popular sports, like soccer, cricket and basketball. Each requires little space. Full sized cricket / soccer pitches and basketball courts are not necessary, especially for children seeking 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. Styles of auto racing seem to follow topographic cues as well. Drag racing is more suited to flat lands. Dirt track racing on small ovals is far more popular in Appalachia where drag racing would be challenging.
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, rather than to other sports. Indiana, and indeed other top basketball states, like Kentucky, Illinois and New York are not hotbeds for other sports, especially football.

Analyzing basketball participation at the state level though hides another story that is evident at a finer scale of 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 because other sports (e.g., baseball, football, golf, etc.) require too 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. Many would rather suggest that biological factors account for the large percent of African-Americans in the NBA (and other levels), but geography, economics and sociology explain far more.

Biology vs Geography
It’s not to say biology doesn’t explain any part of the ethnic biases evident in sport, but it’s clear that places where a passion for a particular sport motivates large numbers of people to hone their skill at it, exceptional athletes inevitably emerge. Once “stars” are identified from a region, aspiring youngsters (and their parents) from those regions identify with local role models whose path to success can emulated by many up-and-coming athletes. The quantity of entrants into a talent pool increases competition, and creates pressure to excel.

Jamaica and Sprinting
Consider the dominance of Jamaicans in sprinting events in the Olympics. Jamaica has a small population and may have small genetic advantage, perhaps even boosted by the high concentration of aluminum oxides in their soil, but a study of high profile US and Jamaican athletes found that neither group had an unusual genetic profile. Statistician / journalist Malcolm Gladwell makes a far more compelling argument. He notes that running
has the lowest barrier of entry for any sport, so it is attractive to people in the world’s poorest countries (e.g., Kenya and distance running). 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 in the process inspired tens of thousands of young Jamaicans to try their hand at the sport. The United States, with a population more than 100 times greater than Jamaica’s, dominated sprinting for much of the 20th century, but exceptionally speedy American youngsters (especially boys) increasingly have other, more lucrative, pathways to success in the United States. Fast boys in the US are more likely to play football than track. American girls can’t realistically dream about playing in the NFL, but the effort to make the Olympics is so great, and the rewards so small in the US, the smart 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 where alternative opportunities to move up the socio-economic ladder are limited and/or poorly understood. Maps of per capita production of NFL and NBA players show strong 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.

**Fandom**

Football, baseball, basketball and hockey are the biggest American sports. Auto racing, especially NASCAR, is likewise very popular. Each sport though has regions of the country where it is more popular. Certainly specific teams have fans inhabiting specific locations.

The New York Times (and others) have made clever use of information culled from Twitter and Facebook 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 identity politics. For the purpose of this textbook several things are noteworthy in the pattern displayed on the maps. Use the link below to explore these maps while you consider the effect of borders.

The effect of *functional regions*, in this case states, one college football fandom is compelling. It appears that in much of the United States, college football fans won’t cheer for a team across the state line. People living near state borders seem to be the minor exception. Also
Because there is some *neighborhood effect*, the second favorite team is often in a neighboring state, but the effect of borders on fandom is amazing, especially for state schools. There are a couple of important exceptions. In much of the Pacific Northwest, including much of Northern California, the Oregon Ducks are popular. Notre Dame spills across from northern Indiana into parts of the Chicagoland area in Illinois, and appears in spots in other parts of the US where no strong affiliation with another school, but a reasonably large Catholic or Irish population. The University of Texas also is claimed by fans well into New Mexico, a state without much of a college football history.

![Figure 0:35: 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](image)

The intensity of fandom 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. The University of Alabama has a long, rich tradition of college football, and in recent years, the Universities of Alabama and Auburn have won “national championships”, probably intensifying the effect. Other states, including Nebraska, Oklahoma, Arkansas, Mississippi, South Carolina and Iowa also have strong fan support for college teams. None of these states has 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 teams.

Just as interesting are the 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 at all. No championship-caliber college team has come from New England in several generations, so that, and their deep affection for the New England Patriots, an professional team may account for New Englanders lack of interest in the college game. Also quite compelling is the degree to which these cultural tendencies conform to age-old patterns of folkways discussed earlier in the chapter.

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 there’s 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.
Similar patterns of fandom exist in other sports, and are evident across a broad range of non-sporting behaviors. The maps below, also from the New York Times’ infographic section 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.

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 adoption of favorite teams follows more of a contagious diffusion pattern. Fans generally root for the most local team, without regard to state borders. Consider why college football and Major League Baseball might function differently.

Another very compelling element of the maps presented on this page is methods 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 dangers might exist from using this sort of data? On danger seems to be evident in the map displayed at right. The New York Time’s Upshot infographic department mapped NBA fan affiliation in 2014. This data, collected from Facebook suggests that many people in Ohio root for the Miami Heat. Why would this be the case? Geographers might point to the fact that LeBron James, the most famous Ohio-born basketball player played for the Heat for some years before returning to home to play for Cleveland, Ohio’s NBA franchise, the Cavaliers. Fan loyalty in Ohio was likely conditioned by LeBron James birthplace, rather than to his team in Florida. Asute 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, and they have yet to update their loyalties on Facebook.
AGRICULTURE AND FOODWAYS

What you eat and where your food comes from are fundamental issues. Our foodways deeply affect agricultural practices both near and far away. In turn, agricultural practices have profound effects on the environment, the economy, our diets and our personal 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 don’t grow human food. Some farmers grow things like cotton, switchgrass (for biofuel) or even marijuana for medicine and/or recreational purposes. Millions of acres are dedicated to the production of feed for livestock that we, in turn eat. Most crops though do wind up, one way or another, in our bellies. For many, farmlands and ranchlands are common scenes, but city dwellers may be hard pressed to recognize agricultural practices on the land. In this chapter, you will explore some of the factors that affect your diet by examining where and how the agricultural economy works.

Landscape of Food

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

The landscape of food varies because of the diversity farming techniques and the numerous ways in which we buy food at restaurants, grocery stores and farmers markets. As you drive around, can you find examples of food production? What types of farming exist near your hometown or college? What crops are growing to feed animals rather than humans? Are the crops in the fields staples, meant for daily consumption? Is the food for the poor?
Why do we eat this stuff?

Why we eat what we eat is a complex question. The answer might seem as simple as “I eat what tastes good”, but opinions vary wildly on the issue of taste preference from country to country, and even within the countries. Taste preferences for food vary within and across ethnicities, and even house to house among people that would seem alike in almost every way. Still, there are trends that characterize regions, in the US, and around the world, many of these foodways have roots in the local geography of a place. It is often said, “you are what you eat,” but geographers might add the rejoinder “what you eat depends on where you eat.” Family traditions determine largely what people eat, but understanding the evolution of those traditions requires an analysis of the spatial contexts in which they evolved.

Migration-Ethnicity

Our ethnic heritage explains much of our taste preferences. European immigrants to the US established most American foodways. Europeans living 300 years ago would have readily recognized many 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. Modern Americans also copy a number of foodways borrowed from the indigenous people of the Americas. Less prominent elements of American’s diet are traceable to Asia and Africa.

Eating is a daily ritual, and as such, it is a deeply ingrained cultural routine. What you like to eat is probably not that different from what your parents and grandparents like to eat. The same was true for your grandparents, giving dietary habits exceptional staying power. This fact is part of the reason behind our obesity crisis. Our lifestyle has changed rapidly as technology and the economy has evolved, but many of our foodways are stubbornly resistant to change. The diets that served our ancestors who were farmers or laborers engaged in strenuous daily activities, provides too many calories and /or fat for a generation working and living in the information age. Cultural lag is the term that describes the inability of cultural practices to keep pace with changes in technological advancement. Numerous behaviors exhibit cultural lag, and culturally conservative regions exhibit a greater degree of cultural lag places with more progressive tendencies.

Agricultural Economics

A sizable portion of the American diet is purely American. We have adopted a number of foodstuffs favored by Native Americans. Maize, better known in America as “corn”, is perhaps the most American part of our diet. Domesticated by the indigenous people of Mexico thousands of years ago, it has proven a versatile and hardy plant. It’s so versatile, that today much of the world eats maize in some fashion. Most Americans know maize mostly as sweet corn.
Americans eat sweet corn as *corn on the cob*, but also canned, frozen and fresh “off the cob”, and in a variety of dishes.

Less well known are maize varieties known as *field corn*, although it is far more common because of its great versatility. Field corn is too hard to eat raw, so we modify it. Some of it is processed into corn meal or cornstarch, which we in turn use to make things like corn chips, tortillas and sauces. We also consume a lot of corn syrup and *high fructose corn syrup* (HFCS) made from field corn. Corn syrups are used as a sweetener, thickeners, and to keep foods moist or fresh. HFCS is an inexpensive replacement for cane and beet sugars, and therefore is the most common sweetener used in processed foods and soft drinks.

**THE POLITICAL ECONOMY OF CORN**

Several scientists suspect corn sweeteners play a significant role in the obesity crisis in the United States, and elsewhere. Some critics argue that although it tastes nearly the same, the human body responds differently to HFCS than traditional sugars. They argue that since HFCS replaced cane sugar as the most common sweetener, a variety of health issues have appeared in the US and elsewhere. Of course, the corn industry disputes such charges. Since this isn’t a biology course, there is no intention to wade into a discussion of human metabolism, but it is appropriate to illustrate how geography partly explains why we use HFCS in such vast quantities.

Several reasons explain the use of HFCS, rather than granulated sugars, including *cane sugar* and *beet sugar*. Cost is the obvious reason, but why HFCS is cheaper has a lot to do with geography. First, corn grows well in much of the US, so farmers can flood the market and drive down prices. Sugar cane and sugar beets on the other hand are less well adapted to American climates. Sugar cane grows best in a rainy climate and to be profitable requires a very long, warm growing season. Only Hawaii, parts of Texas, Louisiana and Florida can *profitably* produce sugar cane. Cane *yield*, is highly dependent on climate, and only Hawaii’s climate is ideal in the US. Cane yields in Hawaii are triple those in Louisiana. Sugar beets are more widely grown in...
the US because they grow well in multiple climates. California and Minnesota both produce sugar beets. Half of the US granulated sugar production is made from beets. Climate and labor conditions outside the US make foreign sugar much cheaper than domestic sources.

The other main reason HFCS is far less expensive than granulated sugar are US government policies. First, the government provides massive subsidies to the corn industry, helping drive down the price of HFCS. At the same time, the US government provides special subsidies to cane sugar producers through tax breaks and incentives. The US government even buys sugar that farmers cannot sell at an above-world market price. More importantly, the US government restricts sugar imports, especially from Cuba, an otherwise cheap source of sugar for Americans. These trade protection policies helps sugar farmers, but food processors and consumers wind up paying higher prices for cane sugar and sugar-sweetened foods than they would under free market conditions. As a result, food processors use HFCS. So-called Mexican Cokes, or Coca-Cola produced in Mexico are evidence of these policies. In Mexico, cane sugar costs is about half the cost of US cane sugar, so Mexican bottlers are able to stick with the traditional recipe.

Figure 0.6: Infographic - Since 1970 cheaply produced HFCs has replaced cane sugar, driving a significant increase in total sugar consumption in the US. Source: Wikimedia

Figure 0.7: US Sugar Production Corn sweetners 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
The nearly $8 billion subsidy paid to corn farmers is four times greater than that paid to the sugar beet and cane industry. This has consequences. One is that there is generally a huge surplus of corn. In 2014, there was about 1.63 billion bushels of corn left unsold. Some years it’s higher. One side effect is that people eat only a tiny fraction of the field corn grown in the US directly. About half of the yearly field corn crop is used to make biofuels, particularly ethanol that is blended with gasoline by many petroleum companies. If you own a car, corn is probably in your gas tank; and your lungs if you live in a smoggy location. The other half of the corn crop becomes animal feed. Farmers use both the grain and the silage, to feed cattle. Farmers feed corn to chickens and hogs as well. Even cat and dog food often has corn in it.

Exceptionally cheap corn helps make meat less expensive than many other types of food. College students on a budget already know that it is a lot cheaper to buy lunch at a local fast-food burger joint than a healthy green salad. Government policies also shape school lunch programs. Kids get cheap, often unhealthy, food and return agribusiness benefits. In 2011, the US Congress even declared pizza sauce a “vegetable”, over the objections of health advocates in order to help specific agribusiness interests. Inexpensive, often unhealthy meats and grains increases incentives their consumption, often in the form of fast food. In

![Figure 08 US Map](image1)

Figure 08 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

![Figure 09 US Map](image2)

Figure 09: 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
impoverished regions of the US, fast food is more widely available than elsewhere. Because a significant percentage of poor people cannot afford health care, the costs associated with a poor diet are passed on as an external cost of farm production.

**The Geography of Barbecue (BBQ)**

Clearly, not all our foodways are by-products of geopolitics and economics, but geography shapes nearly all our eating habits. Barbeque (BBQ), a favorite American dish that involves cooking meat, very slowly, over indirect heat (it’s not the same as grilling meat over open flame) is a great example. Worldwide, there are many dozens of BBQ styles. Jamaica, Mexico and South Africa each have well-known practices. BBQ was introduced to Americans in the 1600s by the Spanish, who probably learned how to BBQ from Caribbean Indians.

BBQ is easy to find in most of the US, but it is most popular in the US South partly because the climate is hot and humid there. Before the invention of refrigeration, fresh meat had to be eaten quickly, or preserved to avoid spoiling or rancidification. 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 other container. Pit BBQ allows people to cook large amounts of meat in a few hours, makes some of the less desirable cuts of meat easier to eat, improves the flavor and preserves a valuable source of protein in a region where diets were traditionally overly dependent on carbohydrates.

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

**Meat**

The primary type and cut of meat used in BBQ varies by region. Part of this stems from the agricultural potential in the region during the last century or two. In Appalachia and the Piedmont region, there is a strong preference for pork BBQ. In these heavily wooded regions, Anglo settlers raised hogs for meat because poor farmers could free-range hogs in the nearby woodlands. Pigs could wander the nearby forests where they could eat acorns, tree nuts and whatever else they could forage. Sometimes pork BBQ is served as ribs, but
more often it is served “off-the-bone” or “whole hog” served chopped or “pulled” into little pieces and served on a bun.

In flat lands and grassy regions like most of Texas, the Great Plains and parts of California, beef evolved as the preferred meat for BBQ because grazing cattle is easy on grassy plains. In some places, beef ribs are preferred, in others – they like brisket or other cuts. Californians, serve a cut called tri-tip, which is largely unknown outside the West Coast. Other regions of the US serve BBQ chicken, turkey or fish, depending on local availability.

**Wood**
The type of wood that is widely available locally is another critical ingredient in differentiating American BBQ regions. Hickory, a hardwood tree found in the forests of the Eastern US is a favored wood for smoking pork BBQ of 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 BBQ. There, they roast tri-tip steaks 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. Even the side dishes change regionally – again based on the local availability of beans, bread and greens.

**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
vendgar-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 style of hot-sauce (like Tabasco brand). Memphis, another city famous for its BBQ traditionally didn’t use a sauce at all, but instead put a dry rub of spices, like paprika, pepper, chili powder, garlic etc. on their meat (typically ribs). Santa Maria style BBQ in California uses a simple “dry rub”.

**Agricultural Regions**

As is the case with BBQ, several geographic factors condition the choices farmers make about what to do with their land. The first factor is climate. Weather is a controlling factor for many farmers. Many crops and some livestock just can’t survive in harsh climates. Some crops are exceptionally hardy, and might even need harsh weather conditions to thrive. The availability of water, either via rain or irrigation is another fundamental issue for farmers. Secondly, farmers need to be profitable; and the more profitable the better, so farmers carefully choose the crops and animals they raise. These decisions in turn affect what we eat. The paragraphs below explain agricultural patterns in the US, an briefly elsewhere. There are roughly five major agricultural zones in the US, each aligned with a climate zone.

**Corn and Wheat Belts**

In the US, it is perhaps best to start with the agricultural regions split by the 100th meridian. This line of longitude marks a transition zone between the humid eastern half of the US and the drier western half. In the middle parts of the US, where the land is flat and ideal for crops, farmers east of the 100th meridian generally plant corn (maize) and soybeans. Frequently this area is called the Corn Belt, and it is centered on Iowa. Much of this land was originally tall grass prairie before it was plowed under and made into cropland.

farmers on flat lands west of the 100th meridian tend to plant wheat. Farmers out west would prefer to plant soybeans and corn because they are more profitable per acre, but west of the 100th meridian, it is too dry for corn and soybeans, so farmers plant wheat instead. The wheat belt runs from the panhandle of Texas up through the Dakotas, an area that was once short grass prairie before it was converted to agriculture. There are hundreds
of types of wheat, but Americans focus on only a few varieties, and these are largely characterized by when they are planted. For example, farmers plant winter wheat in the fall and harvest it in the spring. It accounts for about three-quarters of all the wheat produced in the US, and it is used to make breads and rolls. Kansas is at the heart of the winter wheat belt. Further north, in the Dakotas, wheat farmers plant spring wheat because they plant it in the spring and harvest it in the fall. Bakeries use spring wheat flour to make pastries and cakes. Durum wheat is a special variety of spring wheat, planted mostly by Americans in North Dakota. Pasta makers use Durum wheat to make the semolina flour used in the production of pasta. Clearly, Durum is a favorite wheat in Italy 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, overall wheat production has fallen in the US since the 1970s. Since 1900, the growing season has changed so that corn production is now preferred to wheat 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 decades. This allows corn plants to ripen a few weeks longer, and as a result making corn more profitable than wheat, especially given the subsidies for corn production. An interesting side effect of climate change has been that the once rapid out-migration of young people from North Dakota has slowed as farming has once again become profitable.

Cattle Ranching
Further west, in the rain-shadowed areas between the Sierra Nevada and the Great Plains, there is plenty of prime flatland valleys, but with less than 20 inches of rain per year, few crops can be grown. This leaves agriculturalists two options: irrigated farming or livestock ranching. In much of the area where irrigation is unavailable, ranching is the only option because the land is suitable for grazing cattle and little else. Arid land ranching is probably the least profitable type of farming on a per-acre basis.

Typically, cattle grazed on these wide-open, lands grow only until they near 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 grain until they are suitably heavy for slaughter. Some ranchers however, especially in recent years,
keep their steers on a grass-only diet. Beef connoisseurs considered grass fed beef to be both healthier and better tasting, and therefore it commands a higher market price.

**Irrigated Drylands**

In some dry locations, such as inland California and Arizona, farmers are able to apply vast amounts of water to fields that would otherwise be too dry for most crops. An elaborate system of irrigation canals, pumping facilities and water storage facilities, built with taxpayer money, allow farmers in these regions to grow an enormous variety of foods, and reap great profits. Because the Southwestern US has abundant sunshine, generally good soils and long growing seasons, the addition of irrigation allows farm fields here to become exceptionally productive, and profitable. California’s Great Central Valley has individual counties with larger farm economies than most US states. Most fruit and vegetables eaten by Americans across the US come from irrigated fields in California.

Fruit and vegetable farming is the most labor intensive style of agriculture in the United States, requiring a vast number of farm hands to pick, process, pack and ship fruits and vegetables because few machines are capable of doing these tasks. Because the cost of farm labor and the supply of workers willing and able to this kind of work are critical to the profitability of fruit and vegetable farming, immigrant labor is necessary. California’s Great Central Valley has been for many decades a point of entry for hundreds of thousands of immigrants who work in the fields for some years before moving on to other occupations. Immigrant farmers in the process, fundamentally alter the societies where they arrive.
Red Dirt and Chickens
In some locations, particularly the very humid Southeastern United States, the over-abundant rainfall has made many of the possible cropland areas poorly suited for planting corn or soybeans. Partly this is a result of the various root diseases, insects and other blights that undermine profits, but it is also because the soil in much of this region has been leached, a process by which essential soil nutrients are washed away from the soil by excessive rainfall. The famous “red dirt” of Georgia is not ideal for many crops. Still, farmers adapt and they search for agricultural activities that maximize the local potential offered by the soil and climate. A common option is to forgo crop production and focus on raising poultry. Southeastern states dominate the “broiler” industry – chickens raised for meat.

Specialty Crop Areas
In yet other locations, very specific, local soil and/or climate factors create conditions that allow farmers to focus on a very specialized crop. Oftentimes, these crops are very profitable because the supply is limited by geography, increasing demand and therefore the price of a crop. You can probably think of several locations that specialize in very specific crops. Idaho is famous for its potatoes, Georgia for its peaches and onions, and Washington for apples. Thanks to irrigation and its special Mediterranean climate, California is the dominant producer of a number of crops including broccoli, carrots, cauliflower, celery, lettuce, and spinach. California produces more than 99% of America’s almonds, artichokes, dates, figs, raisin grapes, kiwis, olives, plums, pomegranates, pistachios and walnuts.

Dairy Lands
Farmers raise milk cows in most of the US. The Northeast and Great Lakes region however are known as “America’s Dairyland.” California produces the most milk. The demand for milk is ubiquitous in the US, so those places that have large populations tend to produce the most milk. It helps that most European Americans are lactose tolerant, boosting the demand for milk, cheese, butter and ice cream, especially in places like Wisconsin where the Germanic ethnic heritage exerts a strong influence on dietary practices. Hay farming is also quite important in these regions because milk cattle eat hay especially through the long winter months when field grazing is impossible.
Von Thunen's Model

The economics of transporting crops also helps explain the patterns of agricultural production. It helps explain why California leads the world in the production of so many crops: it has a very large population, and farmers there are at a competitive advantage over others in terms of the cost to transport food to the huge market. Economist (and honorary geographer) Johann Heinrich von Thunen recognized this principle many years ago, and he developed a theory of agricultural land rent that is now widely known as the Von Thunen Model.

The model incorporates several assumptions that may or may not apply in the real world, but it is useful for understanding the decision making process of agriculturalists. First, the model assumes that the all land under consideration is flat and of equal quality (soil, water, etc.) and there are no roads. Second, the model has only one city (or market) where farmers sell their goods. Third, the model assumes farmers are economically rational: they want to, and know how to, maximize profit, so they will choose the best use for their land.

Von Thunen argued that farmers who live closest to the city should focus on the production of milk and/or fruits and vegetables because those products have the shortest shelf life and are expensive to transport. Dairy farmers who live closest to urban markets should specialize in liquid milk, and farmers living further from large cities should produce butter, cheese and ice cream, because they can be stored longer. It would be foolish, especially in 1826, for farmers living at great distance to the city to specialize in foods that spoil quickly. Instead, Von Thunen argued that farmers living far from the city market should specialize in grain crops that can be stored for long periods.

Von Thunen knew that farmland near cities was more valuable because others were eager to use it to build houses, factories or malls. If farmers living near cities want 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 sell it for non-agricultural purposes to make more money. Farmers living further from cities, because they spend a large portion of their money transporting crops to market, must engage in **extensive agriculture**, the type of farming suitable on less valuable land, because it requires less costly farm labor. Far from the city, vast stretches of land are common where farmers can afford to make less profit per acre because there are fewer alternative uses for the land.

Technological innovations, particularly refrigeration and rapid transportation undermine the applicability of Von Thunen’s model today, but the logic behind it is still very potent, and a number of current agricultural maps reflect the ongoing importance of transportation costs to agribusiness. New York City, Los Angeles, and Chicago all have large areas where farmers remain engaged in intensive **market gardening** and liquid milk production. New Jersey is called the “Garden State” for exactly this reason. Market gardening farms are generally within a one-day drive from a large city’s central produce warehouse district. Large grain farms continue to be rare in those same areas. The biggest changes from Von Thunen’s original model are the location of forestry operations and livestock feedlots. Thanks to refrigeration, most hogs and cattle are fattened and slaughtered far from cities. Thanks to efficient transportation of heating fuels, forestry regions, which once supplied wood to heat homes in the city, are far removed from cities.

**Agriculture around the World**

Farming outside North America is different, but subject to the same climatic constraints and market logics that are found in the US and Canada. Some international farmers are in direct competition with farmers in North America, but most international agriculturalists are engaged in **subsistence agriculture**, which keeps their families fed, but the crops and animals largely out of the international marketplace. In some parts of Africa and Asia, over 80% of the population is engaged in subsistence agriculture, yet food shortages are common. In the US, agricultural workers account for only 2% of the population, freeing the rest of the population to pursue other activities. Despite the lack of mechanization, some farm techniques in the **developing countries** are far more efficient than those used by American farmers when efficiency is measured using a caloric balance metric. In other words, it takes less energy, or fewer calories to produce one calorie of food in many places than is the case here in the US. The main problem with agriculture in many developing countries is not efficiency. Rather, the soils and climates are often poor, the mouths too numerous and frequently the best land is dedicated to export crops, rather than to supply local markets.
**Herding and Ranching**

In the places where there is not enough rain or it’s too cold for field crops, livestock production predominates. Many places ranch cattle like we do in the US, particularly in South America, but sheep ranching is often more popular in regions where the British colonial influences linger. *Pastoralism*, the nomadic herding alternate to ranching, occupies large stretches of the world’s lands, but only a tiny fraction of the world’s population are herders. Nomadic herding requires those who tend herds of animals (e.g., cattle, sheep, reindeer, etc.) to move frequently in search of grazing pastures. Without constant migration, herds *overgraze* the land and livestock, and the people starve.

**Wet Rice Cultivation**

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, even airplanes, for seeding. Most Asian rice cultivation remains an exceptionally labor and *land intensive* affair. Not only is most Asian rice planted, weeded, harvested and processed by hand, there is a significant amount of manual labor involved in the maintenance of the rice *paddies* in order 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 providing a generous caloric yield per acre. Moreover, thanks to a generation of scientific advancements in rice genetics and fertilizer science,
collectively known as the **Green Revolution**, rice farmers in Asia often harvest fields two or even sometimes three times per year, vastly increasing yields from pre-World War II levels.

Because rice is a carbohydrate-rich food, people living in wet rice regions must supplement their diet to remain healthy. Many Asians, even those living in big cities, often have very intensively cultivated vegetable gardens. Paddy rice farmers also practice a type of intercropping by introducing fish and other forms of aquaculture into fields. Adding fish, often a species of Carp, helps reduce both pesticide and fertilizer cost, while adding dietary protein and a valuable commodity at local markets. Fish also eat mosquito larvae, contributing to a reduction in diseases, like malaria, while fertilizing the fields.

**Rice and High SAT Scores on Math?**

Paddy rice farming may 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 rely on statistical analyses to explain various social phenomena. One theory Gladwell forwards is that Asians may be good at math because as a group wet rice cultivation requires so much work. The theory goes that wet rice cultivation has taught people cultural lessons about burdensome work during centuries laboring in rice paddies. The **work ethic** developed in wet rice regions serves well those who have adopted the cultural traits of farmers in this region when it is applied to things like learning math. Alternatively, those cultures living in locations where agricultural abundance has been easier to produce, the people more often fail to recognize the relationship between effort and reward. This theory is an attempt to replace **racial** narratives about intellectual talent with one centered around cultural practice. Geographers often argue that cultural and physical environments have significant influence upon each other, the specter of **environmental determinism** continues prohibit geographers from fully embracing ideas like Gladwell’s. It’s a reminder to all to keep in mind the logical pitfalls associated with the **ecological fallacy**.

**Slash and Burn – Shifting Cultivation**

In some ways, the opposite of wet rice farming is **slash and burn agriculture**, also known as **swidden farming**, and in Latin America as **milpa**. Whereas paddy rice farming predominates in wet-dry monsoonal climates, requires good soils, a large labor input and feeds millions, slash and burn farming is practiced almost inclusively in the **equatorial rainforest climates** where few people live on poor soils. Swidden farming requires a lot of land, but requires little labor, making it by some estimates, the world’s most efficient style of agriculture in terms of calories-in and calories out.

*Figure 0.25: 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 necessary in rainforests because soils there are leached, therefore lacking in essential nutrients. To add nutrients, farmers cut down patches of forest, allow it to dry and then burn the logs and debris. The ashes of the burnt trees act as fertilizer, into which farmers plant crops. Each burnt field is good for a few years before the rains once again leach away soil nutrients, forcing farmers to begin the process anew. Farmers leave the exhausted fields fallow, allowing the forest to regrow. Eventually, after many years, the farmer will return to the same patch of forest and begin the process once again. Because this type of farming requires a lot of land, but very little labor, it is known as land rotation system (not a crop rotation system), a kind of land extensive farming.

Slash and burn farming is sustainable as long as the population relying on it remains small. For thousands of years, people living in rainforests in Asia, Africa and Latin America used slash and burn agriculture without seriously threatening the critical balance between themselves and the forest. Population growth, in many of these places has threatened precious rainforest reserves as farmers burn larger patches of forest, and leave fields fallow for shorter 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.

In the Americas, slash and burn farmers often plant the three sisters: corn, beans and squash. These plants offer an ingenious solution to a variety of agriculture and dietary problems. Corn provides carbohydrates to the diet, and supports vining bean plants. Beans provide protein, a critical need in locations where fish and/or game may be scarce. Beans also are nitrogen fixers, meaning they help fertilize the soil for the other two crops. Squash provide vitamins and minerals to the diet and functions in the field to preserve soil moisture while discouraging weed growth with its broad leaves near the ground. 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 dominant. In this agricultural system, agricultural land is dedicated to growing cash crops, generally at the expense of staple crops. Many parts of Africa, Asia and Latin America rely on plantation style agriculture to earn badly needed foreign currency like US Dollars or Euros. 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 themselves hard-pressed to find viable alternatives. Food insecurity is the first problem. Because prime farmlands are generally planted with export-oriented cash crops, little remains for the production of food for local consumption. Secondly, most plantation regions are guilty of monocropping, or relying on a single crop. Not only are monoculture economies vulnerable to crop failure (e.g., insect invasions, diseases, droughts, etc.), monocrop economies can be devastated by unfortunate swings in market conditions. The US has regions where monoculture is common, but the US economy is diverse and can withstand the failure of a single crop or commodity market. Many third world countries do not have this luxury. In those situations, 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 a collapse falls on the poor, many of whom work on plantations themselves.

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. Part of the 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 at the root of a variety of nearly intractable land tenure problems in regions that rely upon it. Export oriented plantation economies developed by colonial powers during the 18th and 19th century affect the politics and economics of many regions today. Colonial powers robbed indigenous people of their land, forcing them to become tenants on their own land, laboring for plantation owners. Some became peasants, confined to marginal lands least desired by the landed elites. The descendants of both groups continued in their roles for many generations, creating a permanent underclass and a landed oligarchy. Violent classes between land reform advocates, often backed by Cuba or the USSR, and those who favored the status quo, often backed by the United States, erupted frequently during the 20th century, especially in Latin America. The economic hopelessness and violence that plantation agriculture spawned continues to spur international migration, much of it to the United States where political opponents of Latin American land reform also constitute the core of the vocal opposition to immigration.

Because plantation agriculture is often highly competitive, and sometimes a highly profitable endeavor, efficiency is a paramount concern. Large plantation operations can 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 plantations) to keep massive farms on the best land intact. In those rare instances where land reform has taken place, and good lands were redistributed to the poor; the export economy has faltered. Zimbabwe’s land redistribution is the classic modern example.

WE ARE THE WORLD

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 leading in part to half-million or more deaths. A documentary news crew broadcast news of the famine back to the rest of the world, shocking many into action. Two of the better-known charity relief efforts came from pop/rock musicians. Live Aid, Band Aid and USA for Africa were efforts launched by famous pop musicians, raising money and awareness of the crisis. Many gave freely and were led to believe that the crisis was largely the result of a natural disaster. While there was drought, few at the time understood that during the famine, Ethiopia was a net exporter of food. Grain and other agricultural commodities were being shipped to first world countries – often as animal feed, while thousands were starving. Transportation and safety issues complicated food delivery, but in the end, the mass starvation was a result of land distribution and poverty as much as it was drought and desertification. Poor people, if they can’t grow food, cannot buy food either. The aid money did help some, but corrupt local officials have been accused of siphoning off too much of the aid intended for the truly needy.

Agricultural Landscapes

The United States has more arable land than any other country. Cropland takes up about 400 million acres and over 600 million is dedicated to grazing livestock. Those numbers have been shrinking by about 3,000 acres per year, as suburbs and commercial developments gobble up farmland (EPA). About half of what you would see out your window driving around the United States would be farmland of some sort. It’s important that you can read these landscapes in some fashion.

Cadastral patterns, of the more interesting elements of the American landscape, are most visible in farming country, but these patterns have significant implications for politics, culture and society that reach far beyond the farms. Cadastral systems help officials divide land among those who would like to own it, and then describe and record the pattern of land ownership for legal and tax purposes. A number of systems are used worldwide, but in the United States, only a few merit our attention.
**Metes and Bounds**

English settlers introduced the oldest cadastral system used in the United States known as *metes and bounds*. Generally, those who wished to obtain land during the colonial period would scout a piece of unclaimed land, perhaps near the town where they lived, and upon finding a suitable location they would hire a surveyor to inspect the land and write a description of the property. This description constituted a legal claim to the land that was in turn registered with government authorities. The shape and size of the land parcel was quite random, often described using very local landmarks, like trees, boulders or streams. Here’s an example:

*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.*

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

The unfair distribution of quality farmland was perhaps the most significant problem generated by metes and bounds. People that arrived early to a location on the frontier could carve out only parcels of high quality land for themselves, leaving poor quality land for others. Often the early arrivers were wealthy land speculators, the surveyors themselves or the politically well connected. Once in possession of the best lands, they stood to dominate local politics and local economic conditions. Many were *land speculators*, who made fortunes buying up the choicest lands and selling them to those arriving later on the frontier. Todays, so-called “house flippers” engage a similar business model. People who arrived later to the frontier often found available parcels of land of were of poor quality.
Eventually, class distinctions grew from the differences in the quality of farm fields. Tobacco farmers were especially vulnerable because tobacco plants quickly exhaust the soil. Farmers with poor soil and limited space for fallow fields could soon be bankrupt, only to be bought out by wealthier neighbors.

Township and Range – Grid Squares
Thomas Jefferson recognized a number of problems with metes and bounds, and introduced the township and range cadastral system, officially known as the Public Land Survey System, as a logical, well-ordered replacement that divided land in a systematic rectangular grid system. Jefferson guessed correctly that if each farm family had an equivalent number of acres, and the quality of that land was reasonably similar, then a more robust middle class of yeoman farmers would emerge, invigorating democracy.

The fledgling United States needed this system. Deeply in debt following the War for Independence, but flush with land acquired from the British in the war, the continental congress passed the Land Ordinance of 1785, regulating the sale of most of the 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.

A township, at least in the flatter parts of the United States, is a six mile by six mile square block of land. Townships were sub-divided multiple times, beginning with 36 sections, each a one mile square. Square mile sections (640 acres) were subdivided further into quarter sections (160 acres) and quarter-quarter sections of forty acres. Homesteaders on the frontier generally purchased quarter sections, but as drier lands further west were settled, larger parcels were distributed for ranching.
The grid system 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 positioned with reference to Jefferson’s grid. The brilliant landscape essayist JB Jackson argues that the grid is a grand symbol of Enlightenment thinking on the landscape, but it also has affected the culture of the regions in varied way – imparting a sense of order and conformity to communities on the grid (even the people are “squares”?)

At the same time, the old communal agricultural communities centered on village greens, gave way to robust individualism encouraged by the grid. The implications are profound in terms of the political and economic philosophies that guide the US today. See the discussion comparing individualism and progressive moralism in the chapter on political geography.

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 even distribution of wealth is in the places where township and range created a vast number of farmsteads of roughly equal size and equal quality. In fact, the Gini coefficient, a measure of income equality, is generally lowest in the grid-dominated states 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, which increases erosion and water loss, especially compared to the more eco-friendly contour plowing practiced by more frequently by farmers in the metes and bounds regions of the East.

Long Lots
Colonists from other parts of Europe, especially the French, introduced yet another cadastral system, called among other things Long Lots. 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 it is evident in 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 fronting a transportation corridor, generally a river or stream.

The idea was similar to Jefferson’s in that each property owner had a roughly equal chance to succeed in a farming economy. Access to the transportation (the river) was a crucial element for farmers hoping to their sell crops. Dividing land in this fashion also insured farmers reasonably equal access to quality farmland. Soil characteristics along a river change with distance from the riverbank. Sandy soils are often near the river. High quality loamy soils are found at an intermediate distance from the river, and in the bottom lands more distant from the river, are clay soils, that are least desirable for plowing. Farmers generally left the clay rich backlots areas as their wood lots, in accordance with the logic presented by Von Thunen.
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 even more narrow strip farms, each with a house at the riverfront with each successive generation.

**Spanish Land Grants**

In the American Southwest, where a vast territory was once governed by Spain (1521-1821) and later Mexico (1820-1846), the policy creating massive *land grants* is still evident on the landscape, especially in California.

Spanish (like the French) families were less likely to practice *primogeniture*, a tradition in which families bequeathed all their lands to the oldest son. 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 significant religious minorities, the Spanish had some trouble getting Spaniards to colonize their lands in the Americas.

Combine those factors with the difficulty accessing the West Coast of the US, as well as its challenging farming conditions, and you can see why very few Europeans lived on the West Coast by 1840. In order to entice settlement of the Southwest (and Florida earlier), the Spanish Kings made significant land grants available to those willing to move to parts of New Spain, especially if they were a political ally. Only about 30 grants were made by the
Spanish crown, but corrupt and weak Mexican governors granted many hundreds of thousands acres to political allies, friends and family members, creating a huge network of ranchos across California.

A nearly feudal land tenure system evolved in California during the Mexican era, characterized by an exceptional concentration of land and power into the hands of a few dozen families, almost all of whom operated massive cattle ranches, employing Indians and mestizo peasant-laborers. After the Mexican-American war, many large ranchos were broken up, because either the US government did not recognize the legitimacy of the property claim, or powerful American interests simply wanted to steal the land (previously stolen from Native Californians). The dozens of huge ranchos that remained into the late 19th century, some of which in places like Los Angeles County, mimicked the large agricultural plantations of the Deep South – but without the enslaved labor force. Real estate developers made a fortune by buying well-placed ranchos and turning them into thousands of small suburban home lots. A few have managed to survive, sometimes as a state park or wilderness area, like the Ahmanson Ranch, which was formerly part of the 113,000 acre Rancho San Jose de Gracias de Simi.

Though the arrival of Americans democratic institutions, urbanization and industrialization undermined the effects of the Spanish Land Grant system in the US, the land tenure patterns established in much of the rest of Latin America 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 develop, alongside a disenfranchised peasantry.
Farm Buildings

Agricultural buildings provide clues about the farm economy, both past and present of a region. Barns are the most obvious element of the agricultural landscape, but fencing, barbed wire, grain silos and other outbuildings are sources of information, readable by the trained geographer. As you ride in the agricultural countryside, make an effort to understand the narrative produced by the landscape.

Consider for example the different styles of barns found across the United States. Barns can be general-purpose structures (see figure 3.34), but can also be built specifically for farmers engaged in a specific type of agriculture. The style of the barn and agricultural outbuildings often reflect the ethnic past of a region, and provide clues to the current political, cultural and religious environment in which barns were built. The tobacco barn in figure 3.35 serves as a reminder to passers-by of the economics of tobacco farming, slavery, inequality and soil exhaustion. If you were to see Alpine hay barns dotting the American roadside (figure 3.36) you could expect the local culture to exhibit many other cultural traits from Germany.

Figure 0:35: Green County, TN. This tobacco barn is a good example of a purpose built barn. The crop hangs from many poles arranged in the airy barn to allow proper drying before the product is shipped for processing. Source: Wikimedia.

Figure 0:36: Mittenwald, Germany. In the Bavarian Alps, small hay barns, made of locally available logs, dot the landscape and provide a clue to the folk heritage of the community here. Similar structures were introduced to the American landscape, but are rare in the US today.

Figure 0:34: Pennsylvania. This massive Pennsylvania forebay barn symbolizes the Germanic commitment to permanence of settlement and land stewardship. Silage, animals and equipment would all be stored in this building. What are the risks associated with such a building?

Figure 0:37: 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. Nearly every building is connected to the next. How might that be an adaptation to the local climate?
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. Spatial variations in the pattern of disease and treatment are evident at many scales. Geographers use location studies to figure out why people get sick as well as how they are cured (or not). This chapter presents several ways in which the geographers’ use epistemology, methodologies and communication strategies in the fight to help maintain the health and well-being of individuals and communities.

Interestingly, the application of geographic techniques to medical questions represents one of the earliest and most famous use of spatial statistics to solve a pressing societal problem. In London in 1854, there was a severe outbreak of cholera, a gastro-intestinal illness caused largely by water fouled by feces. Back then, nobody quite understood that microscopic organisms, like bacteria, were capable of causing such violent illnesses. Instead, most medical experts believed that poisonous air, called miasma, was largely responsible for infectious diseases like cholera and the plague. The fear of breathing 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 suffering the most cases during the 1854 cholera outbreak. He later concluded that the air could not be the cause of cholera because other neighborhoods had similar air quality characteristics. Snow suspected that the water supply was somehow contaminated, but he could not identify the “poison” in the water, even with a microscope. In order to test his suspicions, he mentally mapped households with a case of cholera and realized that those houses clustered around a single public water well. He hypothesized that

Figure 0:1 Lithographic Map - John Snow mapped locations where cholera victims lived in London in an effort to isolate the source of the cause of the disease. Source: Wikimedia
if the pump handle to the suspect well was removed, then local residents would be forced to get water elsewhere, and the incidence of cholera would begin to subside. To test his hypothesis, Snow convinced local authorities to remove the handle and indeed the cholera epidemic lessened. Snow later made a physical point map of the disease outbreak and the water pump. 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 and paved the way for the adoption of the germ-theory of disease that is widely accepted today.

Though cholera still affects several million a year, and causes over 100,000 deaths worldwide, it is not a leading cause of death worldwide thanks in large part to the advancements made in simple sanitation technology. Still, millions of people in the developing world have poor access to sanitary drinking water and water-born intestinal illnesses similar to cholera are a major killer, especially of children who die from dehydration associated with diarrhea and vomiting.

Geography of Disease

Cholera is an example of an infectious disease, because it is transmitted from person to person. Some infectious diseases transfer from animals to people. 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, including heart disease, stroke and cancers. Most of these non-communicable illnesses are labeled chronic diseases, because they affect people over a longer period, and generally affect people who have grown to an advanced age. Infectious diseases, on the other hand, may affect anyone, but are more likely to kill people who are poor and therefore find opportunities among the young as well as the old. In order to demonstrate how geography aids our understanding of health and disease, a several short vignettes about specific diseases follow in the paragraphs below.

Influenza

Influenza, or “the flu” kills thousands each year, often though the effects are regional and short-lived. These smaller outbreaks of diseases are called epidemics. Occasionally a disease like the flu gets out of control, spreads across vast areas and lasts for many months. These outbreaks are termed pandemics. The flu is an airborne infectious disease that generally spreads when someone sneezes or coughs microscopic pathogens (germs) into the air. The dreaded Spanish Flu that broke out during World War I killed somewhere from

Figure 0:2: Seattle, WA - Policemen wear masks during the great influenza pandemic of 1918-20 Source: Wikimedia
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, and over one-half million died, far exceeding the number of Americans that died in fighting in World War I.

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 of the deaths were in parts of Africa and Asia where few laboratories exist capable of confirming the cause of death. In the United States, Americans appear to have suffered 10,000 deaths, which was nearly normal for a flu season.

While the 2009 version of H1N1 was apparently less dangerous than its 1918 ancestor, the activity of health departments around the world was essential in averting disaster. Geographers working at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia knew that early cases of a flu spreading from Mexico were likely to appear first in California or Texas. Indeed, the first American cases appeared in San Diego and Imperial Counties, California. 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 estimate where, when and how severe outbreaks would become in various parts of the United States. Knowing the spatial behavior of an epidemic or pandemic helps health officials direct vaccines and other resources necessary to combat the flu to the at-risk locations. The outsized effort by the CDC and other public health agencies probably saved thousands of lives in 2009-10.

Malaria

Malaria is another infectious disease that kills at least a million of people worldwide every year. It sickens many more millions, creating huge burdens on the developmental potential
of many regions in Africa and Asia. During the 1950s, malaria was largely eradicated in many parts of the world, thanks to effective drugs and massive insecticide spraying campaigns. However, evolution among the insects and the disease pathogen, has rendered many drugs and pesticides largely useless in the fight against today’s malaria.

Malaria is a parasitic infestation of the blood. Female mosquitoes inject parasites into the blood through her saliva as she takes a blood meal. By doing so, mosquitoes function as a disease vectors because they transport the infectious parasites between hosts. Flies, ticks, fleas and lice are other vectors. Malaria is a staggeringly complex disease partly because the parasite that harms people goes through a large number of life stages. The parasite can lay dormant for long periods, often lives part of its life in human hosts, and some of it in the mosquito, and it can invade multiple parts of the body. Mosquitos, hosts and parasites all have spatial behaviors of environmental needs, which contributes to the difficulty of preventing malaria, but also require spatial methods and geographic tools.

**Malaria in the United States**

In the earliest days of colonization in the United States, the English 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 (*Anopheles quadrimaculatus*) to begin spreading. Within a generation, malaria had become a serious scourge in the colonies, especially in the Southeast 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 the 1800s.

By the mid-1800s, malaria was out of control in the United States, but a series of changes in American society all but eradicated it within the next 100 years. How? The demise of wet-rice culture in the Deep South was a start. During the 1800s, more profitable crops, like cotton and corn, emerged resulting in the conversion of thousands of acres rice fields, as well as natural swamplands, into cropland, thus destroying ideal mosquito habitats. Railroads also replaced river and canal transportation in the US, thereby keeping many thousands of people away from the water-loving mosquitoes. At the same time, steam power began replacing waterpower, eliminating the need for thousands of millponds 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 mosquitoes transmitted malaria. Slowly, health officials in the US took steps toward mosquito eradication. Government workers drained swamps, and manipulated water levels in lakes by raising and lowering dams. They removed vegetation from lakes at the shoreline, provided houses within a mile or so of lakes or ponds window and door screens. After World War II, when thousands of American troops returned from Southeast Asia afflicted with malaria, the government took steps to make sure that malaria didn’t spread once again. The major thrust of this effort was in the US South where the military had already fought a number of battles against the disease during the war to prevent the disease from decimating troops training for deployment on southern military bases. The secret weapon in this post-war campaign was a newly discovered, yet highly effective insecticide called **DDT**. The government launched a massive campaign during which they sprayed DDT on millions of acres across the country. By 1949, the government declared the US free of malaria. The headquarters of the operation, near Atlanta, Georgia became the CDC.

Other countries followed the American example. Unfortunately, the widespread and indiscriminate application of DDT across the globe created a crisis of particular interest to the biogeography community. It became apparent after about a decade that DDT, and similar chemicals, harmed 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 chemicals to control insects. 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) in a process called **bioaccumulation**. The 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 was 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. Many credit the ban on DDT for helping Bald Eagles and other prey birds return from the **brink of extinction**.
One of the leading causes of death in the United States is cancer. It is actually a group of diseases, all of which are characterized by an out of control growth of specific body cells that erode life functions. Lung cancer kills more Americans than any other type of cancer, and about 90% of the fatalities are associated with smoking tobacco. Smoking also causes a host of other deadly cancers. Skin cancer is the most common form of the disease in the United States, and it is clearly associated with overexposure to the ultraviolet light from the sun and from tanning beds. Other behavioral factors linked to cancer involve alcohol, weight control, and dietary practices. Cancer is not contagious, but many cancers display spatial patterns similar to infectious diseases. Geographers study cancer and offer insights into both behavioral and environmental causes; as well as strategies to combat it.

Culture is at the root of most of the behavioral factors that cause or help prevent cancers. There are clear regional differences in the rates at which people smoke, exercise, drink, and eat healthy, making it easy to measure the correlation between lifestyle and cancer rates.

Some cancers are associated with ethnicity or national heritage. For example, studies have found that the rate of stomach cancer is higher than average for Finns and Koreans; and that liver cancer for Vietnamese men is higher than other groups. Genetics may be a factor. Some cancers are clearly more prevalent within certain families, and entire groups of people may have specific genetic anomalies predisposing them to a specific cancer. However, because ethnicity and national origins so often also encourage specific cultural practices and economic conditions, it is difficult statistically determine causality.

Exposure to environmental pollutants is also linked to certain cancers making geographic methods really in the search for cancer prevention. 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. For example, mesothelioma, a rare type of lung cancer began showing signs of geographic clustering in the 1960s. By mapping mesothelioma clusters and factories, researchers realized that regions with industries that mined or processed asbestos had higher rates of the disease than regions where mining and processing asbestos was rare. This finding later allowed biomedical researchers to establish a causal relationship between various lung diseases and prolonged exposure to asbestos fibers.
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 environmental causes of cancer. Cancer Alley lies along the Mississippi River in Louisiana between Baton Rouge and New Orleans, alongside a significant concentration of petro-chemical factories. Clearly, this corridor does have one of the highest cancer rates in the United States, but because it is not significantly higher than the rest of Louisiana according to statistical tests, health geographers doubt that it is an actual cancer cluster. Unhealthy lifestyles, poverty and poor access to affordable quality health care both within and beyond this industrial corridor make it difficult to separate the impact of the petrochemical industry on cancer rates from the prevailing cultural and socio-economic conditions.

Other health problems, such as birth defects, asthma, and miscarriages, may be easier to link to residency near polluted sites. The best known example of this is Love Canal, a neighborhood once hosting some 900 families near Niagara Falls, New York that was abandoned in the mid-1970s after hundreds of residents were sickened by poisonous chemicals from a local landfill that began seeping into yards and basements.

**Health Metrics**

How healthy a group of people are in a country, a state or a neighborhood, is one of the most critical and complicated measures of well-being. There are a number of measures or health metrics, that one could use to measure health. A combined health index is probably the most useful way to measure the health of individuals or a groups health; but even then it’s easy to argue about which factors are most important to include in an index, as well as which mitigating factors deserve consideration. Whose health is considered in an overall health index is also a matter of concern. The United States, despite having easily the most expensive health care system in the world, fares poorly when compared to other advanced economies in terms of health outcomes, especially for poor people.
Infant Mortality Rate

One of the most basic measures of community health is **Infant Mortality Rate (IMR)**, which is a measure of the number of children that die during their first year of life per 1,000 live births. Global disparities 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 reasonably hygienic 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.

Infant mortality rates in the United States are low (they appear in the lowest quantile in the world map above), as well they should be in a country that spends more on health care (by a wide margin) than any other country. Still, the US has an IMR nearly three times higher (6 vs 2 per 1000) than places like Finland and Japan. Shockingly, the IMR in the United States is also worse than it is in a handful of Third World countries, including Botswana, Lebanon and Cuba. The solution to this puzzle is complex, but the mystery is rooted in poverty and the peculiar way the American health care system works.

Look at the map of IMR by state (figure 4.10). It is evident that poverty, ethnicity and style of state governance 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 poor, minority and conservative Mississippi and Alabama. Interestingly, the problem lies not in the hospitals where babies are born, 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 the infants of poor families, especially African-Americans. It’s not just poverty. Clearly, Cuba has more poverty than the US, but Cuba’s government focus on cheap, accessible healthcare for *everyone* keeps their IMR lower than the United States. 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 by requiring all citizens to have some kind of health care insurance; and subsidizing the cost of insurance for the poorest of the poor. However, many
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folks, often those in areas where the IMR is very high, resent the intrusion of government into health care decisions.

Life Expectancy

Like IMR, *life expectancy* is a useful indicator of the overall health of a population. This metric is essentially an estimate of how long a person at birth, is expected to live. It’s a guess about what the average age at which people in the group are going to die. Calculations are largely based on observed *death rates*, plus additional considerations. The life expectancy of a group can be greatly affected by things like war, or the outbreak of diseases. In Africa, for example, the life expectancy has stagnated after years of improvement as AIDS swept across the continent. Iraq and Syria have seen life expectancy downgraded in recent years as wars in the region continue to wear on indefinitely.

In the United States, babies born today can expect to live to be about 77 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 a handful of developing nations (Chile, Cuba, Costa Rica, e.g.) have similar or better life expectancies than Americans. Poverty and unhealthy lifestyles are generally cited as reasons for the unimpressive life span of Americans.

Life expectancy varies in the United States as well. Poverty and cultural practices undermine longevity most often. In McDowell County, West Virginia, the county that has the lowest life expectancy in the US (70.1), you’ll find that their median income is around $23,000 a year, about 1 in 5 don’t have insurance, few completed high school or college, over 16% suffer from diabetes, and over 35% of adults smoke. Even the homicide rate is exceptionally high in this rural county. As a result, babies born in wealthy and health-conscious Marin County, California can expect to live nearly 15 years longer than those born in McDowell County, West Virginia.

Ethnicity plays an important role, but perhaps not as important as geography. For example, Asians, perhaps because of difference in wealth, diet, 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 more stark. Black
boys born in Washington DC today have a life expectancy of 66.5 years, whereas Asian-American girls born in Boston might expect to live to almost 92! However, black boys born today in Minnesota may expect to live almost to 80 years old, the same as Asian-American boys born in Hawaii. Health and dietary practices have a significant impact on life expectancy; things determined as much by location as by ethnicity.

Physical and Mental Health Days
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 research concerns. Well done surveys are complex to plan, perform and analyze; so researchers should exercise caution when using survey data for their own research, or even when they use survey data collected by others. The world’s largest telephone survey is done by the CDC with the aid of local health departments. It’s called the Behavioral Risk Factor Surveillance System (BRFSS) and it provides a substantial amount of quality information about the health and health care of Americans. A number of the questions are useful metrics for determining the quality of life of people around the US. The CDC makes this data available in a variety of formats, including GIS formats, allowing health geographers easy access to exceptionally high quality data useful for answering numerous health-related research questions.

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 not good?” (numeric answer, none, not sure, refuse to answer). Similar questions are asked about mental health. Together, these sorts of questions, when mapped for a region (county or state), help paint a useful 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.

Survey results indicate a wide variation in the number of days people are sick over the course of any 30-day period in the US. In some places, the group average is 2 or fewer “sick days” per month. In other places, especially the Deep South and Appalachia, people are sick on average one full week out of every month. While a few days difference may not seem note-worthy, compounded by the many thousands of people that live in most counties, 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 1/5th of the month all the time? How much money might be lost on wages and productivity in a location like this? Even if you are not considering opening a factory in West Virginia, the health conditions of those Americans should be of some concern for all Americans because it’s a humane consideration, but also because poor health of Americans in one region of the country is an external cost that all Americans pay for eventually.

Disability

One of the key outcomes of poor health is disability. Over 12 million Americans were receiving disability payments at the end of 2013. On average, the monthly benefit paid to claimants was around $1,000. 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.

Unhealthy lifestyles, dangerous working conditions, risky cultural behaviors, and bad luck all increase the likelihood of individuals winding up dependent on the government for support. By mapping these individuals as groups, we can begin to see very uneven patterns that suggest that both cultural practices and economic conditions are important causal variables in the creation of a disability crisis in the United States. Primary and secondary (mines and factories, e.g.) sector employment seems a key economic indicator of worker disability, which makes sense because those jobs are often physically demanding.

The geographic pattern evident in map of disability welfare differs wildly from media stereotypes about persons receiving government welfare. Mapping disability coverage offers a counterbalance to the misguided stereotype of the urban welfare queen, a politically charged icon of (typically minority) abuse of government assistance. Disability payment hotspots are overwhelmingly rural, and most are in predominantly white communities.

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. Statistically, it would be highly unlikely that nearly one-third of any region’s total population could be physically disabled by work-place injuries, even if 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 can age-adjust the data to help account for the fact that older people are more likely to suffer a workplace injury from which they cannot recover.
**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, and there is yet to be discovered a specific cause.

Generally, researchers think that genetics is the primary factor, but determining causality has proven to be very complex in part because the symptoms themselves are hard to identify, but also because of the geography of autism. Medical geographers and epidemiologists are heavily involved in autism research, especially since 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 are a causal variable. Indeed, there is some evidence to suggest that environmental exposures to various pollutants are at least triggers for the condition, but definitive answers have proven elusive. What has been less elusive is the effect of neighborhood. Clearly, a number 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 parents and medical professionals, rather than evidence of a real increase in ASD. In poorer areas, parents, families and school officials may simply assume children on the autism spectrum are simply a bit odd, allowing ASD children in those neighborhoods to go undiagnosed. Ethnicity and economics may also change likelihood that parents will acknowledge or accept a diagnosis of ASD. 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 population with ASD.

**Vaccinations**

One of the most controversial aspects of ASDs has been the popular, but scientifically unproven belief that infant vaccinations cause ASDs. Fear of getting children vaccinated against common, and sometime deadly,
ailments has allowed a handful of diseases to reestablish themselves in the US. Measles is a classic example. In the year 2000, the CDC declared measles “eliminated” from the US because no Americans had the disease. Still, Americans without vaccinations against measles remained at risk if they traveled internationally, or if they are exposed to international visitors or immigrants who arrive in the US with measles. Because of concerns about the safety of vaccines, many parents in the past 20 years have opted not to vaccinate their children, allowing the disease to reestablish itself. A significant outbreak of measles occurred in Southern California during early 2015, after a person with measles visited Disneyland in Anaheim and it spread among the unvaccinated children in the region.

Pertussis, better known as “whooping cough” is another disease that has re-emerged in recent years thanks to lax vaccination regimens. In recent years, the number of pertussis cases in the US has risen to levels not seen since the 1940s. Mapping pertussis rates shows a highly uneven pattern. Latino infants in California had by far the highest rate of infection at 174 per 100,000 in 2014. This high rate is likely due to the inability of immigrant families to access quality medical care, especially pregnant mothers, and infants. Some of it is likely a side-effect of language barriers between patients and health care providers. Extended families living together in crowded housing, especially if adults recently arrived from Latin America without updated vaccinations put at risk the health of infants and small children within the household.

Pertussis also is epidemic among those on other end of the socio-economic spectrum. Many wealthier families purposefully opt out of vaccination programs, thereby fueling the pertussis epidemic in otherwise exceptionally, 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 critical herd immunity threshold because more than half of parents signed personal belief exemptions, but still sending 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.

Parents who do not immunize their children are generally able to take advantage of what is called, herd immunity, a condition that characterizes groups of people in which around 90%
the group have developed immunity, generally through vaccinations, to an infectious disease; thereby critically lowering the chance infection for those without vaccinations and/or immunity. This behavior is sometimes used as an example of the free rider problem, in which individuals take advantage of community resources without contributing to the maintenance of those public goods. The free rider problem echoes the “tragedy of the commons” scenario, discussed in the chapter on political geography.

**Geography of Care**

A great deal of the geographical variation in death and disease can 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. Poor women tend to have babies born prematurely and/or may suffering from low birth weight, which in turn seems to invite a number of additional ill health outcomes, most notably infant death. Poor children and adults often continue to suffer from poor diets and an inability to access regular, high quality health care, resulting in shortened lives and reduced capacity. Many of the poorest areas in the United States have the highest percentage of their citizens living on permanent disability status.

**Access to Medical Facilities**

One of the main problems for poor people is that they are not attractive customers for doctors and hospitals. Poor people, especially prior to the Affordable Care Act frequently had little means to get insurance outside of the government-run Medicaid program. This fact limits health care options for many thousands of people in the United States. As a result, uninsured people tend to wait until they are very ill to see a doctor, and often wind up going straight to emergency rooms where federal law requires hospitals provide some measure of 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. Hospitals that serve too many indigent patients risk going out of business. As a result, doctors and hospitals are harder to find in many of the poorest areas of the United States. Geographers sometimes call regions without medical facilities medical deserts. Most medical deserts are in rural areas, but a few inner city areas in America’s largest cities also suffer from poor access to health care provision. The passage of the Affordable Care Act should shrink or halt the expansion of medical deserts in most of the US, but they may expand in others states because some politically conservative states did not adjust their Medicaid program to include those still too poor to afford private insurance, but not poor enough to qualify for Medicaid.
Geographers have examined health care access in large cities frequently. Perhaps the most closely scrutinized health care access problem is in Los Angeles’ “South Central” region. As far back at the 1965 Watt’s Riots black residents of Los Angeles have complained about poor access to doctors and hospitals. Government officials, in an attempt to shorten the distance residents in South Central LA had to travel for medical care, opened in King-Drew Medical Center in the early 1970s. However, many years of shoddy care led to the closure of the facility in 2007, including its very busy trauma center. This angered local residents, who if badly injured, would then have to be transported to more distant emergency rooms for treatment. Locals were bitter, but according to most sources, even residents of South LA have reasonably good access to trauma care. In fact, compared to residents of many areas of the US, all Los Angelenos have easy access to care.

Regional Variations in Treatment
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 the exact same condition. Geography is exceptionally useful in highlighting and addressing these discrepancies. Take for example, South Korea where 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 were finding it more often. As it turns out, quite few people have thyroid cancer and live with it for many years. Unfortunately, many Koreans chose to have the cancerous thyroid gland removed and suffer more complications than they would have, had not just left it alone.
Similar situations occur in the United States. The rate of diagnosis of specific diseases as well as the preferred treatment strategy depends a great deal on where you live. 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 what your doctor suggests as an ideal treatment. You might have them surgically removed, and your cousin may simply get some pain pills and a note to stay home from school.

This trend is troubling, because it suggests that geography may be influencing doctors more than medical protocols. Geographers would investigate this trend by conducting a statistical test for spatial autocorrelation to determine if the spatial pattern of treatment is random or clustered. If the diagnosis of disease, or outcomes associated with various treatments do not mimic the pattern of treatment, then serious questions about the quality of health care are raised.

In recent years, troubling geographic patterns have emerged on maps showing the rate at which Doctors prescribe the painkiller Oxycodone. Florida became the “pill mill” capital of the United States because of the relative ease of obtaining powerful painkilling medication from “pain management clinics”, which in turn were abused or sold on the streets. Presumably, Florida’s pain management industry grew out of its position as a top destination for retirees escaping cold winters further north. Perhaps because they could hide their abusive practices amid the sea of legitimate elderly patients, unscrupulous doctors found Florida an ideal location to profit from legalized drug dealing. By 2009, doctors in Florida were prescribing 10 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 made regular trips to Florida, to visit dozens of pain clinics, where they would pick up dozens of prescriptions that pharmacists filled in the doctor’s office, or at a cooperative local pharmacy. As a result, several transportation routes to Florida, including air routes and Interstate 75 were dubbed, “The Oxytocin Express”. In recent years, more aggressive policing of the pill mills and a reformulation of Oxycodone drove up value of these prescription pills, which in turn fueled a resurgence in heroin addiction in many of the regions of the country where Oxycodone was popular.

**Medical Marijuana**

There is some reason to believe that the explosion of medical marijuana clinics in various parts of the United States, including Los Angeles, shares some of the same abuses as the pill mills in Florida. In Los Angeles, where Medical Marijuana was legalized in 2004, an astonishing number of dispensaries opened within a few years. Responsible estimates put the number at around 600, which meant pot dispensaries outnumbered mainstream pharmacies by a considerable number. One can test this by mapping both dispensaries and mainstream pharmacies as a control variable. If pot dispensaries and pharmacies were equally distributed across a region, then one could argue that marijuana is largely being used for medicinal purposes. However, because there are dense clusters of dispensaries in specific neighborhoods (near college campuses, e.g.) the map strongly suggests that marijuana is probably sold more for recreational purposes.

**Health Care Systems**

The ability to pay for health care is another key question for medical geographers, one that factors heavily into the health profile of people around the globe. Health care is paid for in a variety of ways. In most developed economies, citizens have access to universal health care, which in most countries is a government run health care system funded largely through taxes, with varying levels of individual, or employer payment options. A few countries, like the United Kingdom and Canada have nearly exclusively government run or single payer programs. Other countries...
require all cash payments for health care, or expect the poor to rely largely on donations or charities.

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 in the private sector. About 80% of hospitals are not-for-profit businesses, but most physicians work in a for-profit environment. About two-thirds of those who have insurance in the United States get it through their employer. The government provides health insurance for the poor, the elderly, disabled, etc. for about one-quarter of the population. Medicare is a single-payer system for the elderly, and it pays about half of all the medical costs incurred in the US each year. About 16% of the population was uninsured in 2010, but that number has fallen a few percent since the passage of the Affordable Health Care Act, because the new law requires every US citizen to have some sort of health insurance. For the poor or disabled who were not poor enough to qualify for government health care program known as Medicaid, “Obamacare” offered some help by extending coverage to more people, especially in the 23 states that expanded Medicaid in 2010. States with significant Republican majorities, largely in the South, Plains, Mountain West, declined to expand Medicaid, making it harder for their poor citizens to get health care coverage. Ironically, many citizens living in states with poor access to health care vote for politicians who voted against the expansion of government programs, like the Medicaid, that serve the needs of the poor.

The main feature of the Affordable Care Act was the creation of health care exchanges, which allow people who cannot get affordable health care through an employer to buy insurance on their own. Health care exchanges allow people who are not already part of a large pool of insurance customers (e.g. employees in a large company) to join together to create a large group customers who collectively contribute to a fund. Sick people who have contributed to this common fund, can use some of those funds to pay for health care, occasionally far more than they contributed. Insurance pools therefore need a large number of customers, and a large majority of the customers must be healthy, otherwise an overabundance of sick people will deplete the fund. It’s a bit of a gamble for healthy people to join, but logic suggests that the vast majority of people will need health care at some point in their lives, so everyone should have to pay into a health care pool.

For many countries with government-run health care systems, every citizen in the country is automatically placed in the pool. In order to keep taxes low, governments must work hard to keep people healthy to keep them from costing taxpayers too much in health care costs.
They do that by encouraging healthy diets, exercise and regular checkups: a strategy known as preventative healthcare. In the US, the logic of privatized health care often rewards those who treat the sick more than those who prevent people from getting sick in the first place.

In the United States, those without insurance tend to have poor health, live fewer years, occasionally contribute to the proliferation of contagious diseases, and generate a drag on the entire economy – eventually costing taxpayers as much if not more in the long-run.

Still there has been intense debate over how best to serve the health care needs of Americans. Many political conservatives argued individuals, not the government should shoulder the burden of their own health care costs through mandated insurance. Other political conservatives however think that passing a federal law mandating all citizens be insured is an unnecessary intrusion of government into the private lives of citizens. The latter group of conservatives emerged as the loudest group once President Obama began supporting the ideas of the former group. Liberals, or progressive moralists think that President Obama’s health care plan is not enough still, because as they argue all Americans have a right to quality health care in the United States, and because it is a right, the government has an obligation to do its best to honor that right. You’ll read more about the geography of politics later in the text.
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, like other elements of our culture is a product of geography exerting significant force upon the lives of everyone.

Introduction

What we speak and how we speak is the most powerful marker of who we are. Language marks us as individuals, but also places us in groups. Language constrains and liberates our thoughts and feelings, making language a battlefield where various interests compete to control the chains of meaning attached to words and phrases. Power is exercised through language. 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 fields 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, there is a breakdown of mutual intelligibility – the ability for two or more people to understand one another. At that point, a dialect becomes a language. Consider that many speakers of American English find that they cannot understand speakers of Scottish English if the dialect of the person from Scotland is extreme. Part of the problem is the differences in difference in accent, which refers to the way people pronounce words. For example, the Scottish “roll” their tongues when they pronounce words with the letter R in them and Americans do not. Americans pronounce the word “to” like “tū” and the Scottish pronounce it like “tae”. A dialect generally often is marked by an accent. Dialects also are distinguished by different vocabularies or word choices. So for example, a Scotsman might use the words “wee bairn” to describe a small child, where Americans might use “little kid” instead. So different is Scots English that some linguists even consider it a separate language.

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. Sometimes a pidgin will become more complex and evolve into a language in its own right; a native tongue. Linguists call these newly created tongues creole languages. Most creole languages remain unofficial, but some like Haitian Creole, a blend of French and West African languages, become an official language with rules about spelling and syntax, formally taught in schools, etc.

**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. More distant linguistic relatives on the other hand may share only a common proto-language that forms the trunk of the tree, much like a distant grandparent who died thousands of years 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.

![Figure 0.1: Map of Major World Language Families](image)

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

**Chinese Languages**

With nearly a billion speakers, more people claim Mandarin Chinese, a Sino-Tibetan language, as their primary language than with any other in the world. However, there are multiple dialects of Chinese, so you may find that even in the United States people from China who are from Beijing have a hard time understanding other Chinese immigrants who came from Guangdong province in Southern China and speak a dialect of Cantonese. The Chinese language 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. An even bigger challenge has been designing software that can write Chinese using a standard computer keyboard (or cell phone key pad) developed for another language system, using around 50 keys. Several ingenious methods have been invented, but each requires significant effort and may have implications for the adoption of certain technologies by Asians using a character based writing system.

**Romance Languages**

The second most commonly spoken language is Spanish, a member of the Indo-European language family and one of a number of *Romance languages* that evolved from a common ancestor known as *Vulgar Latin*. While certainly there were swear words in that language, “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 live in mountainous locations, or on islands or in other isolated locations. Each language in this language family features words and linguistic structures that are similar, but they remain generally unintelligible to speakers of other within the language family.

**Germanic Languages**

In addition to 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 related. Most people in North America speak English, as do other locations that were once part of the British Empire. 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.

**English**

German and English are closely related members of the Germanic language family, but English has become the most international of all languages, with more people speaking it than any other, many of which speak it as a second language. English isn’t 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, and it is awash in slang. So why has English become the world’s most popular second language? The answers lie mostly in the political and military prowess of England and the United States. British naval power and their ambitious colonization program during the 18 and 19th centuries expanded the use of English around the globe. During the 20th century, the United States’ ascension into the realm of military and technological superpower elevated the status of English even higher. Take for example jet airline traffic. Most communication between pilots (and traffic controllers) is in English. Why? Partly it’s because the airplane was invented by Americans and the British began the first international commercial airline. This process is similar to the doctrine of first effective settlement, discussed elsewhere in this text, but now with a technology. 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 rock and hip-hop, plus the success of Hollywood has also helped spread English worldwide.

**Linguistic Isolation**

Some locations, particularly those that over the centuries have proven difficult for armies or navies to conquer, generally have unique languages. Locations that are isolated by high mountains, on islands, across vast wastelands or deep in swamps have a tendency to house people who speak uncommon languages. For example, Hungarians and Finns speak a language that is different than most of the rest of Europe. People on the islands of Corsica and Sardinia speak a language similar, but different from their neighbors in Italy on the
European mainland. 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 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.

**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 first alliances. The Russians had agreed to help 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.
American Languages

Louisiana has a fascinating mixture of all these elements. 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 a variant called “Cajun French”, which is less a creolized language, and more a very wayward 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.

American Dialects

Your ability to communicate efficiently with other Americans may depend on where you (or perhaps your parents) grew up. Some parts of the United States have very distinct dialects that others find challenging to understand. People in the Midwest and much of the West Coast, on the other hand, speak a kind of “ordinary” American English that is used by national television news anchors, and spokespersons for various products advertised on TV and radio.

There are quite a few regional dialects in the United States. Some argue that distinct dialects exist within different boroughs of 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 presented in Chapter 2. So, 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
Maps of dialects in the United States are fascinating to inspect. 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. Take Joshua Katz’s excellent dialect survey at North Carolina State University, and view 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.
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. This central, but isolated, 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 made Omaha more convenient for workers there to make and receive calls from both coasts. Perhaps most importantly, the local dialect is what some linguists call Midland English. This accent or dialect is the most ordinary and easy to understand speech pattern found in the United States. Is it any surprise that a city located on a plain, in the center of the continental United States would have a “neutral” accent? The growth of the call center industry in Omaha spurred additional growth in telecommunications, high tech and other service industries. 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.

Several places in the United States have site and/or situations that are partly responsible for 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 has 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.

Ethnicity and Dialect

Ethnicity is frequently expressed through dialect; and conversely a dialect may be a marker of one’s 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 politicians and 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. Linguists were generally sympathetic to the side of the Oakland School Board and weighed in with studies that show that a proper understanding student’s home dialect or language was useful for teachers who sought to instruct students in Standard English.

The controversy in Oakland revealed several interesting issues for cultural geographers. First, it is curious how some everyday practices like language exert a special resistance to cultural change. In this case, elements of African language systems appear, even after centuries, to remain lodged the speech patterns of many black Americans today. Clearly, many African-Americans proudly seek to preserve speech patterns that help distinguish 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 later spatial, ghettoization of Blacks has helped preserve relic speech patterns brought from Africa. The linguistic effects of isolation noticeable among people living on islands, mountains and in swamps has been somewhat replicated within the African-American community through restrictive covenants and other discriminatory housing practices. It is also apparent to anyone who has listened to the speech of white southerners, or urban white people who live in predominantly Black regions that those speech patterns 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 the importance of language in the creation and maintenance of political and cultural order.

Language on the Landscape

Spoken languages, like songs, jokes and other intangible elements of culture are *mentifacts*, and are therefore 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, as a geographer. Be careful though, because frequently the words on the landscape do not “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 free of drugs? There are probably few high schools that could legitimately claim to be drug free, but far fewer colleges. Why do you think then, school administrators would place a sign like that on a 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 it obvious the message on the sign is erroneous, then you are reading the landscape. 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

![Figure 0:10: 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. This helped reinforce their effort to sell “down home cooking” and “friendly hospitality”. How do you think the aqua background and the use of neon (visible at night) fit with the overall motif of the business?](image)

![Figure 0:11: Bossier City, LA - The sign in the yard conflicts with another landscape message in the scene. See if you can spot the conflicting messages.](image)
high-definition televisions.

**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 “Windsor Arms Apartments”. Toponyms, if they are interpreted carefully, may offer a number of clues into the history of a location and the priorities of the people (or person) who named a place.

Many of the place names that are very common to us, those used to refer to states, cities and towns are compound terms. These toponyms often utilize a generic indicator and a specific one. 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 there was some famous “Charles” years ago (King Charles II of England) for whom the town was named. The use of the word “town” or “ton” is an indication that the founders of Charleston were not only English, but also happy with the king; which in turn should also suggest that Charleston was founded well before the unrest that led to the American Revolution. Charleston, West Virginia, founded around the time of the Revolution, was not named after any English King, but still uses an English generic suffix.

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 Junipero 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.

Toponymy and Place Marketing

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 using clever toponymy. 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.
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 languages do adapt 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 are more common among cultures living at high altitudes.

Another fascinating recent study of particular interest to geographers is from the world of cognitive psychology. Researchers have found that the way people think spatially 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 new instruction would have to be issued: “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, placing them in windowless rooms, etc. These effects spill over into many other areas 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”.


Figure 0:14: 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.
RELIGION

Most people believe in the supernatural and consider it 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.

What is it?

Religion comes in many forms. Most scholars characterize religion as a system of beliefs that connect 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, or adherents are bound by beliefs and practices that become the basis for group and individual identities. Religious beliefs and practices are a product of the natural and social environments from which they evolved and in turn critically inform the adherents how they should think and act about a wide range of issues, from politics to economics to their interactions with the natural environment.

Religion in general is hard to characterize though because it comes in so many different forms. One way of categorizing religions is to look at how a religion gets new members. Some religions actively recruit people into their faith. You may have had young men in white shirts and black ties come to your door and encourage you to join the Church of Jesus Christ of Latter Day Saints. These missionaries from the Latter Day Saints church, commonly known as Mormons, are members of one of the more high profile proselytic faiths. These are universal religions because anyone can join. Most Christians actively seek new members, and many go to great lengths to achieve that goal. Other religions rarely proselytize. Closed religions are called ethnic religions, and generally you have to 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 indeed to have a Jewish rabbi invite you to temple so that you might consider becoming Jewish.

Religions can also be lumped together on other criteria. Religions can have a single god or many gods. Those focused on a single deity are called monotheistic. Islam, Christianity and Judaism consider themselves monotheistic religions. Other religions are called polytheistic because they have multiple deities, with various personalities, personalities and capabilities. The religions of Ancient Greece and Rome are the best examples of polytheistic religions. Some religions are pantheistic in which the divine is everywhere and in everything. Practitioners of some religions direct their energies inward in an attempt to achieve an elevated state of mind, while others seek paradise through outward deeds or acts of devotion. Frequently these categories are messy and overlap in various fashions. Some believe that all religions essentially advance similar truths.

Some religions are easy to recognize for Americans. Adherents meet regularly as a group, or congregation, in a building. Some religions are harder to recognize. They may not have a building, or meet in groups. Other presumably profane or secular belief systems make take on many of the characteristics of a religion: they may have texts that are treated as sacred, or nearly sacred; they may have many followers who engage in well-practiced rituals; they may even have holidays, and special clothes for priest-like figures. Sociologists have likened Fascism and Marxism to religions, though such ideas are certainly open to debate.

Even within a single religion, there are occasionally multiple of sub-divisions or denominations and within those sub-divisions, even more sub-divisions and so on. Even with a single small group of believers or congregation, individuals will interpret or understand religious doctrine or engage religious practice differently, making it difficult to say much definitively about any specific set of beliefs.

Frequently, small religions, or denominations within a religion are called cults, a word may be derogatory, but is not necessarily so among academics. Many conservative Christians characterize Mormonism 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 were convinced 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.

**What does it look like? The Landscape of Religion**

Religious practice shapes the landscape in myriad fashion. The landscape is capable of revealing a great deal about the belief systems and values both dominant and minority religious groups in a place or region.

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. Both rely upon a particular understanding of the same religious texts. Many religions have temples, shrines and other houses of worship as well that sometimes pass unrecognized as sacred space by Christians. Dozens of other places on the landscape are believed to have special sacred functions or meanings, including cemeteries, certain mountains, rivers, etc.

For some, clearly the architecture of the church reflects the desire of its congregation to glorify their God. They attempt to create as best they can a monument worthy of a “House of God”. Catholic churches, and certainly Catholic cathedrals and basilicas qualify as monumental architecture. Inspiring architecture may help people feel the presence of the supernatural. Architecture is used to instruct the faithful, especially in the time before widespread literacy. Consider the role of stained glass artwork as a stories telling devices two centuries ago, when few in a congregation had literacy skills. Architecture can be used to recruit new converts. Consider the impact of the modest mission churches of California upon the Indian converts in the late 18th century. Architecture, and landscape in general, can be a very powerful communicative medium.
Approaching in size and grandeur of Catholic buildings are many new megachurches, which have become popular in the United States among Evangelical Christians. These churches, which are sometimes mockingly called “Six Flags Over Jesus” by local towns people, may feature multiple buildings; gymnasiums, classrooms, coffee shops and bookstores, in addition to the more common chapels and rectories. These churches offer a variety of services for the convenience of their congregations, and therefore are easy to justify as great recruiting tools. Churches would claim that buildings that bring people to the faith are worth the cost and effort. Still, the extravagance of the building programs has created some controversy. Some think that these mega-churches threaten to overwhelm, and destroy smaller congregations 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 as successful business enterprises.

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. Amish and certain orders of the Mennonites are the two groups in the US that perhaps best embody this notion. Some of the more conservative Amish groups do not build church buildings at all, but rather gather to worship in private homes. This is because they focus on a particular passage in the Bible that suggests that God “does not dwell in temples made with hands”.

Other congregations also prefer simple church architecture. Some of the oldest churches in America, those built by Puritans in New England adhered to strict rules regarding simplicity and humility. They built churches without stained glass, crucifixes, or statues or other artwork. The buildings were generally square, to help enforce notions of communalism that characterized their politics and economics. 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.
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 brings into question the process by which spaces become sacred. What process, for example, transforms an abandoned gas station or convenience store into a proper church? Can any place be a “House of God” or are certain places unavailable for such a distinction.

**Shrines**

Clearly, the practice of turning profane, ordinary, spaces into sacred ones is commonplace. In areas where Catholicism is prevalent, small folk-art shrines, generally dedicated to the *Virgin Mary*, and enclosed in an artificial grotto; sometimes fashioned out of an old bathtub, thereby lending the colorful name *Bathtub Mary* or *Madonna on the Half Shell* to these home-made devotional spaces. Similar are the impromptu, frequently temporary shrines erected to victims of car crashes or other accidents. Mourners often place candles, crosses, crudely painted bicycles and other memorabilia at the site of an accident, temporarily creating a sacred space for the unfortunate few who may have known the victim.

Occasionally, the site of a particularly public tragedy will instantly become 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. have taken on elements of sacred space because people come to remember, grieve and engage metaphysical questions. Behavior in such locations often approximates that which one would witness in more formally recognized sacred spaces; with people talking in hushed or reverent tones, walking slowly etc. Other spaces in the United States, like the Lincoln Memorial in Washington D.C. have taken on the status of quasi-sacred space.
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, in the month 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 have to decide exactly when and how religious people can use public space to promote or celebrate religious holidays or events.

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, which for some Catholics, is a celebration preceding the start of the Lenten fasting season attracts huge crowds, many of who 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.

Cemeteries

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

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 perpendicular to Mecca, with the dead facing their holiest city. Christians tend to bury people facing east, so that the dead may rise to face Christ on Judgment Day. Burying so many people has multiple implications in geography, not the least of which is the amount of territory given over housing 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 remains to existing mausoleums, or crypts; particularly when a family “owns” a particular site.

Before the 20th century, it was common practice in many parts of the United States to buried 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. 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.

Americans’ attitudes toward cemeteries have evolved. The Puritans of New England paid little attention to matters of cemeteries and gravestones. All 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. The design aesthetics of these early cemeteries influenced the development of public park space in the United States.
Traditional, common monumental cemeteries are costly and difficult to maintain. Headstones marking the location of burial sites erode, crack and break. Wealthier families, especially generations ago, were also prone to building large monuments to family patriarchs in an attempt to raise the stature of the deceased in perpetuity. Of course, over many generations they too deteriorate and may become hazards. The cost of simply trimming grass has led to the popularization of memorial gardens, or lawn cemeteries, that use low, 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, so they leave mementos or plant flowers; thereby increasing maintenance costs.

More recently, the costs associated with burials have invited an increasing number of people to consider cremation, or natural burial to mitigate the environmental consequences of conventional burial rituals, which often involve a large number of processes that slow down the inevitable decomposition of a corpse. Natural burials exclude coffins, burial vaults, embalming and traditional headstones, etc.

**Where is it?: Religious Realms**

Most people in the world adhere to some sort of belief, however most people belong to one of two major world religion families: Abrahamic and Indian. Abrahamic religions (Christianity, Judaism and Islam) all evolved in the Middle East, cover much of the world today and share a number of commonalities. 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 belong to any particular religion.

![Figure 0.15: World Map depicting the importance of religion in people's daily lives (2005-2008) according to the Gallup Polling. Source: Gallup, Wikimedia.](image)
There is wide variation in the religiosity of people worldwide. In some parts of the world, essentially every person’s life is centered around their faith. This is particularly true in the Muslim world, and many parts of the developing world. 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 other regions with advanced economies, like Europe and Japan.

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.

**Christianity**

Christianity, with about 2.2 billion followers is the religion with the most adherents, but many in the developed world are not committed to their faith. This is a process called secularization and it characterizes much of Europe’s Christianity. Christians are also split into various, generally peaceful, factions. The Great Schism of 1054 led to the creation of two great branches of Christianity: Eastern and Western. The Eastern Orthodox Catholic Church, which now includes multiple, national Orthodox churches (Greek Orthodox, Russian Orthodox, Ukrainian Orthodox etc.). Many people of Southeastern and Eastern European areas (and their descendants who have migrated to the US) are Orthodox. They have many similarities and important differences with Western Christians. On the landscape, you may recognize the distinctive onion domes or helmet cupolas on Orthodox churches that distinguish them...
from the steeples that are more common on Western Christian churches.

**Western Christianity**

Western Christians or the Roman Catholic Church also broke apart during a period called the Protestant Reformation that began in 1517. A number of highly religious Catholics began protesting the manner in religious authorities were running the Roman Church. They demanded reforms and have since become known as *Protestants*. They were upset about a lot of things, but eventually their demands included among other things, that the Holy Bible could be interpreted by individuals, thereby removing the total authority of the Pope. Because increasing numbers of Europeans could read, and many people fancied themselves capable of interpreting holy texts, a large number of Protestants formed denominations of their own, splitting from one another like branches from a tree. A series of religious wars followed. Most Germans from the northern part of the country abandoned Catholicism altogether. Those who could not worship as they wished migrated to other locations where they felt safe, or at least comfortable, if not dominant. The United States was a destination for many of Europe’s religious refugees, but it is *not* true that religious refugees were always tolerant of other religions once they arrived in the New World. Quite the opposite is true.

**American Christianity**

Just as Americans are quite ignorant about the religious diversity around the world, it is also easy to be ignorant of the diversity within American Christianity. So great are the differences among American Christian faiths, that it sometimes seems inappropriate to lump all the
various denominations and congregations together under a single label. Nevertheless, we do, and so it is worthwhile to examine the distribution of the main American denominations.

About 60 million American are Roman Catholic. Catholics are the largest religious group in the country. Catholics 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 have fewer than five percent. Many large cities, including those in the Midwest (St. Louis, Chicago, Cleveland, etc.) also have large percentages of Catholics.

Evangelical Protestants concentrate (by percent of adherence) 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). Evangelicals emphasize a personal relationship with Jesus Christ, are generally more literal in their interpretation of the Bible and are motivated to spread their beliefs. They often have very charismatic church leaders. There are about 50 million Evangelicals in the US, distributed among dozens of denominations. The best known of these groups are the Southern Baptists (16 million), but also include and a variety of Pentecostal churches; each also broken into many dozens of sub-denominations, and local variations; plus a very large number of so-called Non-Denominational churches.

Figure 0:19: 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 and politically or 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 are the **Episcopalian**, **Methodist** (United), **Lutheran** and the **Presbyterian** are probably the best known mainline protestant groups. As one might guess, the Mainline Protestants are found in the middle of the United States. Methodists are really quite 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.

**Mormons** (LDS) are not considered Protestants, because they do trace their history through the reformation; but back to church to the time of Christ. Mormonism originated during the early 19th century during a period of great religious fervor in the United States known as the **Second Great Awakening**. During this time, many new religious denominations were established, and churches flourished. Joseph Smith Jr. founded the **LDS Church** after translating the **Book of Mormon**, which he found near his home in Upstate New York, written in an ancient language on gold plates. The Book of Mormon tells a story of Christians during the time of a man named Mormon who lived in America before Europeans came, and before Christ was born. Though some Christians consider the LDS
church a cult, and chose to focus on the Mormon’s history of **polygamy** (now virtually extinct). It is probably wiser to focus instead on the vast similarities between Mormons and Evangelical Christians since both have conservative cultural practices, a focus on family life and strongly held religious convictions. The acceptance of Mormons by most American Christians was obvious in the 2012 Presidential election cycle when LDS member Mitt Romney ran as a Republican with minimal attention to his faith.

Just as important as maps of where a religion is dominant are maps of where no religion is dominant, or religion is not important. In the United States, it’s important to note that many parts of the Midwest and West, there is no dominant religious group (see map of religious diversity above). In some areas of the US, folks aren’t that religious and therefore don’t belong to a church. In parts of Oregon and Maine for example, less than 1/3rd of the population appears to belong to any faith. 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? Could it be that folks in rural locations simply do not belong to a church included in a national surveys of church membership?

**Islam**

**Islam** is the world’s second largest religion with over 1.5 billion adherents. Like Christianity, Islam is not monolithic; it has broken into several sub-faiths, but the about 80% of are **Sunni**. An important minority of Muslims are **Shia**, and they live primarily in Iran and Iraq. There are numerous sects as well, such as Syria’s well-known group the **Alawites**. Many other factions exist within the two main groups. Americans tend to think that all, or most, Muslims live in the Middle East and North Africa, but far more Muslims live in places like Indonesia (Southeast Asia) Pakistan, Bangladesh and India (South Asia). Keep in mind that Nigeria has nearly as many Muslims as Egypt, which is the most populous Muslim country in the Middle East.

Because there are about 2.6 million Muslims in the United States, and it is one of the fastest growing religions in the world, and the Islamic world is constantly in the news and Americans are generally ignorant about Islam, it is valuable to know a bit about Islam.

First, Islam is the religion and Muslims are the followers of Islam. The holy text of Islam is the **Qur'an** (or Koran -- there are various spellings of many Arabic words). Islam has a number of commonalities with Christianity and Judaism. In fact, Muslims believe essentially that all three faiths are variations of the same universal truth, and recognize Abraham, Moses, and Jesus as prophets. Muslims believe that earlier versions of Islam were corrupted over the years (becoming Judaism and Christianity) and it wasn’t until the Koran was revealed verbatim to the last prophet **Muhammad** that the universal truth of **Allah** was properly codified, and written in Arabic.

Islam has several characteristics and practices that American students should know. First, Islam is strictly **monotheistic**. To them (and Jews), the **Holy Trinity** (Father, Son, Holy Spirit) is not sufficiently monotheistic. There is an expansive set of Islamic laws covering virtually every aspect of Muslim life, so it cannot be treated here, but non-Muslims should be familiar with the **Five Pillars**, which represent the core behaviors of observant Muslims.
Five Pillars of Islam

First, one must “take the Shahadah”, meaning they must recite an oath as a basic profession of faith to become a Muslim. The Sunni version of it translates roughly thus: “There is no god but Allah and Muhammad is the prophet of Allah”. The Shahadah is repeated many times, frequently as part of the second pillar, called Salat, which is five daily prayer sessions. 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, and together these amounts likely exceed all other worldwide sources of aid to the needy. 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. 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 pilgrimage to Islam’s holiest city Mecca called the Hajj. All Muslims, if they are able, must travel at least once in their lifetime to the holiest location in the Muslim world 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.

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 its Abrahamic cousins, it is not a universalizing religion. Jews (the followers of Judaism) are broken into several groups. Those 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, starting with the most conservative, orthodox groups, a conservative group and a more liberal or Reform group. It’s also plausible to add a fourth group; those that are only culturally Jewish; essentially accepting Jewish culture without accepting 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% live in Israel, the historic Jewish homeland. About 10% live in Europe and scattered elsewhere. 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 defined differently.

Jews make up a little less than 2% of all Americans, but they have had an outsized effect on American culture. Largely safe in the United States from persecution, Jews have thrived in the U.S. thanks in part a cultural emphasis on education and career success. Still, 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. Orthodox communities, on the other hand, have remained somewhat out of the mainstream of American life, largely confined to the largest urban areas, but their numbers are growing more quickly than their more progressive or reformed Jewish cousins.

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, largely 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 in a coherent fashion. The Indian Supreme Court has even challenged its description as a “religion”, arguing instead that it should be considered a way of life instead. 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 atheists.

There are some more common 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 lead them to 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 exercises, is actually a set of practices that Hindus use to help achieve spiritual goals; there are a number of different 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 they practice ritual cremation. Vast numbers of Hindus make pilgrimages as well. One of the better known is the one made by Shakti Hindus to the banks of the Ganges in the holy city of Varanasi, where the river absolves sin. Many Hindus go to Varanasi to die for this reason.

Buddhism

Siddhartha Guatama, more commonly known as Buddha, lived somewhere in India during around five centuries ago. Unsettled by the abuses and the injustices associated with the form of Hinduism, he 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 message of Buddhist teaching are the Four Noble Truths, which explain why people have trouble achieving an enlightened lifestyle. Essentially, the message is 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 sects within Buddhism. The Theravada Buddhists are dominant in Southeast Asia, where a great percentage of the people are 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.

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

Figure 0:26: 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
Religious Diffusion – Why is it here?

How did the map of religions come to look the way it does? The United States offers a quality case study on religious diffusion. Most Americans are Christian for several reasons. At the most fundamental level, any Christian is that way because some other Christian at some point sought out new converts. The Europeans were converted to Christianity by people from the Middle East, and in turn Europeans converted the peoples of the New World as they conquered territory in the Western Hemisphere. 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 came to the Americas as missionaries centuries ago. Religion also helped to salve the conscious of those who recognized the crass economics of colonial expansion. Religious intolerance within Europe against religious minorities drove many Christians to migrate to the New World.

Mostly however, the United States is largely Christian because most of the people who migrated here from Europe were Christians. Africans brought to the US as slaves, and many Native Americans who were already here, were forced to convert to Christianity by militarily powerful, intolerant and 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 guaranteed the right to religious choice. Also, for generations Americans knew little of other religions or practices.

Religious affiliation changes slowly. Most people inherit their religious practices and ideas from their parents. Few consider adopting a new one, which undermines 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 forces powerful enough to disrupt religious continuity among and between generations.

The map of denominational affiliation is a little harder to explain. Some of the pattern can be explained by ethnicity. The Spanish converted the ancestors of some Americans living in the American Southwest. The fact that places like California already had many established Catholic churches, has surely been comforting to those Catholics 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, those 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 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, environmental pre-adaptation to a specific climate seems to have played a role in creating the religious landscape.

Baptists were not the first group to migrate into the American South, in fact they remained a small minority throughout the colonial period. Their numbers grew as a result of their focus on spoken/oral religious services. This set them apart from the Anglican/Episcopal churches favored by the earliest southerners because many of the later immigrants to the South could not read; and schooling was far less imporant in the southern US than in New England or the Middle Atlantic states. It became the religion of the ordinary people of the South. Prior to the Civil War, American Baptists split into two large groups over slavery. The Southern Baptist Convention was born, and increased in popularity. 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.
Mormons are largely found in the Intermontane West because this was a safe place for them to practice their religion in the 1800s. Early Mormons 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 Mormons moved to what is now Utah in search of a place isolated from persecution. Although there was a short “war” between 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 has helped Mormons maintain a reasonably unique cultural realm.

While religious persecution may have driven early Mormons into some of the most desolate, isolated lands in the United States, religious intolerance (or just the fear of it) 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. Why? Partly this would be 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 are more likely to do so in a large city. Religions frequently preach fellowship. 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. There tends to be a sort of apathy (or tolerance) in large cities. Urban folks are more used to diversity and feel little threat in “the other”.

A final spatial pattern discernible in the US is the manner in which 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 is home to several “new age” cults (or religions).
The Big Picture

Religion affects a great number of elements of any culture, and is itself a product of 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 spelled out here (even if we could); so a few examples will have to suffice.

Religion and Politics

In the United States, as is the case elsewhere, religious affiliation is a good predictor of political behavior. Evangelical Christians and Mormons rank among the most politically conservative voters in the US year after year. This relationship was greatly strengthened by the so-called “Reagan Revolution” of the 1980s, when for the first time since the Civil War, conservative Christians (largely from the South) abandoned the Democratic Party in favor of the Republican Party. Certainly part of the switch was motivated by the Democrats’ stance on Civil Rights, but hot-button religious issues, particularly abortion, drove many Evangelicals to the Right. 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 less regulation of interest rates charged to people taking out loans.

Religion and Economics

Because many religions condemn charging interest on loans, there was little reason to loan money in many parts of the world for many centuries. Jewish people, who faced fewer restrictions on usury, faced little competition in the banking industry until attitudes began to change in modern times. This may explain in part why Jewish folks have traditionally involved with the banking industry. 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

Figure 0:33: 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.

Figure 0:34: North Carolina - Pork Skins. The prevalence of pork in the diet of Baptists in the South would not be possible if Muslims or Jews were the dominant population.
Catholicism has helped advance the very profitable viticultural industry in that state. Muslims and Jews (and some Christians) abstain from eating pork because of religious restrictions; therefore pig farming would be very rare in Israel or the Muslim world. Many parts of India abstain from eating any meat, so any sort of animal husbandry would be an unlikely career path.

Religion and the Environment
How Christians have understood their relationship with the natural environment has had fascinating consequences in American history. The Puritans of New England, having fled Europe while there were still plenty of vestiges of various nature religions in the religious practices of their neighbors; they held a pretty dim view of the great forests of New England. To them, the city was where Christians were most likely to find orderliness, which was a characteristic of God. 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, as long as 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 filmed at some summer camp in a forest. The NHL ice hockey team, known as the New Jersey Devils derives their name from the same fear of the woods.

In the 19th century, American attitudes began to change toward wilderness locations. Rather than always being a place of chaos, where you would become bewildered, people like John Muir argued that wilderness was where people commune with all that was spiritually good. As the industrial revolution and modern capitalism wrought massive changes, religious folks began to see cities as the loci of moral degradation and spiritual corruption, and wilderness areas as “God’s Country”.

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 we see fit, then perhaps coal mining or pipelines won’t bother you. Some Christian Fundamentalists take it even further, believing that ecological catastrophes, like global climate change, are a sign of the approaching Apocalypse, and therefore a welcome sign of the end-of-days.
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 what many folks think of as “culture” – the rules that unofficially govern our everyday lives. Geographers are interested in 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 particular location or space. This chapter explores how people, in the United States and elsewhere 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 seeks to establish the rules governing what happens in that space, how power is shared (or not) and who even has the right to access those spaces.

**Terminology**

Most of the written and unwritten rules that govern our lives are established by those with whom we share common territory and identity. The United States of America is a country or more technically a state. It is defined by its borders. The vast majority of residents within those borders claim “American” as an important part of their identity; therefore the United States is also a nation. A nation can be a very large group, or it can be much smaller, but there is a tendency to simply call small nations ethnic groups (see chapter 9). Because American control the territory that is the United States, we live in a special kind of country called a nation state. France and Japan are also good examples of nation states because most of their residents are either French or Japanese respectively.

Some nations are stateless. This means that there 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 – some of whom, until 1948, belonged to the previously best-known nation without a state.

An important theoretical question surrounds the evolution of the idea of nationhood. There are some who think the idea is quite ancient, perhaps even a basic component of human psychology. Others suggest that nationhood was 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 enlightenment made people far more aware of boundaries and organizational space than they had been during the Middle Ages, and thus gave rise to the idea of 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 this imaginary sense of identity. Some people within nations fight to restrict admission to their group as well. Most countries govern who can enter their space, as well as the degree to which individuals can 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.

**Federalism vs. the Unitary State**

Because the degree to which people living in a country sense inclusion in a nation varies, a variety of political systems have evolved to ensure some measure of stability. In those places like Egypt, France and Japan, where *nationalist* feelings are strong, a *unitary state* makes a lot of sense. Unitary systems generally work best where there is no strong opposition to central control. Therefore, the political elite in a capital city (like Paris or Tokyo) frequently have outsized power over the rest of the country. Fights over local control are minimal and the power of local (provincial) governments is relatively weak.

Many countries have an underdeveloped sense of nationhood and therefore are better suited to use a *federalist* style of government where power is geographically distributed among several subnational units. This style of governance makes sense when a country is “young” – and is still in the process of *nation-building* or developing a common identity necessary to the establishment of a unified nationality. Federations may also work best when you have multi-ethnic or multi-national countries. Rather than break into multiple smaller states, a country can chose to give each of its ethnicities or nationalities some measure of political autonomy. If they want to speak their own language, or teach their specific religion in the local schools, then the central government allows local people to make those decisions. The central government in a federal system focuses on things like national defense, managing interstate transportation and regulating a common currency. The US began as a federalist system.

Occasionally, a particularly troublesome provincial region or ethnicity will result in a sort of compromise situation in which a unitary system, like China, will grant a special exemption to one region or group to allow that location *semi-autonomy*, or greater local control. *Puerto...*
Rico (United States) and Hong Kong (China) are excellent examples, though there are many dozens of other similarly self-governing regions around the globe – most with special names designating their status.

The United States has had an exceptionally difficult time resolving whether it wants to pursue a unitary or federal style government. This question has been one of the central politics issues in the US, since even before the War for Independence. Originally, the United States were organized as a confederation – a loosely 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 country found itself challenged to do simple things like raise taxes, sign treaties with foreign countries, or print a common currency, because the central government (congress) was so very weak. The Constitution the US Government operates under today was adopted 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 government units, rather than the word province as is common in much of the world. In our early history, Americans thought essentially they were living in “The United Countries of America”, so to speak.

From the earliest days, people in the United States could not agree on how power should be shared between the central government and the various state governments, especially where it concerned the institution of slavery. Southern states, which clearly relied on a slave economy, preferred a weak central government. Northerners preferred a stronger central government, one that would diminish state’s rights, and would, in the process, outlaw slavery nation-wide. Eventually, of course, the inability of the constitution to settle this disagreement led to it being resolved 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 by saying:

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)
Though our nationality may have been solidified during the Civil War, questions surrounding the degree to which state’s rights still exist has been constantly at the center of controversy (civil rights, environmental regulation, guns, etc.). In 2014, one of the common markers of difference between liberals and conservatives is feelings 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 governments, they tend to abuse 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 publically that they were fighting for states’ rights, not against the rights of minority children. Today state’s rights is a rallying cry for those who disagree with national authorities on a host of other issues (gays, guns, environmental regulations, etc.).

**Separatist Movements**

Occasionally people within a country find themselves unable to agree about the rules under which they can all live peacefully. When this happens a separatist movement is likely to evolve. Often separatist movements revolve around questions of control over religious practice, language or other cultural questions. Usually, it’s a minority group, often living in a peripheral region of the country that is the offended party ready to break away from the majority group living in the country’s hearth or core region.

![Map of potential separatist regions in Europe](image)

Figure 04: Map of potential separatist regions in Europe. Source: European Free Alliance
Thousands of separatist movements have marked world history. Hundreds of separatist groups are active today. Even within prosperous Europe, dozens of ethnic groups (nations) would like to break away to establish their own nation-state in Europe alone. In principle, Americans and American foreign policy supports the right to self-determination, which is essentially the right of a group of people to control political system of the territory in which they live. Indeed the United States itself was born of a rebellion by separatists living in a marginalized, peripheral region of the British Empire. American colonists’ rallying cry for self-determination was “no taxation without representation” was a rallying cry for self-determination.

Scotlan
Scotland, part of the United Kingdom (England, Wales, Northern Ireland, and Scotland) recently voted on in a separatist referendum. Scottish people, many of whom are resentful of the dominance of their more numerous English neighbors 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 in order to keep Scotland in the United Kingdom, the English gave into several demands by Scottish separatists for additional autonomy from the British (English) control.

Quebec
The Quebecois of Canada, like the Scots, have also held referenda on independence. Fearing the gradual loss of their language, culture and even 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 on whether to stay in Canada. On both occasions, they opted to stay in Canada, but the second referendum was very close. As a result, the government of Canada guaranteed cultural protections to the citizens of Quebec 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. Unfortunately, rarely do separatist movements proceed in an orderly and democratic fashion. Often it’s also really difficult to ascertain exactly when a group has a legitimate claim to exercise exclusive rights over a territory. 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 slave holding South to break from the core region of the North. Unionists in the North sometimes called the conflict, “The War to Preserve the Union”. Southerners were apt to call it, “The War of Northern Aggression”.

**Constructed Identities**

Separatist movements do not always arise from perceived differences in identity. Just as often, if not always, the real difference is 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 that local control (regarding slavery for example) should be a matter of national control.

Perhaps the most interesting thing about civil wars and separatist movements is that often those who suffer the most gain the least when 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 that needed slavery. So how is it that people without much to fight for can be convinced to fight?

Some of the answer lies in the ability of people in power to manipulate the opinions of segments of a population effectively. Populist politicians (radio hosts, etc.) often convince people that their individual or their groups’ problems are the result of unfair treatment by another group. Sometimes, these arguments are legitimate and can be supported by fact; other times there is insufficient evidence to justify 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 finds questions of self-determination especially perplexing. Our government has yet to find a consistent response to those 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. The Clinton administration largely supported the dissolution of Yugoslavia into multiple new countries.
In other instances, the US has worked against groups trying to exercise that right. Take for example, the Kurdish people, an ethnic minority in northern Iraq, eastern Turkey and northwestern Iran. The Kurds have a separate language, history and identity from the Iraqis, Iranians and the Turks with whom they share space. Many 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 several Kurdish insurrections over the years. Each time though, Kurdish rebellions have been met with violence by the governments of Turkey, Iraq and Iran. The US government supported some measure of Kurdish autonomy in Iraq and Iran, but not in Turkey, presumably because that country is a strategic ally of the US.

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.

Generally, secession movements are fraught with danger for the secessionists. In most cases, a breakaway unit of territory would result in a smaller economic base. Small countries often suffer from poor 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 massive economic power of the neighbor from whom “independence” was won. There are others who might argue that secession will benefit an especially productive or efficient local economy. Several separatist groups in Northern Italy, themselves sometimes a significant minority, argue that the rest of Italy represents a burdensome drag on their own local resources and industry. Economists disagreed about the prospects for an independent Quebec and Scotland. For some, however, economic loss may be a welcome alternative to brutally oppression.
**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 roughly “your 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, like wards, townships, counties, congressional districts, states, etc.

Most of the time, electoral districts 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. Each district has almost exactly the same population as its neighbor. Efforts are made to keep all such districts similarly sized, so when a district loses or gains population, the boundaries must be redrawn to ensure even representation and avoid over or underrepresentation called _malapportionment_.

Every ten years, after the _decennial US Census_ is completed, the US Constitution (and other state constitutions, etc.) require following the census, electoral districts must be redrawn. 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 unfair political practices. The reason why the political redistricting process is so important is that elections are heavily influenced by the manner in which the boundaries of electoral districts are drawn. Political groups that control the placement of boundaries are far more likely to control who gets elected, 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 (Democrats, Latinos, labor unions, gun advocates, e.g.) over another. The construction of unfair districts is called _Gerrymandering_. The odd term, “Gerrymander” comes from a newspaper story that characterized the unfair redistricting map of 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. Where 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.
If the opposition (or ethnic minority) party is small enough, then 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 dominated numerically by whites.

If the opposition grows too numerous to split, then group controlling the redistricting process may draw district lines so that the opposition is dominant in a few districts, or even a single district in order 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 the majority group into cleverly drawn district boundaries.

There are dozens of other techniques by which one group is able to 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 one party over the other, ensuring maintenance of the status quo and nearly guaranteeing uncompetitive *general* elections – the *primary elections* may still be competitive.

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.
Consider how gerrymandering might work in California. In this state, there are conservative Republicans and liberal Democrats in the State Assembly. If a few of them get together and looked at the map, they would realize that by moving a few district boundaries around, those already in office could be easily re-elected, it would be hardly surprising if they got together and gerrymandered the electoral districts to the benefit of each office holder. In the next election cycle, armed with the knowledge that they will surely win the November general election, incumbents know that their only challenge to getting re-elected is likely to come from within their own party during the June primary elections. Because voter turnout in primary elections is usually very small, and generally 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. When too many extremists get elected from opposing parties, they tend to be unwilling to make political compromises and as a result, pass few laws or regulations. The recent 113th Congress of the United States is one of the most affected by gerrymandering, and perhaps least productive in terms of legislative activity. Of course, some would say, “The less they do the better!”, while others would suggest inaction in a time of a national economic crisis is an abdication of duty.

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 for example only voters who are registered as Republican can vote for Republican candidates, and 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 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.
The other strategy to combat gerrymandering adopted by several states, including California, has been to remove the power to draw district boundaries from the politicians. In California, an *independent citizen’s commission* now draws political district boundaries. The idea behind this commission was a conviction that non-politicians would create competitive electoral districts that undermined political extremism. In California, there was stiff opposition from some political groups to the district maps drawn by the commission, but most political analysts argue that the new maps are what voters want. In the San Fernando Valley, the new maps 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, had not managed to elect a Latino as a representative to Washington DC until 2012, when Tony Cardenas won the office.

One of the great challenges facing even the most impartial of mapmakers charged with drawing district boundaries is how to ensure that groups that have similar political interests or needs, called a **community of interest** are represented without simply drawing a district around them (packing), or splitting them across multiple districts (cracking). The definition of community of interest is complicated because the language is vague enough that many almost any group with something in common could claim to be a “community of interest”.

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 things 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 in 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 District 23.

**Political Cultures**

Political beliefs are a bit like religion because most people inherit political attitudes from parents and 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, political cultures stubbornly characterize regions for generations. The Deep South has been politically conservative for the last 200 years. San Francisco has been politically progressive from its birth during the Gold Rush. How any region developed its political culture in the first place is a source of great interest to geographers, but answers don’t come easily.

It’s not even easy in the United States to accurately label regional political beliefs. Most of the blame falls on the media (TV news, radio, etc.) because they do such a poor job of characterizing political beliefs in the US. Generally, Americans are familiar with “liberal” and “conservative”. Unfortunately, politicians and pundits have so overloaded these words with conflicting meanings that both are difficult to use effectively, so it is necessary to introduce quickly terminology that is more precise.

**Western Libertarians**

Americans have a wide range of beliefs about personal liberty. If you are a fan of Las Vegas, with its very relaxed laws regulating things like gambling, prostitution and alcohol then you probably think government has no business regulating your personal behavior. If you also think the government should take little from you (taxes) and give you little (college tuition, free highways and beaches) then you might be a libertarian.

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 the central theme of libertarian policies. Distrust of the government is high, and libertarians think dependency on the government programs is a widespread social-ill. Libertarians generally cling to a classical economic theory calling for very low taxes and minimal regulation on private enterprise and property.
There are some serious libertarians in the US, but they probably don’t constitute a majority in any region of the United States. The most libertarian areas in the United States are in the Mountain West, or cowboy country, where cultural diversity and population densities are low. Ironically, many people make their living off government-owned lands drilling oil, ranching and cutting timber in these same regions. The right to own guns and low taxes are rallying cries in this philosophy. Libertarians most often vote Republican, which causes the news media to refer to them simply as “conservatives”, which is a gross oversimplification.

**Southern Traditionalists**

In the American South, there is another brand of “conservatives”, whose adherents are perhaps should be more accurately labeled as traditionalists. Sometimes traditionalists are called social conservatives or “the Religious Right” by the media. Traditionalists focus on maintaining value systems they consider necessary for the maintenance of traditional cultural practices and a specific social order.

Traditionalists frequently say they oppose “big government”, and there is some measure of truth to this assertion where economic policy is concerned. However, traditionalists clearly favor a great number of laws that regulate even highly personal behaviors of individuals. Abortion is the most well-known concern of traditionalists, but they also strongly favor laws promoting prayer-in-school, laws banning alcohol consumption, laws that undermine the civil rights of specific groups (gays, minorities, women).

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 years, distaste for the Republican party was tied to the fact that Abraham Lincoln was a Republican. Later, impoverished southerners embraced the progressive economic programs of the Democrats that helped the poor, especially during the presidency of Franklin D. Roosevelt. They even called themselves “**Boll Weevil Democrats**”, referencing insects that infested cotton plants.
Southern traditionalists began leaving the party in the 1950s when fellow northern Democrats pressed Southerners to accept Civil Rights for African-Americans in 1960s. Battles over abortion law, 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 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 those in within the Republican Party who favor strictly libertarian approaches to government. 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 govern sexual activity among consenting (especially married) adults. Traditionalists, on the other have long sought to regulate sexual behavior of adults, and in some cases even of married adults. As recently as the year 2000, the Louisiana Supreme Court found that the right to individual privacy was not guaranteed in instances where the state’s legislature had chosen to regulate sexual mores. In 2003, the US Supreme Court invalidated all of the so-called “sodomy laws” nationally, but in Baton Rouge Louisiana, the Sherriff’s office arrested gay men for agreeing to engage in unnatural acts with an undercover police officer – 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 T’exas courts could decide such matters.

New England Progressives
In sharp contrast to both traditionalists and libertarians are the progressive moralists who are dominant in New England and Pacific Northwest. The media calls this group liberals, but the term is so corrupted by multiple and often contradictory layers of meaning that it clouds understanding more than it clarifies. Progressive-moralists place a higher value on the achieving social equality and economic justice than other groups in the US, and they are confident that collective social action is both an effective and rational means to achieve those ends.
These 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 long-standing Yankee commitments to communal prosperity. Early New Englanders often built central, grassy areas in the center of towns where villagers, most of whom were also farmers, could corral and graze livestock, especially at night. These greens spaces were sometimes called “cow commons”. The prime pieces of real-estate were held in common by the residents of each village. They were open to abuse by those who would graze too many cattle on the common pasture in order to preserve (or even plow) their privately owned pastures. When individuals abuse commonly held (government?) goods like pastures, parks, or even “free napkins” at McDonalds, they undermine the long-term success of the group for their personal gain. This behavior leads to what is labeled the tragedy of the commons. Fear of this “tragedy” is a central theme in American politics, one that divides progressives who are willing to risk it, from libertarians who are not.

New Englanders are generally willing to risk the abuse of government goods and services by individuals, therefore they are willing give up 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, the cultural hearth of the region, is often mocked as “Taxachusetts”. These folks tend to embrace Keynesian economics, which is an philosophy that calls for higher taxes on the wealthy, and properly funded public goods like education, parks and health care systems. The goal of this strategy is to build a robust middle class from the bottom up, so wages for regular working folks are kept high and worker’s rights and unions are encouraged. The environment is another big concern. There are stricter regulations on the banking systems and industrial pollution, which, along with higher taxes scares some industries away, and attract others who seek well-educated workers and high living standards for executives.

In addition to most of New England, much of urban Washington, Oregon and California along with Minnesota also tend toward progressive moralism. The cities of the Northwest and California were favored destinations for migrants from New England in the 18th and 19th centuries, who provided a political culture that subsequent generations have followed. Minnesota’s collectivist traditions probably stems from its citizens’ long immigration history from Sweden, Norway and Denmark. Today in Scandinavian countries where many
Minnesotans trace their ancestry have adopted the so-called the *Nordic Model*, a political-economic system considered by many progressive moralists as the international ideal.

*Centrists*

Sort of in the middle of all these political philosophies are the people of the Midwest who seem to find some value in all 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 custom. 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 having moved there 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 idea from the Colonial America and the Old World. Compromise and open-mindedness became necessary in this heterogeneous society.

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 situated solidly in the middle of the various American political traditions. Not surprisingly, Ohio is critical in deciding presidential elections for this reason. Columbus, in the middle of the state is moderate, a bit more conservative in the suburbs than in the inner city or Ohio State’s campus region. Cleveland, in the northern part of the state, is more progressive; thanks in part to its Yankee heritage and strong history of unionization. Cincinnati, on the other hand, is more of a southern city; socially conservative and resentful of government intrusions, much like its neighbors 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.

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 makes 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 in order 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 immigrants, but faced with a large, potentially dangerous racial underclass, the agricultural south adopted a conservative, faith-based political philosophy to maintain a precarious status-quo.

In the wide-open spaces of the Plains and the Mountain West, the sparse population invested 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 variable, such as ethnicity, religion, economics and the environment.

**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 determines the outcome of the presidential election.

Geographers are often frustrated with this famous map for a number of reasons. First, the colors are backwards. Until recently, it was nearly universally accepted that the color red was reserved for revolutionary, radical or even progressive political parties. Communists always used red in their flags and symbols. That’s why they are called Reds and those that sympathized with communists, socialists or even left-leaning Democrats are sometimes called pinkos. Conservative movements historically chose the color blue in contradistinction. How the colors got flipped is not clear.
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 that number of votes, but 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.

Another serious flaw in the states only map is that it fails to show both the significant intrastate variation in voting and the outsized contribution of urban areas to the outcome of major elections. Most of the United States land area is rural and sparsely populated. Over 75% of Americans live in cities, but cities show up poorly on these maps. The inability of state-level choropleth maps to communicate these realities clearly may lead 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 highly polarized politically, when in fact most states are evenly 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.

Peruse the cartography gallery below and consider how each of the maps, created using essentially the same data, but displayed according to different cartographic principles affects the way in which the data communicates information about American politics.

**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 the yearly Farm Bill. Even the seat your 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.
**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, American were clearly inspired to pursue democracy by the Ancient Greeks. Towns and cities were also named after counterparts in Greece and Italy (Sparta, Athens, Rome, Cincinnati, etc. –see Chapter 2), but it is architecture that most clearly expresses early American political thinking.

In the decades following American independence, the country grew rapidly and many government buildings were erected to meet the needs of efficient government. Given the respect Americans had for Greek political philosophy, it is little surprise that for much of the 19th century, virtually all government building of consequence were built in the **Greek Revival** style. Certainly, the **Georgian Style**, also popular at the time, but intimately associated with the English monarchy, would have been inappropriate for a government that had recently rebelled against that monarchy.

The American Capitol is a classic example, but also state capitols, small town courthouses and non-governmental buildings began aping the Greek look. So popular was Greek Revival style that it was adopted as for use in both commercial and residential buildings. Eventually, the strict association with classic values (democracy, logic, etc.) were eroded and the message “sent” by these classical landscapes became convoluted.

Architects regularly built banks and plantation homes in the Greek Revival style during the 1800s. Bankers and home owners both liked to convey a message of power and stability to those who would look upon their buildings. Though not overtly political, manipulating the symbols of power, of meaning is often a political act – one we call “culture”.

The process in which the symbolic qualities of words, cultural artifacts or even buildings are reinterpreted and given new meaning is sometimes called **cultural appropriation**. Banks,
which were for many years highly unstable, occasionally losing all the depositors’ money wanted to project stability and responsibility. Architecture could help prevent “bank runs”, the panicked withdrawal of deposits that often caused bank failure.

Wealthy homeowners also borrowed the symbolism of Greek Revival to project 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 radically changed by decades of cultural appropriation by slave owners, and later bank corporations.

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, walking past a Greek Revival courthouse in 1920 (or 2013) in Mississippi might have read the symbolism of the building. What would Greek Revival “say” about his chances for justice should he 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?
# 2012 Presidential Election Maps

*Source: Mark Newman, University of Michigan*

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<td>Standard electoral map by state using two color palette</td>
<td>Election results by county demonstrates intra state variance- two color palette</td>
<td>Source: Mark Newman, University of Michigan</td>
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<td>County level electoral results with graduated color showing percent voter response</td>
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<td>Cartogram of states weighted by electoral votes – two color palette</td>
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## Additional Election Maps

- **This map uses a graduated two color ramp that darkens with voter numbers. Lighter areas on the map have less population. Source:** [Salterwatch, Chris Howard](http://salterwatch.com)
- **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](http://idv.com)
- **This is a 3D map of the 2008 presidential election with counties as raised columns by population. Note the outsized effect of L.A. and Cook Counties. Source:** [Washington Post](http://washingtonpost.com)

## Media

- **YouTube Video from National Public Radio,** showing animated versions of electoral votes and campaign spending. Source: [NPR](http://npr.org)
- **Animated .gif file from Princeton University showing county level election returns from 1960-2012, including third party votes in green. Source:** [Robert Vanderbei](http://vanderbei.princeton.edu)
- **Animated dot density map displaying presidential election returns from 1840 to 2008, including third party candidates. Source:** [Voting America, Univ. of Richmond](http://votingamerica.richmond.edu)
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 effects of the criminal justice system.

The criminal justice system in the United States is massive. 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.). There are about 100,000 are probation nationally. Nearly 20,000 teach others about the criminal justice system. Crime is a huge industry, and it seems to have a life of its own. Since the 1980s, prison and jail populations have exploded, recently exceeding the two million prisoners mark in the United States; 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. Nearly 5 million people are on parole! Criminal activity, and how we deal with, it presents a massive burden on American society that we seem unable to address.

Geography offers some answers. The spatial patterns of crime, victimization, laws, punishment and rehabilitation vary wildly across the United States. Analyzing these patterns from a spatial perspective offers forceful insight into why crime is such a problem in some places. Focusing on criminal justice issues simultaneously provides 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 0:1: 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.
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, in 2013 Latin America and Africa were the two most dangerous regions on earth. Europe and much of East Asia on the other hand have very low homicide rates. The United States is somewhere in the middle.

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.
The rate of property crime also varies greatly through space. Clearly 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).

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.

**Geography of Punishment**

Crime prevention is the goal of law enforcement agencies. There are a number of strategies for preventing crime, but in the United States, the favored method is clearly punishment. Americans favor the idea that putting criminals in jail not only punishes the criminal, it 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.

The United States has the highest incarceration rate in the world at over 700 persons per 100,000. Of all the prisoners in the world, one quarter of them are in American jails, though Americans constitute only 5% of the world population. England, Germany and Japan, as well as many other highly industrialized nations have much lower incarceration rates, often ranging between 50 and 100 persons per 100,000. Americans could learn from the beliefs and practices of other countries.

From an international perspective, the American criminal justice system, which relies on mass incarceration as the principle tool in the arsenal of crime prevention, 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 total rate of people going to jail in the US and many European countries is nearly equal; but American prisoners stay jailed double or triple the time amount of time. Some of the harshness is attributable to the types of crimes committed in the United States. The non-violent crime rate and the simple assault rate in the United States are similar to what is found in Europe. However, very violent crimes are
committed at a much frequency 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. Gun-related crimes receive far longer sentences than those without guns, and this fact contributes greatly to the population of long-term prison inmates.

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 offering inexpensive drug-addiction treatment or investing in effective prevention programs. In the 1970s, a cultural backlash against socio-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 such offices, from both parties, work to prove who can be toughest on crime. Rarely, do these types of elected officials campaign on being the smartest on crime. As a result, prison populations have boomed since the 1970s. Some states also turned to corporations that run private prisons to help house inmates, and by doing so created an economic incentive to maintain high crime, incarceration and recidivism rates.

The United States also executes those convicted of particularly heinous crimes. In 2012, state penal officials executed 43 people. The number of criminal put to death by the government has fallen by about 50% since 1999. Several states, after discovering via DNA evidence that some of their death row inmates were innocent, abolished the practice. Texas executes by far the most people in the United States, about half of the nation’s total. Florida and Oklahoma account for much of the rest of American executions. California had over 700 prisoners on death row, but they are not likely to be executed because of the numerous court cases challenging both the death penalty in general, and individual appeals. Over half of the death penalty cases come from just a few counties in the country. Duval County, Florida (Jacksonville) is one of those select few counties that jurors and/or judges are most ready to condemn to death criminals. Critics of the practice are quick to point out that frequent death sentences in Duval County has not resulted in a
significant reduction in crime in that county. In fact, many other locations in Florida and the US have seen much greater reductions in crime. Southerners seem to be particularly fond of execution as a means to deliver both vengeance and justice. The legacy of old-time Biblical values, particularly Old Testament *eye-for-an-eye* justice, along with a history of violent racism strongly predict where state governments are likely to execute offenders. Internationally, only locations with a similarly devout religious population (Iraq, Iran, Saudi Arabia) and China execute more people than the US. The Chinese execute far more than any other country, but most of the criminal offenses for which the death penalty is used seem to be political. The death penalty is not used in Europe, Canada or Mexico.

Proponents of harsh penalties for crime argue that the plan has worked. Indeed crime rates have fallen in the United States in recent years. In 2013, the violent crime rate nationally was about half of what it was in 1993. However, crime rates have not fallen evenly, nor does there appear to be a significant correlation between states with high rates of incarceration and declining crime rates. 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 preventative measure. 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 and Canada. As Western nations, have aged, the number of people in the prime criminal age-cohort has fallen dramatically.

**Analyzing Crime**

Criminologists who use psychological epistemology tend to study crime and criminals by analyzing the motives of individuals. Some criminologists however think like geographers and they study crime by focusing more frequently at the group level. Crime geographers, and a subgroup of criminologists, may examine criminal behavior at the neighborhood, county, states or national levels. By mapping crime data along with a variety of social, cultural, economic and law enforcement data, crime analysts can help make 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 to celebrated success. Crime analysts also help everyone live more safely by explaining how environmental variables affect crime.
Social Disorganization Theory

One popular theory that guides crime geography is known as social disorganization theory. This theory, originally was built upon observations made by researchers from the so-called Chicago School, who used the concentric ring and sector models (see Urban Geography Chapter) to understand crime. According to this way of theorizing crime, place really matters. In words, this theory argues that neighborhoods create conditions that encourage or discourage crime. 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 in 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 who move a lot, residents are unable to exert effective, collective social control. In stable, homogeneous neighborhoods, where people have more money, people have a greater shared sense of right and wrong, and they are more willing to express their opinions to neighbors, and more willing to defend their neighborhood (and property values) from those who would commit crime. Defending one’s neighborhood is much harder to justify if you don’t have a sense of ownership over your neighborhood, or if you don’t really know your neighbors.

One of the more important findings made by the chief architects of this theory many years ago was that ethnicity was not a determining factor in crime. They came to this conclusion by mapping different ethnic groups as they moved up the social ladder and from neighborhood to neighborhood. What Shaw and McKay found was that recent immigrants groups suffered from high rates of juvenile delinquency only when they lived in specific types of neighborhoods. When these same immigrants moved into more stable neighborhoods, the delinquency rate of juveniles among the group that move into a new neighborhood, but for those that remained in the old neighborhood, the delinquency rate did not fall. 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.

One of this text’s authors co-authored 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 percent young males, jobless rate, residential instability, population density, etc. strongly predicted crime rates; 2) when those factors were held constant, that 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**

Say for example, 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 would 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 map the relative data and 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 crime geographers. It not only permits analysts to identify likely causes of criminal activity, but also by mapping the results of the test geographer can identify neighborhoods that have unusually high or low crime rates 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.

**Broken Windows Theory**

A crime theory advanced by Wilson and Kelling in the 1980s argued that even appearance of neighborhoods was a factor in pattern of crime in cities. Essentially the thesis behind this idea, known today as the **broken windows theory** is that visual cues on the landscape (abandonment, graffiti, vandalism) signal to passers-by and residents alike the level of social control and community investment in an area. In locations where visual disorder is evident, people assume that behavioral disorder is acceptable. At the very least, visual disorder is a signal to would be criminals that if even if local residents do not approve of disorderly behavior (crime), there is likely to be little consequence for those who commit crimes. In places where it’s obvious that people are caring for their windows, lawns, walls, streets and sidewalks, criminal can see that locals residents actively monitor the behavior of others, and are likely to take action against those who violate the social norms associated with well-kept locations.

Implications of this theory suggest that police and local residents should vigilantly maintain order and orderliness. 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. Neighbors and the police should also confront disorderly behavior, no matter how small, whenever it is witnessed, because
allowing even small transgressions of the social order is a signal to everyone that disorderly behavior is OK.

A number of police departments across the United States embraced Broken Windows Theory and adopted an associated crime prevention strategy called zero tolerance policing. This policy gives police officers little discretion in the sorts of crimes they actively monitor. The idea behind zero tolerance policing argues that by arresting people for small crimes (graffiti, petty theft, failing to pay subway fares, etc.) there will be a reduction in major crimes. In New York City, the policy became known as Stop and Frisk. Under this policy, the number of times New York City cops stopped and questioned individuals on the street quadrupled within 10 years. Black and Latinos appear to have been disproportionately targeted for police attention, leading to protests and lawsuits accusing police of illegal racial profiling. Advocates of Stop and Frisk policies point to the fact that the crime rate has gone down dramatically in New York City. Critics charge that other cities not using zero tolerance policing have experienced similar reductions in crime rates. Other research suggests that policing neighborhood blight, such as erasing graffiti, cleaning up garbage, fixing streetlights, etc., resulted in a similarly positive reduction of crime rates, without widespread complaints from communities of color about police harassment.

Crime Mapping
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.

Patterns of criminal behavior that might be impossible to spot in a spreadsheet or in stacks of crime reports are often readily discernable once displayed with 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 a number of 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 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 the 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 pawnshops, liquor stores or 
strip clubs to help identify likely suspects, or landscape elements affecting crime.

Perhaps the most thrilling application of spatial 
principles in the study of crime is geographic profiling, a collection of techniques that allow 
geographers to identify patterns in criminal behavior. Serial offenses, like arson, murder, 
car theft, etc. can be mapped and by observing known the tendencies (modus operandi or 
M.O.) of offenders, analysts can predict where an offender is likely to commit additional 
crimes, and where the offender may live or work. 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 crime in close proximity to their home/workplace because 
they fear that someone who knows them 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 many instances, criminals behave just as the theories suggest and GIS analysts can 
make predictions with reasonable accuracy. An assignment accompanying this text allows 
students to do some geographic profiling with data regarding the crimes committed by the 
so-called Hollywood Arsonist, who set nearly 60 fires over a span of several days in around 
New Year’s Day 2012. Far more complex procedures are available to advance students of the 
craft, including Rossmo’s Formula. More American are becoming aware of the power of GIS 
thanks to publicity generated by television crime dramas (like NCIS, CSI or Numb3rs) that 
ocasionally feature geeky GIS crime analysts helping detectives solve baffling crime sprees.

**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. Marijuana and moonshine are two illegal substances whose production and consumption exhibit interesting geographic patterns. 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 and promoted a number of temperance movements during the 19th century. They had little success. The alcohol industry was important almost everywhere. All cites, and even most small towns, operated a brewery, winery or distillery. During this time, alcohol taxes were an important source of revenue for various levels of government, especially during wartime. During the 19th century, vast hordes of immigrants streamed into the US, bringing with them a variety of European cultural traditions centered on wine, beer or spirits. Eventually though, the association between heavy drinking and a variety of social ills grew too large to ignore, and several other conditions undermining temperance movements softened. In the aftermath of World War I, when German-American political power was greatly diminished, women’s political power had greatly increased, safe drinking water was finally widely available, and a national income tax capable of offsetting the loss of alcohol taxes was in place, the temperance movement finally got its way, the 18th Amendment passed making booze illegal. This grand legal experiment lasted 13 years (1920-1933). During this period, known simply as 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 the new law quickly became a massive problem. Demand for alcohol was hardly dampened by legal restrictions. Bootlegging began almost immediately. Widespread violation of prohibition occurred largely because far too many people felt that outlawing alcohol was unjust and beyond the authority of 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 illegally. 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 because 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.

White Lightning

During Prohibition, the production of illegal alcohol, known as moonshine or white lightning flourished, especially in Appalachia. This powerful clear liquor 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. Fast cars were reputedly built to help bootleggers evade law enforcement officials, and legend holds that this led to the evolution of stock car racing.

It has been nearly a century since national prohibition elapsed, moonshining continues in Appalachia. Several reasons, rooted in the geography of the 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, prohibition continues in many parts of the South. Many locations in the South and Appalachia lie 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, completely outlawing booze seems to encourage the production of moonshine rather than to undermine its production. 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 an ironic, but longstanding, political and economic relationship that favors the status quo.

The mountainous terrain and geographic isolation of the region have always made it difficult for Appalachians to enter the economic mainstream of America. The inability of Appalachian farmers to cheaply produce and transport grains to market encouraged them to turn to the production of alternative “agricultural goods” that remained profitable in spite
of the added transportation costs (see Von Thunen Model). Because the 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 in a location with few viable economic options.

In a few locations within Appalachia, especially the karst regions of Kentucky and Tennessee, the spring water is filtered through limestone bedrock giving it a chemical composition that produces a particularly high quality whiskey. As a result, a number of best-selling brands of whiskey in the United States is 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 consumption of cannabis, better known as marijuana. Clearly, many people break federal and state laws regarding the manufacture, consumption and possession of marijuana. Most of them get away with it, but according to the FBI, police arrest around 1.5 million people for drug abuse violations, about half for marijuana related offenses. It is easily the biggest category of crimes, outpacing even the number of alcohol related crimes.

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 the law. Law enforcement efforts vary wildly across the United States, and have varied through time. Some US Presidents have pushed federal policy toward jailing drug offenders while others have been less enthusiastic about it. Several politically progressive states have sought to decriminalize or even make marijuana 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 be in isolated areas, especially mountainous regions. Good soils and rainfall favor some locations more than others. The lack of viable industrial or agricultural alternatives seems to be the 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 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 in counties where law enforcement agencies budgets are heavily reliant on taxes raised indirectly from the pot industry.

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 had moved away from the Bay Area in the 1970s when police fighting the war on drugs forced production into more hidden locations. Over the years, the economy of northwestern California has come to depend on the marijuana crop. It is clearly 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 transport costs (which are not significant), but more importantly the explosion of competitors (supply) would drastically lower demand and therefore the price of marijuana. Legal pot could be an economic disaster for the places that depend on the bootlegging marijuana. Because the Emerald Triangle is essentially a monocrop agricultural zone, much like those places that rely solely on coffee or bananas, expanded competition can be ruinous (see Agriculture Chapter 3). If pot 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.
ETHNICITY

Personal identity can be very complex. Ethnic identity alone is determined by cross-cutting factors, including language, racial characteristics, national heritage and religion. Ethnic identities factor into a wide variety of cultural practices – including politics, religion, marriage and economics. Geography play a significant role in the creation, maintenance and erosion of ethnic identity.

“What are you?” You need some sort of an answer to this question because you will be asked it frequently. Employers, schools, banks, the US Census are among the institutions interested in what you are. You may be asked the same question by new acquaintances or even old friends. In the United States, no matter how complex the answer to that question may be, it can be nearly impossible to respond in any way other than the most simplistic terms. Check this box. Some people find it easy to check a single box, or provide a one-word answer to the question. Others may find checking a single box, or providing a one-word answer makes no sense at all. Moving from one cultural region of the world to another can make answering such questions even more confusing because “what you are” is likely to change when you move, even though you are still the same person. This is because your identity is yet another socially constructed idea. It’s made up. And because it’s constructed in our collective imaginations, it’s also subject to change through time and across space. Geography is an especially powerful tool when it comes to understanding questions of race, ethnicity and identity.

Governments create most of what we know as identity “options”. In the United States, that begins with the US Census Bureau, but a number of other government agencies have been interested in establishing categories into which people could be placed since the earliest days of the colonial period.
Slavery, though once nearly a universal human practice, and as old perhaps as agriculture itself, is ultimately a primary source of notions about ethnicity. In the Americas, many of the “rules” we use to determine ethnic identity today were introduced hundreds of years ago in order to grease the wheels of the slave economy. Nearly 100 years before the English established the Jamestown colony in Virginia, the Spanish brought African slaves to North America. The indigenous people of the Americas, were also captured and sold into slavery. In both instances, race was the predominant characteristic qualifying someone to be a slave in the European system. Almost any one whose ancestry could be traced to Africa or the New World was at risk of being enslaved.

**Race**

Americans primarily use three visual determinants to classify someone by race. The first element is skin pigmentation. People with darker skin are distinguished from those with lighter skin, but skin color alone is not sufficient in the US to classify anyone into a category. Second, people with darker skin are further categorized by the texture of their hair. People with naturally straight hair, but dark skin are generally not considered “black” or “African-American”, but instead assigned to another category. Finally, people are categorized by the shape and color of their eyes. People with brown “almond shaped” eyes, and straight hair, are placed in the “Asian” category. Using this “three-factor test” generates three groups: White, Black and Asian. Americans use this test, very clumsily, all the time, and a lot of people are left out, poorly categorized or not categorized, so additional measures have been created by society.

There is substantial reason to doubt whether race even exists. Clearly, the three-factor test used widely in the United States is a social construction, meaning people created this test and each category. On a deeper level, anthropologists, biologists and geneticists argue quite a bit about whether the concept of race is scientifically valid. Clearly, there are genetic markers for physical characteristics, like skin color or hair texture, that identifiable via DNA testing, but only a few of these DNA markers match up well with our very convenient social constructions. 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 and blood type (rather
than skin color, hair texture and eye shape), we would have an entirely different set of races lumped together quite differently across the globe.

Because the overall amount of genetic variation among people of the same race is less than the amount of genetic variation between people of different races, statisticians argue that race fails the simplest definition of what constitutes a “group”. Despite the fact that the concept of race, is essentially dead among scientists, it remains a vital reality in the lives of many people and in most societies. Clearly race exhibits spatial characteristics on the landscape that are of interest to geographers.

Language and Ethnicity

Often Americans confuse race and ethnicity. Race is commonly used as an ethnic marker, but ethnicity extends well beyond race. Take for example people who speak Spanish. Known collectively as Hispanics, this group constitutes about 17% of the US population. Hispanics are not a race in the classic sense, despite the occasional attempt by groups to use the Spanish expression La Raza to define a racial category (see below). Because people from any race may speak Spanish, there are Asian Hispanics (Filipinos, e.g.), White Hispanics (Spain) and Black Hispanics (Cuba, e.g.) among others who are not thought of as Hispanic. As such, Hispanics constitute an ethnic group in the United States because of a shared linguistic heritage.

A sizeable percentage of Hispanics in the United States have ancestors from both Europe and the Americas, and therefore have a mixed racial background. Traditionally, this racial mixture was known as mestizo. Today, the term Latino is a common, but inexact analog for mestizo. Latinos however identify so strongly by language that they are reluctant to identify a race on government forms. Oftentimes, mestizos in the US select “other” when prompted to identify a racial category. Therefore, maps of race in cities like Los Angeles feature large swaths of the race “other” in Latino-Hispanic neighborhoods. Complicating the issue of race among Latinos is the varied way Spanish speakers use the term “La Raza” (translated “the race”). Fascists in Spain used the term to celebrate the uniqueness and racial purity of Spaniards for decades, but it has since been adopted/adapted by various Latino groups to refer to a host of sometimes competing claims to ethnic identities not based actually based race, at least as race is defined in this text.

No other minority group in the United States is defined as much by language as Hispanics. Clearly, many dozens of languages other than English and Spanish are spoken at home by millions of Americans, and those who speak those languages generally identity themselves by language before they would use a racial category. Americans of Chinese, Korean or Japanese descent think of themselves as quite different from each other, but the government (and indeed many non-Asian Americans), frequently collapse these three linguistic/national identities into the monolithic, but over-expansive Asian American category.
Switzerland
Switzerland is a country that is overwhelmingly “white”, with less than 10% of the population non-European. Still, in many ways, Switzerland is exceptionally multi-ethnic because of its great linguistic diversity. The majority of Swiss speak German, but there are sizeable numbers of persons that speak French and Italian. Even Romansh is recognized as an official language in Switzerland, though only about 1% of the population speaks.

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 (see chapter 5). What makes Switzerland somewhat unusual though is the manner in which the Swiss have embraced their linguistic diversity, even requiring school-aged children to become bilingual. Despite the linguistic diversity, various groups came together in the year 1291, and since then Swiss have focused national commonalities such as their neutrality, love of democracy and Alpine sports to build a special sense of identity. It probably helps that Switzerland has one of the highest qualities of life in the world (health, wealth, happiness), but their prosperity is in no small part due to their ability to get along. The Swiss demonstrate to the world that people of diverse backgrounds can live together quite happily if they chose to do so.

Religion
In some parts of the world, religion is the primary marker of ethnic identity. In the United States, religion is not widely used as a marker of identity. The US government collects almost no data on religious affiliation because to do so would infringe upon the separation of church and state. Jews and Muslims are probably the two groups in the US that most often self-identify using religion, but even that is not common.

In areas where racial or linguistic markers are not readily available, religion can become the primary marker of ethnicity. The ongoing conflict in Iraq between Sunni and Shia Muslims is a good example of how religion can...
be made a primary marker of identity. Perhaps the most tragic example in recent memory was the violent dissolution of the country of Yugoslavia, in many ways the “anti-Switzerland” of Europe.

From 1918 to around 2003, Yugoslavia was a multi-ethnic country in southeastern Europe 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 forming the basis of a common national identity. There was some measure of ethnic difference and a variety of religious identities within Yugoslavia, but for generations none of that seemed so important.

However, after the death of their leader, Marshall Tito in 1980, the religious differences among the groups proved unmanageable. The country broke up quite violently, largely along lines established by religious identification. The Bosniaks (Bosnian Muslims) follow Islam, and they 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 felt that the differences between the groups were not significant, and certainly not worth the civil war that broke up the country. Critics have argued that only a few power-hungry politicians were responsible for whipping up hatred among neighbors that had lived together for generations by creating or exaggerating claims about historical wrongs done by one group against another. Today, after generations of living together, each of the break-away countries has taken steps to create official languages from the various dialects of the common Serbo-Croatian language they all speak in an attempt to create several unique identities from a former common one.

**National Heritage**

Where your ancestors are from may be how you identify yourself as well. People sometimes use **nationality** as a marker of ethnic identity. Some people in the US do this regularly. Others couldn’t even tell you what their national ancestry was. Most of the time in the US, national ethnicities comes in the form of hyphenated identities, such as Chinese-American, Mexican-American, etc. Most Americans of European descent would rarely self-identify as “English-American” or “Canadian-American”, even though the England and Canada have each been a significant source of migrants. Part of that stems from the fact that English migration largely took place many generations ago, and that English (and Canadian) culture is so similar to American.
culture, that in some ways, differentiating one’s self in this fashion makes little sense. Another reason surely stems from the “melting pot” trajectory of many of European immigrants to the United States. European immigrants to the US over a number of generations have so frequently married people from other European countries that the countries of national origin have been forgotten. *Interracial marriage*, is the most effective means by which groups *assimilate* into the *host culture*.

Time and distance also seem to factor into how completely migrant families assimilate. After a few generations, most families are fully integrated, especially if the distance between the ancestral country of origin is great, making it difficult for migrant families to remain connected to ancestral ways. Cheap international travel and even cheaper digital connections (TV, internet) have made it possible for people to retain connections in distance places, creating what is sometimes known as *transnational* identities. Transnationalism may be 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 interest of recent immigrant groups during the Olympics and/or during the World Cup soccer tournament. These events provide a window into the processes of identity construction and maintenance. Though not always a reliable measure of national identity, most Americans who identify simply as “American” would have trouble cheering for any country other than the United States.

**Region**

The US Government also uses much broader stokes to classify ethnic groups as well. “Asian” is the most common such category, and it is probably the most absurdly broad as well, because it lumps several hundred ethnic groups from a vast continent together as one. People whose ancestry lies in China, Japan, Korea, India, Pakistan, Iraq, Turkey and parts of Russia could be technically “Asians”.

White people are also overly broadly categorized. Clearly, this category is used to classify people who are European, or whose ancestry is mostly European; but it also sometimes includes people from Saharan *Africa* and the Southwest *Asia* (Moroccans, Egyptians, Iraqis, Saudis, Turks, etc.).

African-American is another similarly confusing category, because Africa is made up of about 50 countries and probably 500 ethnicities, but only the ones from Sub-Saharan Africa always count as African. Secondly, some immigrants from Africa are white, especially from South Africans. Some African-Americans reject the label, preferring “black”, partly because “African-American” has no equivalent, such as, “European-American”, but also because of
the manner in which the term “black” was culturally appropriated as source of cultural pride and ethnic power during the Civil Rights era. The terms “colored” and “Negro” largely fell from common usage during the Civil Rights era as well.

**American-American?**

There are some that reject 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 really sure what to check off on the “ethnicity” or “national origin” question? The simple identity *American* is an option that a lot of white people now chose on the US Census form, especially in the Appalachian South. This could be interpreted as a bit *xenophobic*, but for families from that region (the author included), many of whom trace their American roots back to the 1600’s, the number of ethnicities represented in the family tree is too varied, and generally lost to time, to call oneself anything other than simply “American”. Anyone living in the United States with a complex family tree is perhaps by default “American”.

During the last two census periods (2000, 2010), there has been an effort by small politically-motivated groups in some southern states to make *Confederate-American, or Southern White* as an official ethnic designation. This seems clearly an outgrowth of the racially charged, anti-Federal politics still quite common in the South, but there may be some logic to it as well. Ethnic groups should be allowed to self-identify. Certainly many of the official and unofficial strategies we use to place people in a box are as illogical as this proposal. One could make an argument that because many people in the American South have a unique dialect, religious beliefs, politics and social customs that they may indeed be entitled to call themselves whatever they want.

**MEXICO-CANADA-UNITED STATES – FOOD AND ETHNICITY**

There’s a well-circulated speech by a Mexican-American essayist Richard Rodriguez 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 difference 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. There are several million indigenous people living in Mexico for sure; the Nahua, Mayans and Zapotecas come to mind, and there is a small population of Afro-Mexicans as well, but their experience has been different than equivalent groups in the US. The main factor was the high rates of intermarriage between Europeans (Spaniards), the native population and Africans. The host culture of Mexico is itself mixed. Rodriguez likened it to a burrito: a lot of things rolled up into a single creation. Therefore, it makes little sense for the host culture to aggressively
discriminate against any of the constituent elements within the mixture. As a result, Mexican identity and culture is more cohesive, generally happy and perhaps more monolithic than that in the US.

Rodriguez points out that Canada, a country known for its typically genial multi-national culture has become a welcoming place for immigrants by celebrating diversity and respecting the rights of all who come to maintain their identity. As a result, Canada has had little of the racialized ethnic strife that has marked US history for decades. Of course, some French-speaking Canadians have argued for secession, but it was handled in an orderly, democratic fashion (and rejected twice). This strategy though has perhaps undermined the growth of a solid, 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. Canadian cuisine may be largely unknown because without the cultural hybridization of the type one finds in the US and Mexico, it is difficult for novel, creative cultural practices to emerge.

The United States has pursued to some degrees both the Mexican and the Canadian models. 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 who constitute the American “salad bowl”. The result has been complicated. Neither Mexico, nor Canada has had the sort of ethnic tensions, riots and violence that the US has seen, but neither of America’s neighbors have spawned the sort of cultural innovations the US has become so well known for: rock n’ roll, rap and jazz; airplanes, light bulbs and movie theaters; football, basketball and skateboarding.
Space Makes Race

Spatial processes are responsible for the creation of ethnicities. Geographers like to argue that “space makes race”. Imagine what would happen if someone invented an app for cell phones that could instantly transport you to any spot on the planet, completely removing the friction of distance. Within a dozen generations, humans around the globe would begin to look more alike (generally speaking) thanks to accelerated intermarriage, a single world language would begin to emerge, we would begin to see the development of a single world religion, and maybe we would begin to think of ourselves as earthlings, rather than “Americans”, “Germans”, “Chinese”, etc. Or maybe not. There may be some psychological reason compelling people to consider themselves part of some group, or at the very least identify groups of which they are not a member. What is clear however, is that geography factors heavily into the formation of identity groups.

In the early history of humankind, there were no ethnicities. Everyone belonged to a single, very small group. As our species grew more numerous and the search for resources (or adventure) led groups to venture out of Africa, our languages evolved, multiple religions were established and our bodies changed in response to the new local conditions in which people found themselves.

Physical Geography of Race

Human beings have a number of physiological adaptations to climate, but skin color is perhaps the classic example. Humans living in the tropical regions of the world are exposed to much more sunlight during the course of a year than those living closer to the North or South Poles. Researchers suggest that the variations in skin pigmentation may have taken as little as 100 generations to appear across the globe and there is evidence that the process is reversible.

Theory holds that dark skin is an evolutionary adaptation that helps protect people from the damaging effects of ultraviolet radiation that comes from the sun. Darker skinned people had an evolutionary advantage over lighter skinned people in very sunny locations. However, sunlight also provides vitamin D, an essential dietary nutrient, especially for lactating mothers. People living in sunlight-deprived areas, like Europe, get less vitamin D from the sun than those in Africa. Dark skin, great where sun is plentiful undermines the production of vitamin D. Therefore, persons with lighter skin could absorb more vitamin D, and had a slight evolutionary advantage over those with darker skin in places like northern Europe where sunlight is scarce during long winter months.

The inability absorb vitamin D into the system may also have factored into the development of lactose tolerance, and the subsequent dairy industry among Europeans. Most adult mammals cannot drink milk because of an inability to produce lactase, an enzyme that metabolizes lactose. Most Europeans can drink milk. Was this because millennia ago they were, as a group, so deficient in vitamin D / calcium that the rare persons that were lactose
tolerant had a massive evolutionary advantage over those who were lactose intolerant? Moreover, did dairy farming become a staple of European farming because Europeans were lactose tolerant or did lactose tolerance develop among Europeans because they raised cattle? In any case, where was and continues to be 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 variables are also partly determine our “race” or biological characteristics as well. Some of these characteristics, like skin tone, height, or body morphology are partly determined by localized standards for physical attractiveness. Across the globe there are differences in what men and women consider attractive in the opposite sex. Preferences regarding height, weight, eyes, hair, skin tone and body morphology vary greatly. For example, for many generations Chinese men valued tiny feet and therefore would bind the feet of girls and young women. Presumably, tall women with naturally big feet were considered less desirable than short women with smallish feet. In West Africa, where maternal societies and a cult of fertility, coupled with food insecurity, may have led to a preference for large buttocks, especially on females. In Japan, a place with a vastly different agricultural and religious history, this taste preference is muted or even reversed.

In the United States, especially during the 1970s and 1980s, there was great emphasis on tanning the skin to achieve a standard of beauty. Getting a dark tan however would have made little sense to earlier generations of Americans that sought to shelter from the sun as much as possible to prevent tanning. A standard explanation for this shift in cultural practice is rooted in time and space. During the agricultural era, a tan was a sign of poverty because agricultural field laborers worked long hours in the sun. Following the industrial revolution, impoverished people increasingly worked in factories, and as a result were kept pale by working long-hours indoors. The wealthier classes finding themselves now indistinguishable from the impoverished classes, began to tan in order to signify their status via their ability to engage in outdoor leisure activities, like going to the beach. In recent years however, the threat of skin cancer and shifting demographics have confounded this American beauty standard once again.

Over the course of thousands of years, these preferences, each rooted in local conditions
(and perhaps random fascinations) have lent themselves to evolutionary changes in body morphology that contribute to notions of race and ethnicity. Identity Maintenance

Once identities are created, they are in constant danger of alteration or elimination. People can move away from a region, draining a group of the critical mass needed to sustain a group identity. This process is known as the clearance model of ethnic change. Alternatively, a new ethnicity can move into a region, overwhelming the established host group, eroding their identity of the host group. This process is known as the changeover model. There are other processes that affect the maintenance of ethnic identity as well.

Several of the key ways identities are preserved, maintained or enforced are spatial. The simplest way this happens is when people live in an inaccessible location. 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 lived in a swampy part of Louisiana where railroad and highway infrastructure was late to arrive. People on various islands, in mountainous regions and other hard-to-get to places find their identity insulated from the degrading effects of immigration and emigration.

The less benign practice of ethnic ghettoization is an attempt to enforce the maintenance of ethnic identities. The term ghetto has been historically 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 to make reference to poor African-American neighborhoods. It is important to recognize that ghettos are nearly universal and as old as civilization itself, and any ethnic group can be ghettoized. Certainly the Chinatown districts of many US cities would have qualified as ghettos 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 better describes 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.

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 separate makes it easier for groups in power to maintain the status quo. Residential proximity might permit people from different groups falling in love, mating, having offspring or just learning from one another. Any of which is likely lead to the
dilution of the “purity” of identity, whatever that identity is based upon (race, religion, nationality, language, etc.). More importantly for those seeking to maintain dominance over a minority, intermixing undermines the ability to exercise political and economic power over the subjugated group(s). Marxist thought maintains that racism and/or ethnic bias is an important means by which capitalists maintain power. Marxists often maintain that race is the cultural clothing of capitalism.
**Environmental Racism**

In addition to keeping specific groups of people residentially separated, ghettos seem to have served a variety of other functions as well. Ghettos have served as dumping grounds for a variety of social ills and civic *disamenities*. Prostitution, the illicit drug trade and gambling are often less vigorously policed in ghetto districts, signaling those involved that such activities are more widely accepted among minority residents, when in fact such activities are as likely a sign of the lack of political power among ghetto residents.

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*. Clearly black and brown residents 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 people are least able to move from polluted neighborhoods, some of which were established long before the Civil Rights era. Minority groups also have more trouble defending their right to healthy neighborhood via the political process.

In addition to the obvious toxic pollutants, environmental hazards in the form of things like predatory lenders, fast food, noise and even the lack of disaster planning may undermine the ability of residents living in poor minority neighborhoods to live as long and 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 unable to take advantage of the city’s 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 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 wonderful 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 accrue to ethnic groups remain living in close proximity to each other. Mutual support, in a variety of forms, economic, political, recreational, etc., is easier when members of an ethnic group live close near one another. 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, no doubt would find an ethnic enclave an easier place to begin the acculturation and assimilation process than a neighborhood dominated by a 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. A number of voting districts are gerrymandered in order to help promote (or deny) the interests of specific ethnicities. Even simple pleasures, like finding someone who also likes to play certain 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 cluster together.

**Space and Race**

Geography plays a significant role in the construction of ethnic identity. During the early period of human history, there was probably not strong sense of “us and them”, because finding a “them” would have been difficult. The Chinese symbol for “China” also means “middle” or “center”. This symbol seems to suggest that the Chinese, like many other ancient civilizations, thought of themselves as the center of the world; they were “the people”.

Contact with outside groups created a sense of difference and thus the evolution of ethnicity begins. Migration and invasion heightened the importance of identity. People who had never given their identity much thought found themselves, after migrating elsewhere, now strange or peculiar in the eyes of the dominant group where they migrated, a source of fascination or ridicule and scorn. People once part of the majority – and therefore not “ethnic” may become “ethnic” by migrating to a location where they are in the minority. Alternately, one may move from a location where they are considered an ethnic minority to another location where they are not considered ethnic. This could happen if they migrated to a location where their ethnicity was in the majority, or it could happen if they migrated to
People and Landscapes

a location where the characteristics that classified them as a minority ethnicity did not exist. The social construction of ethnicity is fluid.

African-American and Blackness
In some states in the US, for many years, there was an official policy that any person that had any ancestry from Africa was considered African-American, regardless of their physical appearance. 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 ancestry. In 1930, the US Census Bureau stopped using the designation “mulatto” to indicate people of mixed ancestry. Subsequent censuses (1940-1960), “black” and “white” were the only options. It wasn’t until the 2000 census that the government allowed people of mixed heritage to once again identify by more than a single category.

Figure 0.13: Cumberland Posey, a famous baseball player from Homestead, Pennsylvania was considered “black” because local people knew of his family’s partial 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 early 1900s, 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.

It was only during the 20th century, during the height of the Jim Crow era, that stricter “blood laws” were enacted. Some states declared specific percentages (one-fourth, one-eighth) of ancestry as a legal limit to be considered legally white or black. Some of these laws remained intact until the late 1960s, when the Supreme Court struck them down. Such laws were necessary in part because even the US Army was segregated until 1948; the military had to know to type of unit each individual should be assigned. Similar laws, known as blood quantum rules have been applied to determine membership in various American Indian tribes.

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 just a small 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, but still identify (or are identified) as “black”. Even very well-known people, like President Barack Obama and golfer Tiger Woods are shoved into a single ethnic category, sometimes over their very public objections. Woods is considered black in America, but he calls himself Cabiliasian, a made up word that reflects his ancestry that includes Caucasians, Black, American Indian and Asian. In Thailand he 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.

In South Africa, where race-based apartheid government policies lasted until the mid-1990s, officials devised a variety of tests to determine 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 mixed ancestry are generally considered white. 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 and anger. 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.

Ethnicity and the Economy

Your ethnicity may guide (not determine!) your career choices. Students on multi-ethnic campuses can see this process unfolding across the university campus. Certain ethnicities are easier to find in engineering and business buildings. Other ethnicities are particularly rare in majors like Anthropology or Agriculture. Gender biases are perhaps even stronger. 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 a number of areas in the economy.

Some of these differences come from what varying ethnicities value. Some groups seem to value most careers that are high-paying. 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 about mostly like to be self-employed at around 30%. Immigrants come to America sometimes pre-equipped with specific skills – especially if they are coming a great distance. Because it can be expensive to get into the US, groups including Koreans and Israelis often have some business experience prior to 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, proximity – 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 relative helped you get started. Particularly in big cities, where employment niches get a chance to fully develop, you’ll find specific job categories or business 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 Gujuratis, a linguistic ethnic group from India and Pakistan. So strong are family connections in this process that a single name dominates this area of the hospitality industry, lending itself to the catch phrase used to describe these establishments: the “Patel Motel.” It appears that a single Gujurati 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 particular 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. This particular 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.

Other sectors of the economy may have a less random origin. For example, Korean-Americans own almost all stores that sell hair-care products for African-Americans. It is somewhat bizarre reality, but it can be traced largely 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.
Ethnic Regions

If you zoom out from the scale of the city, you will see ethnicity articulated on the landscape, sometimes over vast distances. In the United States, there are a handful of regions that are heavily influenced by a single ethnicity, but barriers to entry to any of these places is uncomplicated; and most Americans don’t really care too much about it. The US constitution does a reasonably good job of protecting the rights of minorities of all stripes. In other parts of the world, regional and ethnic differences can be explosively dangerous.

Three main ethnic regions dominate the United States. Around a dozen small ethnic regions, known sometimes as ethnic islands, occupy areas as small as a county. The map in above shows that the largest ethnic region, in light blue is German-American. It’s hard to discern what would make such a vast region ethnically German because so much of American culture is derived from German-Americans. Clearly some areas are more culturally Germanic than other regions within the vast swath of counties that are predominantly German-American. For example, people in Wisconsin may drink more beer, eat more knackwurst and sauerkraut, and celebrate Oktoberfest more heartily than people in Southern Oregon, but for the most part, German-America is difficult to characterize as distinct from the Mid-South which appears on the map as “American-American”.

[Map showing largest ethnicity regions]
The other large ethnic regions 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 the mainstream. Foodways, musical traditions, holiday celebrations and a host of other cultural practices mark these two regions as culturally unique. 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 are stereotypical, but either scenario would be very atypical in Iowa or Vermont.

There are a number of much smaller ethnic islands as well. They are too numerous for an introductory textbook, but so interesting that 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. The Irish live in many of the same locations as the Italian-Americans. Norwegian-Americans, as well as other descendants of Scandinavian ancestors form a number of ethnic islands in Minnesota and the Dakotas. Cajuns, descendants of French-Canadians migrants dominate regions of swampy southern Louisiana. People who claim Spanish ancestors are numerous in much of northern New Mexico.

**Process**

The processes that create ghettos, ethnic islands and ethnic regions are varied. Much of it is mundane or ordinary. Other causal factors are more interesting and a few can be attributed to racism or ethnic prejudice. There is an element of accident to a number of migration stories, so accidental or random processes should not be discounted. It’s not unusual to hear a story about why some great-great-grandfather moved to a certain location be a simple as “my car (wagon) broke down here” or “I only had enough money to get this far”. Chaos theory and stochastic processes help social scientists explain and/or predict a number of social and cultural phenomena.
Environment and Ethnicity
Many of the locations that are attractive to migrants 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 may have found the Midwest similar enough to the North European plain. When cultures are well suited to thrive in a new environment, they enjoy some measure of cultural preadaptation. For example, Dutch people from Holland, having generations of experience with draining the Zuiderzee using an elaborate system of drainage ditches, windmills and dikes found taming the marshy, tall-grass prairies scattered across the Midwest little trouble. Other Europeans settlers considered these soggy wetlands wastelands. On the flip side, the English were cultural maladapted to settlement in both the Massachusetts and Virginia colonies. This maladaptation occasionally resulted in catastrophic failure. They had to learn new strategies for survival in the extreme climates of the North America, where heavy forests and unusual soils posed considerable challenges. Mormon migrants to the Great Basin in Utah were forced likewise to quickly adapt to different climate conditions from those they were accustomed back East. It’s really very surprising that the Cajuns managed to survive in the swamps of Louisiana at all after moving south from Canada.

Enforced Ethnic Regions
Smaller ethnic regions, ghettos, enclaves and islands, have frequently been engineered to purposefully isolate specific groups. North American Indians were forcibly removed from their lands, eventually restricted to small parcels called reservations, often near ancestral lands of the tribe. Occasionally, Indians were relocated to reservations many hundreds of miles from their homelands. The famous trail of tears was a product of the Indian Removal Act of 1830, which led to the relocation of some 46,000 Native Americans to Oklahoma from various locations in the American Southeast. Dozens of similar evictions characterized the settlement of the American West.

Following the Civil War, a wide variety of strategies, aimed at limiting the geographic distribution of African Americans evolved 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 found unconstitutional by the US Supreme Court in 1917 (Buchanan v Warley). More sophisticated segregation methods emerged quickly.
Restrictive or exclusionary covenants were written into the deed of sale for many homes sold in the 20th century. These legal documents prohibited owners from doing mundane things like building garages, fences or porches, but also might prohibit the sale of the house to specific ethnicities. Black folks were frequently the target of this discrimination, but Jews, Catholics, Chinese and other ethnic groups also found themselves victims of legalized housing discrimination. For example, it was once illegal to sell or rent property to Jewish people in Beverly Hills.

After 1948, when the Supreme Court found these restrictive covenants also unconstitutional, yet additional means to maintain housing segregation evolved. Realtors, fearing a loss of profits through the degradation of home values, sometimes would simply refuse to show/sell minorities houses in specific neighborhoods. Other practices might involve making it harder or more expensive for specific ethnicities to buy or rent in certain neighborhoods. Banks and other lenders also practiced mortgage discrimination, which could effectively keep ethnic homebuyers out of selected neighborhoods by denying loans, or making them irrationally expensive. There is evidence that this last practice continues to some degree today. Another related practice, redlining, is discussed in the urban geography chapter.

One of the most controversial practices, known as blockbusting was used to some effect, especially in cities in the Industrial Midwest. The practice worked like this: realtors would try to convince white home owners that once a black family had moved into a neighborhood, the value of housing would fall. If they could scare the white owners enough, the realtor would buy the property, at below market value, and seek to sell it to a black owner at above market value. Real estate speculators, land developers and lenders all made substantial profits from the scam, white and black homeowners all lost money. Ethnic segregation was generally maintained, through the process known as white flight. The Fair Housing act of 1968 outlawed blockbusting, well after most of the damage was done.

More benign, perhaps subconscious, actions also create and maintain ethnic neighborhoods or ghettos. One realtor behavior called steering may be still widespread today. Steering happens when a realtors, in an attempt 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.

Even some of the actions taken by national and local governments seem to have contributed to ghettoization of minority groups. There is some debate about the intentionality of the government, and the overall-long term effect of American public housing efforts, but public housing projects appears to have, at the very least, contributed to the maintenance of ethnically segregated neighborhoods in many cities where they were built. They certainly became for many years icons of black ghettoization in the United States.

**Black Ghetto Typology**

Because they develop in different places and different times, ghettos do not all look the same. Ford and Griffin developed a partial typology of black ghettos in the United States based on their morphological evolution.

**Early Southern**

Before the civil war, most African Americans lived in the Deep South, most frequently as slaves. Clearly the largest number of slaves were agricultural workers, but a substantial number lived in cities, like Charleston, SC; New Orleans, LA, and Atlanta, GA. Urban blacks folks, living in the south during this period were largely employed as domestic servants and because most were slaves, they were required to live essentially with the white slave holders. Urban slaves and hired help were most often quartered on the property of the white holder/employer, 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.”

The close physical proximity combined with the exceptional differences in economic and social status produced a peculiar type of ghetto that saw people of different races living 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.
Classic Southern
Following the Civil War, blacks were freed from slavery, but most in the South continued to live on farms. As industrialization progressed, blacks (and others) moved in greater numbers to cities in both the North and the South. As blacks migrated to southern cities, Jim Crow segregation laws created a new pattern of ghettoization emerged, the classic southern model in which one half the city or town was reserved for African-Americans. Often, the dividing line between whites and blacks was the rail line (or some other transport corridor), giving rise to the expression “other side of the tracks”. Many cities around the South fit this model still today.

Early Northern, Classic Northern
Outside of the slave holding regions of the South, the pattern of black ghettoization evolved quite differently. Blacks were originally a very small minority in northern cities. As such, they competed for precious space near downtown with other minority populations, most of whom were also recent migrants to the city. In the figure below you can see Blacks, along

with Anglo Whites and two other minority groups represented by the blue and peach colors (Irish and Italians?). Over the years, most European minority groups, moved from the inner city regions of northern cities, and were replaced by African Americans who were less able
because of discriminatory housing practices, to move to suburbs. By the 1980s, African Americans dominated the inner city of many locations in the Industrial Midwest and Northeast. The intensity of black ghettoization is often extreme in cities with classic northern ghetto. Cities like Cleveland, Detroit, Chicago and Milwaukee have much higher segregation index scores than counterparts in the west or southern United States.

**New City**

In the western United States, and parts of the Sunbelt, black ghettos evolved largely during the age of the automobile. As a result, the morphology of the black ghetto reflected the importance of the highway and interstate system that co-evolved with the car and the city. These new cities grew rapidly after 1900, but had intense growth during and immediately following World War II. Los Angeles is a classic example, where good jobs in defense industries attracted large numbers of African Americans from the South, Midwest and East.

Because places like L.A., Dallas and Phoenix grew without efficient public transportation systems, dense inner city cores never developed around rail or subway lines. Therefore, most families bought single family homes. Multi-family apartment complexes that attracted in-migrants of all ethnicities were sited near highways, where accessibility was greatest. As a result, ghettos in new cities tend to be linear, stretching along a highway outward from the CBD. In some cities, several distinct

![Figure 0.24: New City Black Ghetto](image)

Figure 0.24: 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.
“black corridors” developed. In the Southwest, Latin American and Asian immigration have occasionally generated additional linear ghettos, replicating the style of black ghettos formed earlier.

**Ethnic Landscapes**

Ethnicity is heavily inscribed onto the landscape. It appears in many forms and helps us better understand each other. Some ethnic landscapes are a product of segregation. Many American ghettos are African-American, but others are Latino or Asian in some fashion. Irish, Greek and Polish ghettos were once more common. Most ghetto landscapes however were not built by the minority inhabitants, so the architecture offers little clue about the residents. Instead, geographers turn their attention to other elements of the landscape, including businesses, how public space is used, graffiti and public art, as well as landscaping. Think to yourself what visual elements of a minority neighborhood (besides people) stand out to you as characteristic of a specific ethnicity? Are their differences in the landscape of middle class Whites, Blacks, Asians or Latinos?

**Ethnicity Based Tourist Landscapes**

Landscape also can be misleading as well, helping undermine enlightened understandings, while helping create or maintain faulty stereotypes about the other in a process called *othering*. One of the prime sources of simplified ideas about ethnicities are found in touristic landscapes, like ethnic-themed destinations (Chinatown), “wild west” themed locations and ordinary tourist traps.

Ethnic islands, or enclaves dominated by a specific ethnicity often try to attract visitors by theming their location as a tourist destination. Many cities’ Chinatowns have done so successfully over the years, turning degraded slum areas into attractive spots for tourists to spend cash. Many of the architectural motifs...
in Chinatowns are exaggerated to 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. Local residents (Chinese-Americans) have every right to cash in on the erroneous beliefs held by Americans, but it can also be argued that places like Chinatown may reinforce negative stereotypes. On the other hand, if such destinations did not build upon silly notions about what Chinatown should look like, then others might not visit at all, perhaps foregoing any opportunity for outsiders to learn about Chinese Americans or Chinese culture.

Tourist attractions, playing upon the ethnic heritage of many dozens of locations, draw millions of visitors. 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, assured that few Americans are aware that the Dutch (Netherlands) are the ones who are most famous for them. Still visitors crowd the streets, particularly of Solvang, happy to be strolling along, buying sweets in a miniature fantasyland.

Perhaps the most unfortunate representations of ethnicity in the US seem to involve Native Americans. Business people use Native American 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 touristic commerce. The stubbornness of this tactic may help explain why Indians remain the only ethnic group so consistently used (and misused) as mascots for sporting teams (see below).
Part of the reason Indian imagery is so compelling is that it is hopelessly tied to Americans 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, but war-like, silent, primitive and respectful of nature. Americans have learned little of value about Native Americans because a heavy reliance upon the stereotyped Indian created 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 TeePees) a folk housing tent-house favored by nomadic tribes on the Great Plains, such as the Lakota, Sioux and Blackfoot, is the only Indian housing Hollywood insisted depicted. Now, 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 Central Plains. Indian headdresses, scalping, bows and arrows, horseback riding and other iconography of the Hollywood stereotype of Indians dominate the landscape in diverse, spatially inappropriate locations.

**Washington Redskins**

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 more controversial than the NFL franchise in Washington D.C.

Geographers would point to the role of space and place in creating and maintaining this unfortunate situation. First, spatial thinkers would point out that Native Americans 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 Native Americans, but prevented the rest of America from the kind of direct interpersonal contact that would 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. Imagine if a mascot to honor Jews, Blacks, Latinos or Asian epithets and iconography were displayed in a similar fashion. 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.

**TERMINOLOGY**

What to call Indians is another source of controversy that is instructive on a number of levels. The ability to name or label anything is important indicator of the *locus of power*, which is often a geographic concept. The most popular theory regarding the word *Indian* stems from Christopher Columbus mistakenly believing he had landed in South Asia in 1492. Columbus assumed, incorrectly, that the people of the Caribbean were therefore Asian Indians. The *exonym* stuck even though the *indigenous people* of the Americas were clearly 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 “Native American”, because somebody considered it less offensive than “Indian”. The problem was that, like the term “Indian”, “Native American” was once again imposed upon them by an outside group. Therefore, many Indians rejected the term as just another symbol of abusive government power, preferring instead the age old term “Indian”, or “American Indian.” This text uses “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 a broader, including 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, it would be best to use the *endonym* referencing a specific national identity, like “Cherokee”, “Ute” or “Chumash” where possible.

Similar consideration should be used when referring to Asians. Most folks know that “Oriental” refers to things like rugs and food, rather than a group of ethnicities. When possible, each of us 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 not simple political correctness, but rather an indication of your knowledge of, and sympathy for the identity of others. That courtesy is extended to the people of the United States. All people of the western hemisphere (Canadians, Mexicans, Brazilians, Cubans) are not referred to with the overly broad term “Americans”
Our gender identification is an important part of our identity, yet this most basic component of personal identity is fluid because our “who you are” is based in part on geography. Where you live conditions how others see you, how they label you and how you understand yourself. Where you can go and what you can do is a product of your place-based gender identity.

Are you a boy or a girl? Seems a simple enough question, and it is for lots of people, but for many, 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 that most people and governments recognize. Hundreds of babies are born every day that do not fall easily into one of the two traditional categories: male or female. In the United States, doctors generally assign a gender, often when the person is an infant. Traditionally, Americans have insisted that each individual “must be either a boy or a girl”, because only two gender categories were available in American culture. A person could not be both. “Neither” was also an unacceptable gender identity. However, 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 American gender binary 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. 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 may be condemned in other cultures. In the US, those who do not fall into traditional categories are generally condemned and commonly suffer from physical abuse.

In recent years, there has been a growing recognition here in the United States that there is a complex rainbow of gender identities, well beyond our culture’s simple monochromatic categorization system. This has led to the adoption of the word transgendered to help us to begin to develop at least a third category. Still, congress, courts and voters argue in heated terms about the legitimacy or desirability of allowing marriages between

Figure 10.1: Symbol: Transgender. Source: Wikimedia.
only a man and woman, always without a pause to consider what the categories “man” and “woman” really mean. Sometimes, the questions prompted by our cultural insistence on recognizing only two genders isn’t as profound. Often, these questions are as mundane as, “which restroom should I use?”

**Evolution of Gender and Identity in California**

In 2013, state legislators in California passed a law protecting the right of transgendered schoolchildren to select lavatories and sport teams based on their gender identity rather than their anatomy or chromosomal identity. It appears to be the first statewide law of its sort in the United States. California officially recognized that some people do not fit into the traditional gender binary. It’s hardly surprising that California would be the state to blaze this trail. The Golden State has long been home to large populations of lesbian, gay, bisexual, transgendered, and other people (LGBT) who fall outside traditional gender roles and classifications.

The relative ease with which LGBT Californians go about their lives may be rooted in the cultural diversity that was born with the Gold Rush. The Bay Area may have been the first place in the world to be truly globally multicultural. Tolerance for diversity was a necessary component of life in California from its early days. Of course, California has had ugly moments of racism and bigotry, but in general, Californians have been more tolerant than most. It seems that California’s tolerance for difference probably attracted thousands of people who felt persecuted elsewhere for a century or more before World War II. It was only after World War II that the first tentative steps toward gender identity tolerance were made in California. The massive military presence in California during the war years made San Francisco a point of re-entry to civilian life for gay men who were dishonorably discharged during the war. Perhaps unable to return to the places they were originally from, gay men appear to have opted to stay in California to build a life after the war among the other outcasts and misfits tolerated in San Francisco. Bohemians, radical poets and Beat Generation figures had already established a significant presence in San Francisco during the post war era. These radicals occupied night clubs, like the Black Cat and other social venues that openly accepted LGBT people. By the 1950s, several civil right groups focused on the rights of LGBT 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.

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 as the de facto headquarters of the anti-establishment youth culture. News spread both 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 momentum to the cultural trajectory of Bay Area and the rest of the state. In 1977, one of those migrants, Harvey Milk, became one of the first openly LBGT persons elected to public office in the United States. He was assassinated alongside the Mayor of San Francisco George Moscone in 1978.

**Same Sex Marriage**

Perhaps the most visible arena of public debate shedding light on our collective understanding of gender is the fight over same sex marriage. The topic is covered briefly in the chapter on Political Geography, but there the focus is on the question of whether the government has a compelling interest in directing who may marry who, and the role of religious affiliation in shaping people’s willingness to seek governmental regulation over the legal union of any two people. Another way to approach the question of same sex marriages is to call into question the government’s ability to identify “sex” in a legally consistent pattern. If the law of a state only recognizes “man” and “woman” as identities, what is to be done with people who have indistinct gender identities (biological and/or psychological)? What criteria can feasibly determine a person’s legal identity? Most often, a doctor in a delivery room makes this determination moments after an infant is born, but sometimes it takes weeks to determine the sex of an infant.

Similar difficulties have arisen most notably in sports, especially Olympic sports, where female athletes were for many years subject to gender verification to ensure they were indeed women. Today, the International Olympic Committee, FIFA and other sports governing bodies struggle to find a way to allow everyone to compete against people who share a similar gender identity, hormonal and chromosomal profiles. Most state laws fail to consider the complexities of gender identification at all, and therefore identity questions are not a common fixture of legal (or public) debates on marriage rights. Only, Connecticut and California have managed to enact gender-neutral marriage rights, either through legislation or court decisions.

**Evolution of Gender Roles**

The traditional notions governing how a men and women should act, are called gender roles. These largely unwritten rules are quite powerful, governing much of our behavior every day,
including how we are dressed, what courses college students enroll in, what kind of car people drive, and even what people eat. These codes of conduct are in a constant state of flux, and they vary widely by geography, although many people consider them immutable.

Gender roles have had an outsized effect on the course of history. Consider for example the effect gender roles had upon the evolution of slavery in the United States. Europeans made a significant effort to enslave Native Americans, and although thousands were sold, most of the men were found to be poor and reluctant agriculturalists because farming / tending plants was considered women’s work among many Indian groups in North America. Men from West Africa did not consider farming to be women’s work, and they were therefore not emasculated by farming. Spanish Missionaries in California had similar difficulties convincing male Indian neophytes at the Missions to abandon their masculine hunting roles for more feminine agricultural roles.

Prior to the era of industrialization, women had robust roles in the agricultural societies in which they lived. Farm economics in the pre-industrial age required all members of the family pitch in. Men and women and children may have had different jobs back then, but women were considered absolutely essential to the survival of the family unit. In pre-industrial urban areas, women who were a part of a family unit engaging in trades or crafts required women played important economic functions in the production of good or the management of the family business. Geographers would point out that the domestic spaces (family houses) were also essentially the family’s place of economic livelihood. Women and men worked side by side in the “family factory” where they lived. Gender roles changed dramatically during the industrial revolution, when men started to work far more frequently away from home and earning wages.

A sizeable portion of current notions about gender roles in America evolved during the 19th century’s Victorian Era. During this period of rapid industrialization, men began to work away from the home and farm. Women, especially from the middle class, were left behind in the house with the children. Women’s roles were increasingly restricted to housekeeping and child-rearing. Women were expected to be especially modest in dress, sober, private,
and impecably moral, especially when it came to sexual mores and marriage. Poor women, often worked as domestic workers, or in 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 had the power to influence public opinion on such matters. 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, when changes in the economy and culture eroded some of the rules governing the proper behavior for women. In the United States, during the 1920s, there was a backlash against strict moral codes for women. Young women who wanted to drink alcohol, smoke cigarettes, cut their hair short, wear makeup and comfortable clothes, have sex and generally flaunt authority were called *flappers*. At the time, they elicited considerable controversy, but are widely considered important figures in the slowly evolving women’s rights movement. Spatially, flappers were distinguished as much by the fact that they not bound to the home as their dress. Flappers all but faded from the American conscious during the Great Depression, but they were replaced admirably by the iconic mythic figure *Rosie the Riveter* during World War II. Women were needed to work in factories because a significant percentage of young males were called to serve in the Armed Forces at a time when industrial production needed to be at an all-time high. Rosie the Riveter, was also defined in large part by her *spatial* behavior. She was not at home. Instead, she worked in a factory, a place 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 wanted the right to continue working outside the home, especially for good wages and benefits that came with factory work.

**Gendered Landscapes**

Over the years, the close association between domestic home spaces and women became more apparent, and for some, the home and particularly vast suburban tracts of homes became like prisons reserved for women. In the post-war years, men would leave the domestic space for work, often taking the only family automobile. Women would be left to tend to housekeeping chores and children, a routine that left many women little of their own money, a low degree of mobility and with few options to pursue career options after their children had grown. Many women, no doubt, loved this role, but for others the domestic
sphere was stifling. It also left women exceptionally dependent on husbands, and therefore sometimes unable to escape abusive or unhappy marriages.

**Housing**
The very design of houses have been analyzed by a number of geographers seeking to understand the interplay between gender roles, architecture and landscape. Victorian era homes were designed to be more private than pre-industrial homes. They were built further from the street (a public sphere), often with gates, fences and yard space to create a safe haven; a private and domestic sphere for families, especially women and children. For some feminist geographers, the house becomes the critical machine for reproducing oppressive gender roles. All were designed and built by men who, may or may not have understood how to optimize design for women. For example, the size and layout of kitchens, the height of sinks or countertops, location of laundry rooms, and other domestic work spaces were often thoughtlessly designed by men, and as a result functioned poorly for women. On the other hand, the domestic space dedicated to male recreation was often expansive and well designed.

Consider for example how the design of the courtyard house, a common house type 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. Modern American homes often have high fences separating neighbors and smallish, non-functional back yards, a sacrifice to enhance the appearance of a large front lawn. Think about the design features of your house or apartment. How do they reflect, enhance, undermine or reinforce gender roles?

**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. Some places, like barber shops, stag bars, fraternal lodges, automotive garages, gambling halls, and some sporting arenas were off-limits to women, especially those who wished to maintain good

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Figure 0:7: 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 a central courtyard where domestic chores could be completed more communally than permissible today.

Figure 0:8: Tokyo, Japan - Women wait in line to board a special, "women only" subway car. Persistent groping by male passengers generated a demand for segregated spaces. Source: Wikimedia.
standing in society. Separate, and not always equal, spaces were reserved for women. Beauty parlors, grocery stores, flower shops and elder care facilities tended to be spaces for women. Gender segregation begins at a young age. American toy stores have “pink aisles” full of Barbie dolls and baby dolls, where little girls are encouraged by the built environment to learn, through play, to be attractive and motherly. Boys sections of the toy stores have construction equipment, action figures (not dolls) and sports equipment. 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 the Muslim world, where Islamic law specifically sanctions the separation of men and women in public spaces many locations are off-limits to men and/or women. A great example of official gendered spaces can be found also outside the Muslim world in public transportation systems that feature women only train/subway cars and busses, created to combat persistent sexual harassment (groping) of women passengers by male passengers.

**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 higher levels and more frequent instances of fear of crime. Though men are more likely to be the victim of violent crime in general, women’s fear of crime, especially sexual crimes, appears to often limit the places where women 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 some park that women fear. So, why are people, particularly women, afraid of some space? Studies show that there are a number of visual cues that women use to read the landscape. Lighting seems to be an important factor. Dark places are read as dangerous because it provides hiding places for would-be attackers. Other landscape features, like alleys, or walls, or recessed spaces that provide concealment also elicit fearful responses. The presence of groups of idle young men, addicts and prostitutes create a sense of fear among many because certain people represent a pool of potential criminals. Disorder in the landscape, such as graffiti,
litter and vandalism also evoke fear (See Broken Window Theory), and together these various landscape elements may 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. This leads to a host of other social ills, including ill-health, obesity, psychological disorders, social disengagement, and a loss of community bonds, each of which makes the actual potential for crime even higher. Landscape disorder (graffiti, vandalism, run down housing, etc.) has numerous unseen consequences, a far greater economic and social cost than most people recognize.

Women and the Environment
Gender roles appear to have a significant effect on how people interact with the physical environment as well. A number of studies have shown that American women express greater concern than male counterparts 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, concerned for the welfare of others, especially their own children. Women are less likely to defend polluters’ rights. What is less clear are gender differences when it comes to policy strategies regarding protecting the environment. Men and women seem to be generally unsure what steps 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.

However in some countries, the gender gap on the environment is more evident, perhaps because gender roles remain far more clearly drawn than they are in the developed world. A number of 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.
Most of the world’s population lives in urban areas today. An understanding of where how and why cities evolved is critical to understanding the human condition. Cities have different shapes and function differently around the world and even within the United States, and the varied geography of urban form has important implications for the daily routines of those who live in cities.

You are probably a city person whether you like it or not. Many people say they don’t like the city, with its noise, pollution, crowds and crime, but living outside the city has its challenges as well. Living outside a city is inconvenient because rural areas lack access to the numerous amenities found in cities. The clustering of activities within a small area is called agglomeration and it reduces the friction of distance for thousands of daily activities.

Cities are convenient places for people to live, work and play. Convenience has economic consequences as well. Reduced costs associated with transportation, and the ability to share costs for infrastructure creates what is known as economies of agglomeration, which is the fundamental reason for cities. The convenience and economic benefits of city life has 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.

**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 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 are very small, rural communities. Villages are slightly larger. Towns are
larger than villages. Cities are larger than towns. Then there are words like metropolis and even 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 consider multiple factors simultaneously. It can get complex.

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”. There were problems though with that simple definition. Some areas, that had really quite large populations, but were unincorporated, failed to meet the old definition or urban. For example, Honolulu, Hawaii and Arlington, Virginia are not incorporated, therefore were technically labeled “census designated places”, rather than cities. Conversely, some incorporated areas may have 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!).

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. Among the criteria now used by the Census are a minimum population density of 1,000 people per square mile, regardless of whether the location is incorporated or not. Additionally, territory that includes non-residential but still urban land uses is included. Therefore, areas with factories, businesses or a large airport, that contain few residences 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 be a factor in classifying a place as urban. Finally, the census classifies locations that are reasonably close to 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, but instead form a single, contiguous urban region. Therefore, people in suburbs within five miles of the border of a larger city, are counted by the Census as residents of the urban region, associated with a central 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), urban conglomerations that function as a single super 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.

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 them on trips to Mammoth Lakes or Lake Tahoe.
Birth of Cities

Cities began to form many thousands of years ago, but there is little agreement regarding why cities form. Chances are that many different factors are responsible for the rise of cities, with some cities owing their existence to multiple factors and cities arose as a result of more specific conditions.

Two basic causal forces contribute to the rise of cities. Site location factors are those elements that favor the growth of a city that are 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, the exceptional distance invading armies have had to travel to reach Moscow, Russia have helped the city survive many wars. Most large cities have good site and situation factors.

Defense

Certainly, the earliest incarnation of cities offered residents a measure of protection against violence from outside groups for thousands of years. Living in a rural area, farming or ranching, made any family living in such isolation vulnerable to attack. Small villages could offer limited protection, but larger cities, especially those with moats, high walls, professional soldiers and advanced weaponry were safer.

The safest places were cities with quality defensible site locations. Many of Europe’s oldest cities were founded on defensible sites. The European feudal system 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. For example, Paris and Montreal were founded on
defensible \textit{island sites}. Athens was built upon a defensible hillside, called an \textit{acropolis}. So famous is the Athenian acropolis that it is called simply \textit{The Acropolis}. On the other hand, Moscow, Russia takes advantage of its \textit{remote situation}. Both Napoleon and Hitler found out the hard way the challenges associated with attacking Moscow.

In the United States, the Atlantic and Pacific Oceans have largely functioned as America’s defensive barriers, and therefore few cities are located on defensive sites. In fact, Washington, D.C. has no natural defense-related site or situation advantages. On the only occasion the US was invaded, the city was overrun by the British in the War of 1812. The White House and the Capitol were \textit{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. This is partly the reason so many state capitol buildings in the Midwest closely resemble the US capitol building in Washington D.C.; many states were trying to lure the seat of the Federal government to their state capital.

San Francisco is the best example of a large American city founded upon the basis of its defensibility. Located on a peninsula between the Pacific Ocean and a large bay, San Francisco was established where it is because of the military advantage provided by that site. San Francisco boasts two kinds of defensible site advantages. It is both \textit{peninsula site} and a \textit{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 coming northward up the peninsula would be forced into a handful of narrow passes where the Spanish Army could focus their defenses. These site advantages led the Spanish to establish the fort, \textit{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.

\textit{Religion}

People who possess a specific skill set become a \textit{site} factor that can greatly affect the location and growth of a city. One specialized skill sets was confined to the priestly class, and proximity to religious leaders is another probable reason for the formation of cities. Priests and shamans would have likely gathered the faithful 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 \textit{tithes}). The priestly class were also the primary vessels of knowledge – and the tools of knowledge like writing and science (astronomy, planting calendars, medicine, e.g.), so a cadre of assistants in those affairs would have been 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 TO 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, still a leading cause of death and malnutrition worldwide.

**Industry and Trade**

If the production of beer was not truly a motivating force behind the development of cities, then the production of other goods and services may well have been. Cities may have evolved as small trading posts where agricultural and craft goods were exchanged by local farmers and/or wandering nomads. Surplus wealth generated through trade required protection and fortifications, so cities with walls may have been built to protect marketplaces and vendors. Some trace the birth of London to an ancestral 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 original function - Market Drayton, Market Harborough, Market Deeping, Market Weighton, Chipping.
Norton, Chipping Ongar and Chipping Sodbury (source: Wikipedia). “Chipping” is a derivation of a Saxon word meaning “to buy”.

Throughout history, cities, big and small, have served market functions for those who live in adjacent *hinterlands*. Some market cities grow much larger than others because they are more centrally located. Central location relative to other competing marketplaces is another example of an ideal *situation factor*. Large cities generally have excellent site and situation characteristics. Every major US city, including New York, Chicago, Los Angeles, Atlanta and Houston are located ideally for 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 only those with quality *site* factors, like good port facilities and varied transportation options grow large. Cities ideally located *between* major markets for exports and imports have excellent *situation* factor advantages versus other competing cities, and will grow most.

Most large cities in the United States emerged where two or more modes of transportation intersect, forming what geographers call a *break of bulk* point. Breaking bulk happens whenever 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 or port or station attracted workers. Los Angeles, Chicago, New Orleans and Houston all grew very large because each was well served by multiple transportation modes.

**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 of specific advantages in transportation. Early on, Boston and Philadelphia were larger, but New York City’s *break of bulk* advantages helped it immensely. Key among the factors helping New York outcompete rivals were its additional transportation options. First, it had a port on the Atlantic Ocean. Second, it had the navigable Hudson River, which served inland cities far from the ocean via riverboat and barge. Then, in 1825, the [Erie Canal](https://en.wikipedia.org/wiki/Erie_Canal) opened, effectively connecting the Atlantic Ocean with Lake Erie and all the markets of the Great Lakes Region via New York City. The canal was a massive advantage. With the opening of the canal, agricultural products coming from the Midwest could be transported across the Great Lakes and 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 had to be unloaded at the port in New York City. The additional jobs working at docks and warehouses attracted other industries and a snowball effect was achieved by the mid-1850s that made New York City, for a time, the largest city in the world.
**Rivers**

Most all cities are established along rivers of some sort. Obviously, rivers provide freshwater 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 the by far the most efficient way to transport heavy cargo, especially over long distances. Interestingly, the *interruptions* to river navigation were most often responsible for creating conditions that attracted settlement and favored growth.

Waterfalls were for many years a complete nuisance to river traffic, but they also are responsible for a number of cities. Not only do waterfalls provide a source of power for industry (see *fall line* cities below), but they also create special kind of *break of bulk point* called a *head of navigation*. At a waterfall, people had to stop, get out of their boats and carry the boat, and their cargo. 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.

Those process of carrying boats and/cargo between two navigable stretches of the river (or to another river) is called *portage*. Towns evolve where important portages zones arose. Indiana, New York, Ohio, Wisconsin, Michigan and Maine all have municipalities named “Portage”, but the most important portage zone in the United States appeared in Chicago, Illinois. Just southwest of what is now downtown Chicago, near Midway Airport was a portage zone where the Chicago River, which flows north into the Lake Michigan nearly intersected the Des Plaines River, which flows southward into the Mississippi River system. Around 1850, 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 other locations in the Midwest.

Business people value *break of bulk* because they offer opportunities for warehousing and manufacturing. Those industries not only attract migrants seeking work, but also additional
transportation modes, which in turn create even more jobs. For example, the completion of the Illinois-Michigan canal in 1848 made Chicago an especially attractive terminus for multiple railroad companies that sprang up in the 1850s. It took Chicago just over 30 years to grow from the 100th most populous American city to the number two spot. Later still, interstate highways and airline routes also converged on Chicago.

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 simpler at a ford. Bridges funnel overland traffic to specific points, and provide another break of bulk opportunity, especially if the river is navigable.

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.

**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 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.

Los Angeles remained a small town until the Santa Fe/Southern Pacific railroad opened a second transcontinental railroad terminus in L.A. in 1881. Not long afterward, the local port facilities at San Pedro were upgraded and L.A. began competing with San Francisco for business. With the invention of refrigerated boxcars and the discovery of oil in the region, L.A. grew quickly. Good weather helped encourage migrants to journey westward to take jobs in the petroleum and citrus industries. The same great weather helped attract the movie and aeronautical industries decades later. Water resources though have remained a problem. The Los Angeles River was never sufficient to serve the needs of 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.
Central Place Theory

Under very unusual circumstances, one might find that among a group of cities, no single city has special site location advantages over others. This might happen out on a vast plain, like in Kansas, where there are no navigable rivers, waterfalls or ports. In instances like this, situation advantages come to the fore and a regular, geometric pattern of cities may emerge. This process was more pronounced when transportation was primitive and the friction of distance was great, but it can still be witnessed by picking up a map of almost any flat region of the earth. Geographer Walter Christaller noticed the pattern and developed the Central Place Theory to explain the pattern and the logic driving it forward.

Figure 0:13: 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 (like farmers) diffuse evenly across a plain (as they were when Kansas opened for homesteaders), a predictable hierarchy of villages, towns and cities will emerge. The driving force behind this pattern is the basic need everyone has to go shopping for goods and services. Naturally, people prefer to travel less to acquire what they need. The maximum distance people will travel for a good or service is called the range of that good or service. Goods like a hammer have a short range because will not travel far to buy a hammer. A tractor, because it is an expensive item, has a much greater range. The cost of getting to a tractor dealership is small in relationship 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.
Each merchant and service provider also requires a minimum number of regular customers in order to stay in business. Christaller called this number the \textit{threshold population}. A major league sports franchise has a threshold population of probably around a million people, most of whom must live in that teams range. There’s only 30 Major League Baseball teams in the United States, and the team with the smallest market (Milwaukee Brewers) has a threshold population of 2 million people. An ordinary Wal-Mart store probably has threshold of about 20,000 people, so they are far more numerous. Starbuck’s Coffee shops probably have a threshold of about 5,000 people or less, because they are so numerous.

When customers and merchants living and working on featureless plain interact over time, some villages will attract more merchants (and customers) and grow into towns or even cities. Some villages will not be able to attract or retain merchants and they will not grow. Competition between towns on this plain prevents neighboring locations to grow simultaneously. As a result, centrally located villages tend to grow into towns at the expense of their neighbors. A network of centrally located towns, will emerge and among these towns only a few will grow into cities. One very centrally located city may evolve into a much larger city.

The largest cities will have business and functions that require large thresholds (like major league sports teams or highly specialized boutiques). People from villages and small towns can access only the most basic goods and services (like gas stations or convenience stores), and are forced to travel to larger cities to buy higher order goods and services. Those goods and services not available at the nearest large city (regional service center) require customers to travel further. Some goods and services are only available at the top of the \textit{urban hierarchy}; the mega-cities. 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.
Urban Morphology
You've probably visited several large cities and noticed how differently they are organized. If you've visited New York, London, Tokyo, Paris or Chicago you might find some of them confusing or disorienting because they're “laid out” differently than your home city. The “look” or “shape” of a city is known as its urban morphology, and it offers strong clues into the evolution trajectory of a city. More importantly, the morphology of a city is a potent element shaping the daily interactions among people who live in each city.

Consider for example, how the Californians often talk about the radical differences between Los Angeles and San Francisco. The differences are partly by product of the migration streams that populated each city generations ago, but the profound differences in their basic physical geography have in turn led to different urban morphologies. A recursive relationship between each city’s urban morphology and its political culture seems to have led to significant differences in public transportation, housing, culture and politics.

During the early 20th century a number of geographers, sociologists and anthropologists trying to understand how cities worked, developed a variety of urban morphology models to help describe and explain various types of cities and the neighborhoods within them. Many of these models were suggested by scholars at the University of Chicago, a city that had undergone incredible growth in the previous century.

Concentric Ring Model
Ernest Burgess argued that cities have zones 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. Just outside the CBD is a pair of zones; the “inner city” and the “zone of transition”. In these areas, one can find very high concentrations of people, often living in high-rise apartments or tenements. Industrial uses are also common, but this is common 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. They sometimes have a small yard and a garage, but people are as likely to rent as they are to own their homes and they generally work in the nearby factories or in low paying jobs in the CBD. Beyond the working class housing are the suburbs. Homes out in this zone are larger, with yards and garages. Homeowners are likely to be part of the middle class. Beyond the suburbs are the more distant commuting zones. Upper middle class folks may live here in houses on very large lots, with winding driveways. Also at this distance are the “septic tank strips”, homes for working class people who trade more space and/or “country living” for much longer commutes than their experience by their counterparts in the working class zone.

The *Concentric Ring Model* accurately describes only a few American cities, generally on the plains in the Midwest where few physical barriers exist, allowing the suburbs to grow steadily in all directions. This model also works best in cities that never developed a robust public transportation system. Columbus, Ohio and Indianapolis, Indiana are two examples.

**Sector Model**

Homer Hoyt, a land economist, proposed an alternative to the concentric ring model known as the *Sector Model*. Hoyt argued that neighborhoods in cities are mostly arranged in wedge shaped zones. In the Sector Model, the CBD remains in the middle, but stretching away from the CBD along rail lines and highways are zones for residential and industrial uses. Hoyt’s model accounts for the effect of transportation routes, and even prevailing wind patterns on the location of specific urban land uses.

According to this model, in regions of the city with a significant industrial transportation route (rail, barge, freight), industrial corridors will develop. The noise and pollution of these zones drive all but the poorest residents away from these areas. In these zones, almost everyone rents. In Chicago, several of these industrial corridors stretched outward from the CBD along railroad lines and the Illinois-Michigan industrial canal. Adjacent to the industrial corridors are the lower middle class or working class zones, where factory workers live in single-family homes and duplexes that are a mixture of owner-occupied and rentals. 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 at work as well. Further out are suburban areas and
exurbs, much like one finds in the concentric zone model.

Hoyt’s also proposed an elite zone, for the upper middle class and handful of upper class
people who live in a district built around a grand boulevard. In Chicago, that elite district
was along Michigan Avenue, leading northward from downtown along the Lakefront. In
many American cities, the elite district is the “west side” 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 the region where poorer people live.

Chicago, Buffalo, Cleveland and Detroit are cities that 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 transportation routes.

**Multiple Nuclei Model**
Many of the cities that grew rapidly after
World War II did so *without* a robust public
transit system. Without efficient commuter
rail systems, cities like Los Angeles, Phoenix,
Dallas and Atlanta evolved very different from
older cities in the Northeast. Post-war boom
cities all have a CBD and an inner city area,
but those areas are not as large, nor as
important to the city as the CBDs of older rail-
oriented cities in the East and Midwest.
Instead, in these newer cities, multiple small
business districts popped up, scattered around
the metro area. Some of these districts
compete with the historic CBD for common
downtown businesses like banks, insurance
companies, realty and legal affairs (FIRE
industries). 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.

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 occur
anywhere zoning laws permitted. In western cities, zoning laws are often far less rigid than
in the East, so the pattern of industrialization in these cities is sometimes random.
Residential neighborhoods of varying status also emerged in nearly random fashion as well,
creating “pockets” of housing for both the rich and poor, alongside large zones 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 that are easy to read by outsiders who have been to other similar cities.

**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 along which housing for the city’s elite was built stretched away from the central plaza and served as both a parade route and opulent promenade. For some blocks outward from this elite spine was built the housing for the wealthy and powerful.

The rest of the city was initially left for the poor, because there was almost no middle class. The poor built houses close the central plaza where jobs and conveniences existed. Over time, the houses built by the poor, perhaps little more than shacks, 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 that is always being upgraded. At the edges of the city are always the newest residents, often *squating* on land they do not own.

The main difference between North American and Latin American cities is where the poor live. In most US cities, the urban poor live near downtown. 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, fresh water, 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 the 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. Residents in squatter zones may walk several hours before they even reach the terminus of urban bus lines in places like Lima, Peru or Sao Paulo, Brazil. It is for these reasons that people in the Latin American middle class people do not “trade up” for a house in the suburbs, as is the case in the United States. Latin American suburbs are poorly served by services and only the poorest of the poor live along the outer rim of Latin American cities. Over time, governments will build water lines, sewers, electricity lines and streets out to the squatter zones and residents there will, like their inner-city predecessors, begin the process of improving and enlarging their homes.

City Life

Where you live 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 them because neighborhoods are vernacular regions. Each person has a sense of where neighborhood boundaries are drawn, but those boundaries are open to debate. Census tracts and ZIP codes sometimes function as proxies for neighborhood, but they do not always work well in that capacity. In some parts of the city, citizens have very specific ideas about neighborhoods. Gangs, for example, often mark very specific territories to warn rival gangs and locals of their presence.

Neighborhoods

Most neighborhoods don’t have organized gangs, but still people with long-term commitments to homes and neighbors do engage in a number of group behaviors to protect their turf, or as they would say “property value”. 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 seen as unsavory by outsiders. 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, generally sex crime offenders, from moving in the neighborhood. Because many of these same individuals are less concerned when the same factories, stores or people invade other neighborhoods, the term “not in my backyard” or “NIMBY” was coined to characterize local militancy. Generally, neighborhoods with wealthier people, more politically active populations and/or
areas with 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 book *City of Quartz*.

When residents in a neighborhood lack the money, political organizational skills or the motivation to protect themselves from disamenities, significant neighborhood degradation is possible. When that degradation effects the health of a local population that largely belong to a minority group, the term environmental racism is sometimes applied to describe the situation. What is racist is often hard to discern because cause and effect is rarely obvious. Was a neighborhood polluted before minorities moved there, or did polluters move in after the minorities moved in? Did minorities populate polluted neighborhood voluntarily, or were the forced to live there? Poverty is frequently at the root of these issues. Poor people of all ethnicities can rarely afford to live in neighborhoods that have the outstanding schools, parks, air quality, etc., and so they are often able to afford to live only in the most dangerous, toxic, degraded neighborhoods. Racism is certainly a common variable in the poverty equation, but it is rarely the only one.

**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) were rooted in systemic racism. However, economic decisions also factor prominently in the lifecycle of a neighborhood. As housing ages, it tends to become less desirable. Middle class people move out and buy new homes. The lower classes move into the older homes, frequently as renters. Often the poor live in older, multi-family dwellings or apartments. Roofs and pipes leak, heating and cooling systems get comparatively less efficient, neighborhoods become congested, etc. So folks with enough money to move into newer houses and/or newer neighborhoods that offer (for some) a better quality of life.

**Suburbanization**

Suburbs first appeared in the United States in the mid-1800s as urban passenger rail lines extended beyond the limits of the pre-industrial, pedestrian oriented cities. Rail allowed some of the upper middle class to join the upper class in housing located outside the traditional city limits in communities sometimes called streetcar suburbs. Upon the introduction of inexpensive automobiles and a quality road network, suburbanization began moving along quickly in the United States.
during the 1920s. The Great Depression and World War II halted suburbanization for two decades, but by the 1950s, suburbs were exploding. The rise of suburbs in the post WWII era introduced profound changes to American cities. Many families found themselves able to exchange a new house for an old one, a big yard for a small one, new schools, malls, parks and hospitals for old, broken or crowded urban amenities. It’s the American dream for loads of people. The US and many local governments were eager to help people achieve those dreams, and created a number of financial incentives to make suburban dreams inexpensive, but government policies created a number of unintended consequences.

The Federal Housing Authority (FHA), created in 1934 as one of Franklin D. Roosevelt’s New Deal projects, was tasked with ensuring that housing was built safely while encouraging banks to make loans to people seeking to buy new homes or repair older homes so they were suitable to sell. The FHA was part of a grand scheme to stimulate the housing sector of the economy during the Great Depression, but also to provide government help and oversight to the home loan industry. The program worked in that it increased overall homeownership from around 40% at the start of the Great Depression to around 70% in recent years. The biggest jump in home ownership came shortly after World War II, after the economy recovered and millions of veterans were 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. Faced with the option of buying a cheaper, but nicer home in a new neighborhood or staying in the expensive, crowded city, those who could made the logical choice to move. Since many of those who qualified for loans were white and not in poverty, the government helped increase residential segregation by encouraging white flight from the cities. Meanwhile, minorities faced still with racist deed restrictions in many new suburbs, found themselves stuck in the city, where the FHA’s mortgage assistance programs were far less helpful.

Redlining
Some have argued that FHA policies encouraged a series of discriminatory mortgage and insurance practices, known as redlining. During the post-war era, banks, insurance companies, and other financial institutions would use a map to decide where not to do business. Residents in neighborhoods with a “red line” drawn around them would not be able to get loans to buy, repair or improve housing. Some couldn’t get insurance on what they 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. It appears that the main criteria for inclusion in a red-lined neighborhood was the percentage of minorities, therefore, most of the people who suffered from the ill-effects of redlining were minorities. African-Americans were harmed most often. Individuals with good credit histories and a middle class income could find it impossible to buy homes in specific neighborhoods. Redlining was a death sentence to neighborhoods. In 1968, the Fair Housing Act tried to outlaw redlining (and other forms of housing discrimination), but additional laws were needed to bolster the language in the 1970s, but by that time, long-term damage was evident in inner
cities across the United States. Although it’s illegal to discriminate against minorities (or anyone really) for non-economic characteristics, there is ample evidence to suggest it still occurs.

**Urban Renewal**

As many federal policies tore away at the fabric of American cities, the US government launched an effort known as urban renewal to reinvigorate urban cores of large cities. Legislators launched several programs to provide cities with funds to buy up land in degraded parts of the city, build public housing projects for the displaced and incentives for 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. Old parts of the city were ugly. By demolishing thousands of buildings and creating a clean slate, civic officials thought new investment would pour in, and new businesses and housing would rise up from the ashes. The displaced would be housed in new high-rise housing projects that were clean and efficient. In a few instances, it worked. New buildings with good paying jobs replaced abandoned old factories and warehouses. New apartments replaced dilapidated houses. Displaced folks moved to newer, cleaner safer housing elsewhere.

However, the failures outnumbered the successes by a wide margin. Frequently, thousands of residents, most of them poor and minority, were displaced from their homes and their neighborhoods and herded into overcrowded projects that were poorly built and maintained. Within a decade, “projects” became synonymous with segregation and crime (see ethnicity chapter for additional information). Some neighborhoods were split by massive highways or other transportation corridors, effectively rending the social fabric of communities and cutting off traffic to businesses that remained. Redevelopment efforts often turned out to be the products of 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 empty lots, wastelands with sidewalks where neighborhoods once stood.

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 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

Figure 0:22: 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.
 unsuccessfully starts and bankruptcy proceedings. For more than a decade, the property remained empty (Google Streetview). 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.

**Highways**

The other wildly important program sponsored by the Federal government encouraging suburbanization after World War II was the construction of the Interstate highway system. Originally, the new highways were designed 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 rapid deployment. Additionally, President Eisenhower, who was previously the Supreme Commander of Allied Forces in Europe, was impressed with how the German Autobahn aided the mobility of Nazi forces during World War II. So in 1956, at the urging of Eisenhower, congress passed the *Federal Aid Highway Act*, which dedicated billions of dollars to upgrade the domestic transportation network used by the US Armed forces. As soon as the stretches of these new, high-speed freeways were opened, it became clear that they would have a significant impact on suburban development.

As a rule, most folks consider one-hour the maximum desirable commute time. This was true when people walked to work, when they rode street cars or subways. Because the new highways were originally free from traffic congestion, people working in the inner city figured out they could move further from their jobs without increasing their commuting time. They might even find their commute faster once they moved out into the suburbs, where, for a time, housing was new, plentiful and cheap.

In some areas, entire small cities, with little to no base industry of their own, emerged on the outskirts of a larger city. These commuter towns, sometimes called bedroom communities, may get quite large in their own right. If a commuter town is separate from the city and its adjoining suburbs, these places are sometimes called exurbs. The distinctions get blurry though, because cities and their suburbs seem to spawl ever outward, gobbling up any undeveloped spaces on the edge of the suburbs.

Over the years, as suburban populations grew out-of-control and women entered the workforce, the highway networks became overloaded, unable to convey commuters quickly to work in the inner city. So some folks just found work in other suburbs. People who drive from one suburb to another are called lateral commuters. Other folks chose to move to the inner city and work in the suburbs in order to drive in the opposite direction of rush-hour traffic. Those that live in the city and commute outward to the suburbs are known as reverse commuters.

**Edge Cities**

Eventually, cheap suburban land and increased highway accessibility attracted some industrial land development as well. Factories, warehousing operations, retail and even
some information sector industries relocated to office parks in the suburbs. Some suburban sites attracted so many employers that they emerged as significant new nodes, or nuclei competing with historic urban cores for business supremacy (see the multiple nuclei model above). Joel Garreau, another non-geographer who does geography well, called these places *edge cities*, which are kind of the opposite of bedroom communities because such places have many businesses, but very few residents. Garreau set out a few rules to identify an edge city:

1. They must have at least 5 million square feet of office space
2. They must have at least 600,000 square feet of retail space
3. They must have more jobs than bedrooms
4. They must be recognized as a vernacular place by locals, not necessarily to outsiders
5. Didn’t exist in the 1960s.

Tysons Corner, Virginia is great example of this new urban form recognized by Garreau. In the 1960s, there was hardly anything there. 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, it would rank among the top 20 cities in the United States. All the locals known exactly where “Tysons” is, but hardly anyone outside of Northern Virginia has even heard of the place.

*America’s Suburb*

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 has neighborhoods with population densities in excess of 50,000 per square mile.
The Los Angeles area highway network, once a model of efficiency, is badly overburdened. US Highway 101 across the southern San Fernando Valley exceeded capacity in 1974, but development in far flung suburbs and exurbs extending well into neighboring Ventura County continues apace. The intersection of US 101 and Interstate 405, in the Southeastern corner of the San Fernando Valley consistently ranks as one of the most congested in the country.

Land developers stand to make fortunes from buying up large patches of agricultural 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 demands from middle class voters and working class people in the building trades, so there is often minimal resistance to pro-growth policies. As a result, poorly planned, sprawling suburbs leap frog each other outward from large cities.

Occasionally, there’s a backlash from opponents who favor less, 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*. Such 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 for the considerable *external costs* incurred by land developers, and those living in new suburbs. Ironically, the burden falls on partly on property owners in the inner city, diminishing the true value of housing there, and further stimulating growth in the suburbs.

**Neighborhood Life Cycle**

Housing stock in aging suburbs eventually goes through the same downward cycle that crippled older neighborhoods in the inner city. Older suburbs, especially pre-WWII era ones, are today filled with housing stock approaching 100 years old. These houses often aren’t big enough for the demands of modern families (and their cars), often need frequent maintenance and may not be stylish any longer. As a result, middle class families move out of these houses, whereupon the houses become rental properties and enter a cycle of disinvestment. Once again, the government encourages urban disinvestment, perhaps unintentionally, by providing tax breaks to rental owners for the *depreciation of value*. Renters themselves often misuse the housing they occupy, contributing little to the maintenance of the properties they don’t own and often don’t plan to occupy for the long-term. At some point, value of rental properties fall to the point that even minimal costs associated with maintenance and taxes become economically irrational for owners to pay. Buildings are abandoned and become the property of city government. Abandonment accelerates the collapse of value for neighboring buildings, creating a sort of death spiral of home values. The net result can be ruinous for any neighborhood.

The movement of capital, or investment money, can explain the entire lifecycle of any neighborhood. Banks and those looking to make money from real estate will take their money to places where the *return on investment* is perceived to be greatest, and financial risk lowest. After World War II, banks, the real-estate community and governments moved most of their investment money from the inner city to the suburbs. Homeowners who could move, and were permitted to do so, naturally followed because they too sought a good return on their biggest financial investment. Because there is a limited supply of investment money, inner cities got little or no (re)investment capital, and as a result spiraled downward very quickly. Still not all parts of the inner city completely collapsed. Some poor neighborhoods received large numbers of immigrant families, many of whom brought limited financial capital, but significant *human capital* into struggling...
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 neighborhoods abandoned by the banking system and the former, mostly white, occupants.

**Gentrification**

Occasionally, specific neighborhoods in inner city regions are radically redeveloped in a process known as *gentrification*. The term suggests that the “gentry” are moving to the city from landed estates, but that would be misleading. Rather, gentrification is a process that usually begins with people of lower social status gradually improving a neighborhood until people from higher social status consider it a desirable location, and begin occupying it. Gentrification does not typically involve people exchanging homeownership in the suburbs for residence in an inner city neighborhood, but instead is characterized by people buying their first homes in the inner city, or exchanging addresses within inner city neighborhoods.

There are many theories explaining the causes of gentrification that began in earnest in the United States in the early 1970s. Some theories point to the increasing number of high paying jobs in the inner city as the economic structure of the United States, shifted away from manufacturing toward high-tech and FIRE industries. Other theories suggest that changes in lifestyle and demographics are more important factors in gentrification. *Baby boomers* figured prominently among gentrifiers, and they unlike their parent’s generation, frequently delayed marriage and parenthood into their 30s. They also got divorced a lot. Therefore, they were more likely to spend a longer period of time unmarried, and they enjoyed living closer to nightclubs and other “courting” hotspots, most of which were located downtown rather than in the residential suburbs.

**The Organic Model**

One way gentrification seems to evolve is without significant assistance from the government or mainstream investors. In this *organic model*, a small nucleus of *bohemians*...
(artists, musicians, actors, etc.) begin to occupy a neighborhood. Impoverished by their vocational paths or career trajectory, they are drawn necessarily to places with cheap housing. Because these folks tend to be financially vulnerable, and drawn to cultural excitement, they tend to move into poor, culturally diverse neighborhoods. Generally without children, or family constraints, bohemians infuse into the neighborhood much needed sweat equity because standard financial capital is often unavailable. Unlike even immigrants or poor minorities, their lifestyle choices make bohemians ill-suited (and perhaps) unwelcome in traditional family-oriented suburban neighborhoods. This fact tends to keep them 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 the community improvement.

People in the LGBT community (some of whom are also bohemian) are also important gentrifiers in the organic model. Though often less impoverished than bohemians and occasionally well-paid, LBGT folks have likewise been constrained by cultural restrictions in terms of residence. Gay men, for example, built safe enclaves in many large cities where they could live in relative peace; largely free from both social scorn and violence exacted by homophobes and law enforcement officers in other parts of the city. Alongside bohemians, who welcome diversity, the LBGT community, brings both sweat equity and a long-term commitment to neighborhood stability. Alongside immigrants, poor whites and bohemians, the LBGT community helped build unusual neighborhoods, marked by eclectic mixtures of cultural amenities (restaurants, art galleries, theaters, etc.) and a vibrant nightlife (discos, bars, live music). Drawn by the excitement, entertainment and affordability of gentrifying neighborhoods, singles and young couples (both straight and gay) move in as well over time. Eventually real estate speculators and city officials began to take notice, and encourage further development in such areas.

**Economic Model**

Geographer Neil Smith offered a far more 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 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 so attractive they move their capital into renovating decrepit housing.
Certainly there instances where both individual, corporate and even municipal investors have sought to profit from by renovating beat up houses in degraded neighborhoods, but it seems unlikely that economic motives are capable of explaining all gentrification. Certainly, some gentrification projects undertaken by corporate real estate concerns (with significant tax incentives from the government), though attractive on paper, have failed to attract interest from would-be inner city home owners. Maybe they’ve just been poorly done, but it appears that consumers of cool housing are not entirely slaves to economic rationality.

It’s very likely that multiple forces act simultaneously encouraging gentrification. One alternative theory posits that TV shows airing in the early 1970s were possibly a factor in creating demand for gentrified housing. Attractive, young and cool characters on TV were often shown living in gentrified housing, in turn encouraging young, stylish couples and singles during this time to build hip self-identities by choosing to also live in gentrified housing, rather than staid suburban housing or modernist, glass-and-steel high rises.

Governments, especially municipalities desperately seeking to rebuild crumbling tax bases, embraced gentrification. During bad economic times, so many building owners abandoned rental properties, rather than pay upkeep or property taxes in America’s inner cities that many big city governments became the largest owner of properties in their respective urban areas. Unscrupulous landlords were known to set fire to degraded buildings in order 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 folks to move to other places. Gentrification helped put a stop to the financial death spiral affecting some cities.

Cities offered a variety of incentive programs to get people to buy and renovate homes. Tax breaks were common, particularly for corporate investors. One grassroots inventive program used by several cities was to sell houses for one dollar. In return, buyers had to agree to live in the house themselves for a period of several years. By living in the house, it was assumed that homeowners would fix and maintain the building. The idea was to offer low income residents affordable housing and in return the city would get some modest tax returns. 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).
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 projects forcibly remove poor people from their homes without adequate compensation, and without providing the displaced a means of securing viable, alternative housing. Probably more common is that housing values and rents rise, forcing some long-time residents of gentrifying neighborhoods to move to more affordable locations. 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 can’t 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. It can get violent. 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 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.

Transit Oriented Development – 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 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.
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 2013, about one-third of the entire homeless population were living as a member of family unit. One fourth of homeless people were children. In Los Angeles County at the same time, there were somewhere around 40,000 homeless people living either in shelters and/or on the street. Another 20,000 persons were counted as near homeless or precariously housed, typically living with friends or acquaintances in short-term arrangements.

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 people in a particular year, not only because during recessions people lose their jobs and homes, but because the stresses of poverty can worsen mental illness.

The government plays a significant role in the pattern and intensity of homelessness. Ronald Reagan is the politician most associated with the homeless crisis both nationally and in California. When Reagan became governor of California the late 1960s, 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 for-profit board and care homes. The idea was that people shouldn’t be locked up by the state simply for being mentally ill and that government-run facilities could not match the quality and cost-efficiency of privately run boarding homes. Many private facilities though were badly run, profit-driven, located in poor neighborhoods and had little professional staff. 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 ensured an explosion of mental illness related homelessness. Most funding has never been restored, though the Obama administration has aggressively pursued policies aimed at housing homeless veterans.

**Homeless Shelters**

Though homeless people come from many types of neighborhoods, facilities for serving homeless populations are not well distributed throughout the urban regions. Many cities have a region known as *Skid Row*, a neighborhood unofficially reserved for the destitute. Apparently, the term 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 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. Today, it is home still to a number of cheap hotels and numerous homeless shelters, but almost all residents of Skid Row were born and raised elsewhere, generally in locations *without* homeless shelters (see NIMBYism). Over the years, city
officials and law enforcement have attempted to “clean up” Skid Row, without much success because the underlying causes of homelessness are not solved by police sweeps, and arresting people for living in abject poverty on public spaces remains illegal.

**LANDSCAPES OF HOMELESSNESS**

Geographers with a developed awareness of landscapes may be able read the landscape of homelessness, even when homeless people themselves are not present. Some elements are obvious and others not so. 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.

<table>
<thead>
<tr>
<th>“Burn Proof” benches</th>
<th>Tarps and Cardboard Shelters</th>
<th>“No Trespassing” signs in public spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>A long list of “don’ts” provided at public buildings</td>
<td>Abundant security cameras</td>
<td>Cardboard pieces littering sheltered locations, especially after a rain. Smell of urine.</td>
</tr>
</tbody>
</table>

Table 1: The Landscape of Homelessness: Photos of downtown Los Angeles, where homelessness is largely invisible during the day, but many landscape features provide clues to the vigilance of officials to keep homeless people out of sight. Photos: Heather McDaniel, Jason Larson, Mark Barker.
City as Place

In one way, cities are vast, complex machines that produce goods and services, but that way of conceiving the city overlooks very real emotional qualities that define almost any location. Most people would argue that cities have personalities; qualities that define them as a place. People who live in particular cities often develop a sort of tribal attitude toward their city. This attitude is reflected most visibly in the very real, emotional attachment citizens have to their 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.

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 enormous storehouses of knowledge about specific places (New York, Paris, Hollywood), even though they have never even visited. We also have powerful ideas about generic places, “small towns”, “the suburbs”, “the ghetto”, even though we may not have visited these places either. 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 and we must seek to understand what purposes these constructions 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, despite that fact that we are hard pressed to identify how we came to understand the symbolism associated with these places.

Meinig’s first symbolic landscape is the sleepy New England Village, with its steepled 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, and 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 landscapes. Think of those

*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 location – 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 L.A. band, 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 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. Click to listen to some PG rated cuts below.

<table>
<thead>
<tr>
<th>Song</th>
<th>Artist</th>
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</thead>
<tbody>
<tr>
<td><em>Sweet Home Chicago</em></td>
<td>Buddy Guy</td>
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<tr>
<td><em>I Love L.A.</em></td>
<td>Randy Newman</td>
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<tr>
<td><em>New York, New York</em></td>
<td>Frank Sinatra</td>
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<tr>
<td><em>Lights</em> (San Francisco)</td>
<td>Journey</td>
</tr>
</tbody>
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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 spatial dimension to it, and exchanges occur on a number of 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 society works in general. People who understand how the economy works well can persuasively answer almost any question one might envision about culture, politics, religion, ethnicity and dozens of other areas of concern. 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 particular college. If you see the power of money at work in nearly everything and every place, you might find some value in the political-economic ideology of Marxism, particularly the methodology of Historical Materialism. You might also 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 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.

Economic Sectors

Nearly everyone has to 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 that things that are 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 known as autarky, or complete economic self-sufficiency. Since almost no group is able, or willing, to live separate from all other economies, nearly every group engages in trade or some sort. Locations unable to produce any good or service worthy of trade will be economically weak, and may disappear altogether without an ability to engage in trade.
Basic and Non-Basic Industries

**Basic industries** are economic activities that attract trade from outsiders, bringing wealth in a local region from some other region. These are *export industries*. An obvious example of a basic industry is the oil extraction industry in Saudi Arabia (or Texas). Essentially every local economic system must have at least one basic industry, sometimes called its *base industry*. Such industries define a location’s economic independence from neighboring economies. Without a base industry, all the people in a town would move away from their hometown, or they would take jobs in a neighboring town/city – and their hometown would cease to have a local economy.

**Non-basic industries**, on the other hand, are economic activities that do not attract wealth from outside the local economy. Most dentist offices are non-basic industries because Dentists very rarely attract customers from out of town. Many service sector jobs are non-basic in nature, but not all of them.

**Primary Sector**

Traditionally, communities created 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 may develop economically much faster than others. In those locations where the earth provides opportunities to extract or harvest a particularly valuable commodity, like oil, wealth is likely to accumulate locally. Where the earth offers little, people are poor.

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 healthy economy. A principal factor in the poverty of a variety of locations around the globe is a underdeveloped primary sector. People in some places just can’t coax or pull anything out of the ground or the water valued by outsiders.

A vibrant primary sector often provides quality jobs for locals, and brings in ample money from outside that locals may invest in developing other sectors of the economy. However, in many locations, 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 Appalachia is a great example. Jobs in underground coalmines were especially dangerous for generations of men who braved the mines. The lack of quality alternatives in this region made coal mining the most attractive job among a bad set of options. Many migrated to Appalachia expressly to work in coalmines. While coal mining jobs allowed families to stay in the mountains, where farming was difficult, families often remained deeply impoverished. Miners made reasonably good wages, but because many mine sites were so geographically remote, mine owners sometimes set up company towns, where nearly all the houses, stores and services were owned by the company. Some companies paid workers exclusively in company scrip, rather than dollars, forcing all workers to shop only at company stores. Massive strikes during both world wars helped coal miners increase their wages and benefits, but safety has remained an issue. Tens of thousands were injured or killed in mine US accidents during the war years; many more wound up suffering from a variety of long-term health impairments, like black lung.

Perhaps worst of all, the vast fortunes made from coal largely escaped Appalachia, ultimately lining the pockets of coal company executives and company shareholders living elsewhere and replicating in a primary industry the multiplier leakage effect. Because the most profits escaped the local economy, little cash remained to invest in socially productive infrastructure, like schools and universities that might have paved the way for greater economic diversification. Today, once thriving mining towns that lost the ability to sell coal, are often abandoned (or nearly so). In Appalachia, exhaustion of coal reserves, and environmental regulations undermining the sale of high-sulfur coal have crippled the regional coal economy in the last few decades. Similar conditions and processes characterize other extractive industries, including logging, fishing, farming and quarrying.

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, corn meal, fish sticks, etc.) Generally, the transformation of natural resources into a finished product is called “manufacturing”, but secondary industries also includes things we might not consider “manufacturing”, like oil refining and food processing.
Like extractive industries, manufacturing has great benefits and dire consequences if industrialists manage them poorly. Because manufacturers convert items of little use value (like a log) into something with greater use value (like a dining room table), manufacturing activity often generates large unit profits or value added. Sometimes, if labor conditions are right, some of the value added during the manufacturing process is passed on to workers in the form of higher wages. For much of the 20th century, good paying manufacturing jobs led to a high quality of life for American workers. Many of those jobs have disappeared, victims of international competition.

**Factors of Production**

Land, labor and capital traditionally constitute the main costs of building and running any business, especially manufacturing. Together these factors are known as the factors of production. The costs and availability of each of these factors are critical in profitability of businesses, and therefore are critical in the decision making processes that lead industrialists to pick one location rather than another to build a factory. 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.

**Labor**

Ideally, factory owners would like to hire very high skilled workers, but compensate them as little as possible. Compensation includes wages of course, but in many instances includes things like health care, retirement and other fringe benefits. In low-skill occupations, for workers are able to master quickly various tasks necessary to produce a product. Therefore, industries that rely upon low-skill laborers are more likely to seek locations with a low cost of living because workers in such locations can be paid lower wages. Some industries require highly skilled worker, which reduces the number of locations where such industries locate.

If the cost of labor is a significant portion of the overall cost of producing of a good, and no significant restrictions on the movement of that industry exist, those industries may move to locations with cheaper labor. Industries that are able to move easily, without negative consequence to their profitability are footloose industries. The textile industry is a good example of a footloose industry.

**Textile Manufacturing**

In the United States, the manufacture of apparel was a key element of the early industrial revolution. Most of the early textile factories were in New England where factories were built to take advantage of the in numerous waterfalls occurring along the Atlantic Seaboard fall.
These factories used inexpensive female labor (mill girls) drawn from regional farming communities. Textiling endured in New England for several generations, relying increasingly on immigrant labor after American workers fled textiling 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 were moving to southern cities like Charlotte, North Carolina where land and labor were cheaper, and the main raw material, cotton, was cheaper to transport. Unfortunately for textile workers in the United States, the labor and transport advantages that lured factories to the rural south, also led them away. With the passage of the *North American Free Trade Agreement* (NAFTA) an estimated 300,000 jobs in the textile/apparel industry were lost, many to Latin America and Asia where wages are much lower. Many other industries also moved to Mexico, China and elsewhere seeking greater profits via lower wages.

Free trade agreements, like NAFTA are also occasionally responsible for the creation of manufacturing jobs in the United States. Some high-skill jobs left Mexico and came to the US. For example, Cummins, a manufacturer of diesel engines for large trucks and construction vehicles made engines in Mexico prior to NAFTA. After the free trade agreement reduced the *import tariffs* on American-made engines, the factory in Mexico closed and production relocated to Jamestown, New York.

The principle of *comparative advantage* is the key principle in economic geography responsible for the location and movement of industrial operations. Essentially, comparative advantage means that countries engaged in free trade must specialize in the production of goods in which it has an advantage in terms of efficiency. In other words, locations should focus on making those things they make cheapest and best. Locations should not try to build things that they cannot do well or cheaply. Industrial systems benefit because inefficient industries are eventually abandoned in favor of ones that are more efficient. Efficiency is profitable and consumers benefit because they can higher quality goods for less money.
Although wage competition and concerns about the quality of American-made goods undermined the health of American manufacturing during the 1970s, one of the biggest factors in the downfall of US manufacturing was the widespread adoption by the 1980s of the humble intermodal container. Invented in the 1950s, these rectangular metal boxes revolutionized the way goods are shipped. These containers were designed so they could be filled with cargo, stacked neatly, high upon one another (almost like Legos) maximizing the efficiency of transportation vehicles. Containers are also intermodal, which means that trucks, trains, barges and ships can all transport the same steel boxes. In addition, multiple shipping companies adopted a set of standardized designs that allowed companies to mix and match their cargo on a single transport carrier. The effect on the cost and speed of delivery is hard to overstate. In the 1950s, large cargo ships arriving at coastal ports required dozens of dockworkers (stevedores) many hours to unload. The process was slow, inefficient and very costly. Each break of bulk acted as a significant tax on the cost of each product every time it was 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 reload the cargo onto intermodal trains or a fleet of intermodal trucks in a matter of hours. Thousands lost their high paying jobs at the docks, and many more thousands lost their manufacturing jobs to overseas competition as the cost of transporting goods from places like China or Mexico fell substantially.
Import Substitution Development

Many countries, regions or locations find that adhering to the principle of comparative advantage works poorly for their economies and people. Politicians therefore create a variety of trade barriers to protect specific 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 specific policies of import substitution industrialization severely limiting the importation of specific manufactured goods so that their own infant industries could get a foothold. The strategy had some local successes, especially in terms of encouraging 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. These policies were discouraged by capitalist countries, like the United States, despite the fact that most economically developed countries, like the US, pursued similar protectionist policies during the 19th century. Import substitution policies had a mixed record of success in Latin America during the 20th century. Many of the overt import substitution policies were abandoned worldwide by the 1990s, partly upon the insistence of the International Monetary Fund, a global finance organization that refused to lend money to Latin American governments that insisted on protectionist policies. Though officially frowned upon by nearly every industrialized country today, nearly every government engages in a variety of clever protectionist practices designed to shield home industries from foreign competition.

Land

Land is another primary factor in the location of most industries. In some instances, industrial inputs are inexpensive to transport or ubiquitous. If the raw materials are cheap to move or found everywhere, then more options for industrial site location are possible, but even in the best of circumstances locations vary wildly in term of profitability.

Some land is just too expensive for industrial purposes. Factories are not built near downtowns anymore because cheaper land is available at the edges of cities where land is cheap and labor is available. Factories remaining in crowded, inner city neighborhoods often suffer from spatial diseconomies of scale if freight (truck) access is necessary. Despite being close to cheap sources of labor, the costs of taking delivery of materials and shipping finished product through congested street networks and jammed highways undermines profit. Access to less crowded freeways is ideal. Workers and materials can also easily access
the factory; finished products are easy to ship from the plant. If rail or water transport access is available at little extra cost, then the desirability of such a site would increase yet.

**Bulk Reducing – Bulk Gaining**

The type of nature of the manufacturing process also has implications for where some products are made. For example, if during the manufacturing process, the item being manufactured becomes much *cheaper* to ship than the raw material inputs, then it makes sense to manufacture it close to the source region of the raw materials. These are called *bulk reducing industries* because they get lighter during construction. These products are said to have a *raw material orientation*.

The lumber industry is a great example. It would be highly inefficient to ship thousands of unmilled logs directly to home improvement stores like Home Depot or Lowes. The logs are transported as little distance as possible, because they are expensive and bulky to transport, especially by truck. Sawmills are usually built near forests. Once at a sawmill, logs (timber) are cut into boards (lumber) that can be neatly stacked inside a truck or train so that it can be efficiently transported to market. A significant part of each log is unusable as lumber, but the shavings, saw dust, wood chips, etc. remaining after milling is used to make plywood, particle board or other wood products.

Another set of industries have the opposite location constraints. These are *bulk gaining industries* that have a *market orientation*. These sorts of industries make products that get heavier or more expensive 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. However, the main ingredient in a bottle of Coke is *water*. The logic of economic geography makes it irrational to ship a product, like Coke, that is mostly water from Atlanta to each of the markets in the world. Instead, Coca-Cola ships the *only* the syrup concentrate in large drums to thousands of...
bottling plants, where local water, sweeteners and carbonation are added to the concentrate inside the cans and bottles before they are sealed and ready for shipment. Each bottling plant is franchised, and each franchise is awarded a specific geographic distribution region in which it has exclusive rights to sell Coke. This system also explains why Cokes taste different in different places. Coke’s main ingredient, water, is local, and water tastes different in each town where Cokes are bottled.

Workers in industries with location constraints discussed above often make higher wages than those working elsewhere because factory owners cannot realistically threaten to move the factory elsewhere in search of lower wages. This is not always true, as is the case in the logging industry. Trees can be found in many places and sawmills are not capital intensive, so they can be shut-down and moved without a great loss of profit to a large corporation.

**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 a basic tool to consider a large number of weighted inputs. In its most basic format, Webers’ model uses only transportation costs, which means best place for a factory will be nearer the input or output with the highest associated transport costs. In the example on the right point S₄ has the highest transport costs, which draws Factory (F₁) to the bottom right of the triangle. Should the cost of transportation to T₁ (the town) increase significantly, the least cost location would move toward the top of the triangle. There is of course, a number of other factors worthy of consideration when building a new factory, but Weber’s model remains an important tool as people build factories today.

**Capital**

The final *factor of production* and therefore industrial site location consideration is *capital*, or, loosely, investment money. Investors are necessary for industrialization. Someone has to have the money to start businesses. Money can come from wealthy individuals, groups or banks that specialize in investment. Groups of investors, known as shareholders, own stocks in many companies, and therefore own, as a group, many factories. A special group of investors, known as *venture capitalists*, make high risk loans to startup companies in hopes of reaping great rewards if and when the fledgling company “makes it big”. Some locations have many venture capitalists or ordinary investors, other places do not.
Capital has other forms as well. Investments to upgrade existing factories, for example, have made workers far more productive, and occasionally 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 generally the greatest source of 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. In other parts of the world, especially Asia, governments very openly work with businesses to promote the interest of businesses.

Indirect government capital is the reason why factories do not simply locate in the locations with the cheapest labor. In recent years, many US jobs have gone to China where wages are low. So, why don’t factories move to Zaire, Haiti or the Guatemala, where wages are even lower?” The answer is government capital. Efficient governments, like China’s, work very closely with companies to attract the capital necessary to build and equip factories. Governments in other developing countries may not have the resources needed to attract foreign investors. Many governments are absurdly corrupt. So, even if factory owners wanted to locate where labor is cheapest, a variety of infrastructure investments (government capital) 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 workers educated workers, so governments have to invest in their children, and not just the boys. Workers must be reasonably healthy, so countries with government-run health care systems are especially attractive to factory owners because workers are healthy, and private companies do not pay for expensive health care insurance for each worker.

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 structures and cultural systems discourage or prohibit women from engaging in wage labor, the chances are poor that such locations will enter the modern world economy. Regions where conservative Islam, Hinduism and even Christianity are
dominant, educated women workers are hard to find. Other cultural elements that contribute to the likelihood of industrialization are things like worker honesty, loyalty and pliability, among others. Culture and economics have contributed to the redistribution of industrial patterns across the globe, and within the United States.

**MOTOWN VS SMALLTOWN**

Automobile manufacturing was for many years the most critical American industry. Its unquestioned headquarters was in Detroit, Michigan home to industrial giants Ford, General Motors and Chrysler. In the early years of the Automobile Age, Detroit had some geographic advantages over other competing cities. There were plenty of industrial laborers and a ready supply of hardwoods necessary for carriage and wheel making. A series of entrepreneurs, particularly Ransom Olds (Oldsmobile) and Henry Ford pioneered manufacturing strategies that focused on building cars for a mass market. Other companies soon emerged from the original companies and competition bred innovation.

By the 1970s, Detroit’s dominance in the automotive market and the lack of competition within the industry; it had become a three company *oligopoly*, led to industrial complacency. American cars in the 1970s were poorly built, overpriced and often gas-guzzlers even as oil prices skyrocketed. Enter the Japanese. Japan had been making small cars that were fuel-efficient for a number of years. They also had pioneered several manufacturing techniques and strategies that allowed them to make quality, reliable, cheaper than Detroit’s Big Three.

A significant retooling of the American automobile industry occurred starting in the 1980s, and a key element of it was the *spatial reorganization* of the industry. First, US, Japanese and German auto companies built new factories in the US, but none in Detroit. Michigan factories were closed. New factories were built, generally near, but not in, Cincinnati, Ohio, because it is a *least cost location* for both the receipt of parts into factories and the shipment of new cars to American consumers. BMW, VW and Mercedes Benz built factories further south, because more of their parts and customers were international. None of the factories were built in large cities. Automobile companies sought employees that were more rural, and therefore less troublesome (anti-union, pliable, hardworking) and happier with their pay in a low cost environment. Small town plants became the rule. Marysville, Ohio; Georgetown, Kentucky; 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.

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Figure 0:12: 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.
In the 1980s, American car manufacturers adopted another key Japanese business innovation called just in time delivery. Rather than holding large warehouses of parts (bumpers, tires, fenders) at the main assembly plant, companies like Honda order only the parts they plan to use assembling cars in the near future, eliminating most warehousing jobs in the supply chain. Quality control is better because if a supplier is sending defective parts, the problem can be immediately, before thousands of defective parts can be shipped to the main assembly plant. Suppliers to the main manufacturing plant therefore tend to be located within one day’s drive of the main assembly point. As a result, numerous small parts manufacturers spring up in small-towns circling the main assembly plant, connected together by a web of highways. Sub-assembly plants may compete to win contracts, and so may seek low cost, non-union labor in small towns. Generally this puts downward pressure on wages and creates anger among union workers.

Just-in-time manufacturing was in the 1980s very different from the supply chain strategies used by most American factories at the time. Consider that Ford’s River Rouge factory that at one time was largest integrated factory in the world, at over one-mile in length and over a mile wide. Iron ore went in one side and finished Mustangs came out the other end. On hundred miles of railroad tracks in 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 were inefficient. Production ended there in 2004, after nearly 80 years of operations.

Many quality union jobs were outsourced to non-union plants scattered around the Midwest. Workers lost leverage in their struggles against employers for benefits and wages.
However, just in time delivery creates an occasional opportunity for workers in a small subsidiary plants (making brakes, e.g.) to interrupt the entire supply chain, since no large inventory of any single part is kept at the main assembly plant. So, if workers in a key sector of the supply chain strike, not only is the main assembly plant crippled, but all the other parts suppliers 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 just-in-time style General Motors assembly plants to falter.

**Tertiary Sector**

The fastest growing sector of the American economy since 1970 has been the tertiary sector, often referred to as the “service sector”. In the simplest sense, people working in the tertiary sector deal with the products created in the primary and secondary sectors of the economy. This includes men and women who transport goods, sell goods or somehow help others use those goods. Service sector jobs do 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.

A generation ago, far more Americans worked in the primary and secondary sectors of the economy. Since the early 1970s, there has been a dramatic shift toward service sector jobs, which now account for more than three-fourths of all jobs. In some parts of the US, that percentage is even higher. A robust service sector can be a good thing, or a sign of a troubled economy, just as some service sector jobs are well-paying and 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, but paid good wages, such as automotive assembly line work. As those jobs disappeared in the 1970s, Americans turned to service sector jobs. For folks in some locations, the loss of manufacturing jobs has opened opportunities to get a clean, safe, well-paying service sector job. Other haven’t been so lucky, and they’ve been forced into low-paying service sector jobs. Unfortunately, most regions have not been able to attract high
paying service sector jobs. As a result, since the early 1980s, the lower middle class has gotten much smaller, while the size of lower middle class and lower class has exploded. At the same time, the pay for people in the upper middle class has grown. 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. Geographers measure wealth inequality with a statistic called the gini coefficient.

Gini coefficient

The gap between the rich and poor has widened over time, especially since 1980, when the United States not only underwent a significant economic restructuring away from manufacturing, but also adopted the logic of supply-side economics to restructure both the tax structure but also spending on public welfare.

In recent years the pattern of income equality in the United States has come to look much less like that found in Europe and Japan and more like that in the developing economies of Latin America. You should keep in mind, that the Gini coefficient is relative measure, 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. The economy has grown greatly since 1980, but little of the growth has gone to average Americans. The Great Recession of the last 10 years made it worse. Most of Americans therefore just feel poorer, which may seem silly a silly thing to worry about, but feeling poor has significant effects on things like health outcomes, crime and psychological health.

The Gini coefficient varies considerably within the United States – by state and by county. As mentioned earlier, income inequality is lower in many of the farming states where the national grid system created a vast number of equal-sized farms. Utah, with its unique religious, cultural and ethnic profile has the lowest 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.

In many of the poorest regions of the United States, low-paying service sector jobs dominate the local economy. The majority of 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. In fact, depending on the ownership of the retail operation, some stores effectively remove more money from the local economy than the jobs create, helping impoverish local people.


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, don’t often pay much and rarely do the 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. Their business model has negative consequences for the economic structure of towns or even regions with Wal-Mart stores. 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 the locally owned rivals. Manufacturers, transportation workers and even local radio/newspaper businesses suffer when Wal-Mart comes to town.

A large service sector can be beneficial if jobs are high 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 are generally well-paid. Tourism also thrives in Los Angeles and though there are many more low paying jobs (hotel workers, e.g.) in the tourism sector, it represents a significant source of basic income for the economy of Southern California.

Tourism
Tourism may be 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 the mountains or along seacoasts with little to offer other than scenery and relaxation can attract visitors, and their money.

Tourists are defined by their spatial behavior. 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 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. Generally, if you stay more than 24 hours in a ZIP code outside your own region, then you are considered a tourist. California is, by a wide margin, the top destination for Americans traveling with the US.

Tourism geography is an exciting sub-discipline within geography. Part of what makes it so interesting is analyzing wide variety of strategies and tactics used to attract visitors. Nice beaches and warm weather is clearly a major attractor (Hawaii, Florida, California), but people will also make their way to a desert wasteland if the right type of entertainment can be provided (Las Vegas). Amusement parks (Disney), historic sites (the Alamo, Washington...
monument), unusual natural features (Niagara Falls, Grand Canyon) and 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 attractions capable of 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). Similar ecotourism concerns may help protect endangered rainforests, the Serengeti Plains in Africa, glacial regions of the Arctic and Antarctica, among others.

Poorly managed, tourism fails to benefit local economies, causes environmental havoc and endangers local 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 may 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 the overtaxed sewage system that not designed to handle thousands of tourists. If you stay in an “All-Exclusive” resort (and there are many), your vacation dollars are probably paying local housekeepers, kitchen workers and maintenance men, but the profits are probably going back to 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 high 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, based essentially around San Jose is the gold standard to which other locations dream of emulating. 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 preceded the computing revolution. There to fuel high tech industries were a number of quality universities, chief among them Stanford, which actively engaged in a variety of close partnerships with local businesses, like Hewlett-Packard, Xerox and Bell Telephone. Luckily, there was also an ample pool of venture capitalists willing to take a chance investing in experimental electronics. However, those things alone don’t seem to explain the extraordinary success enjoyed by tech companies in the Bay Area. After all, lots of places in the US and elsewhere 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 as the pre-eminent center of high tech innovation in the world.

THE CREATIVE CLASS

An exceptionally geographic series of economic studies by economist 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. Florida argued that these locations stood out they each had permissive cultural environments that allowed the creative energy of individuals to flourish. Essentially, his argument was that in places where cultural innovation is encouraged, 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 incentives, along with government deregulation (lax environmental, bureaucratic rules).

By studying the characteristics of the high tech cities, like San Jose, Florida found little evidence supporting the neoclassical economic theory. Instead, he identified strong relationships between quality of life issues and the ability of high skill industries to attract and nurture talented people. The central part of his argument was that talented people were attracted to places that had a good quality of life; things like good schools, parks, health care and entertainment. More controversially, Florida posited that tolerance of diversity was the secret ingredient in the formula for attracting talent. He argued that creative people often embrace ideas and lifestyles out

![Figure 0.15: 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.](image)
of step with the mainstream, so places that allowed individuals to express their individuality (and creativity) without fear of personal, societal or industrial condemnation attracted and nurtured talent.

A key indicator of a place’s openness to creativity was its “gay friendliness”, which, of course, was misinterpreted as a threat to family values, etc. In reality, Florida explains that “gay friendly” places are also welcoming to a great variety of lifestyles, ethnicities and cultural orientations. Still, it is worth noting that an openly gay CEO, Tim Cook, runs Apple Inc., one of the most emblematic of all creative class companies. What is clear is that places where social conservatives discourage or “squelch” personal and/or industrial innovation, high tech does not evolve. Some locations force people to abandon their creative spirit or move. So oddballs with big ideas migrate to places like San Francisco, Boston or Austin, where people embrace diversity. Entire companies may move to creative cities in order to attract workers with creative ideas. Over several generations, the implications are significant. One analyst called the process, _The Big Sort_, leading another to predict that intolerance leads some locations into a “dumb state death spiral”

**FIRE Industries**

Finance, Insurance and Real Estate (FIRE) industries also have a definite spatial logic. New York is the clear leader in this sector of the economy, 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 even larger hinterlands. People and businesses require banking services, so populous regions need 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 the norm in business transactions, and those are easier under conditions of agglomeration.

**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 it certainly had (and continues) to have an unusually large number of insurance companies headquartered there, and nearly one-tenth of the 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 emerged nearby (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, Hartford has lost some insurance companies to structural change in the industry. Some simply moved to nearby locations where real estate was cheaper, and quality-of-life issues were better. Like many other cities specializing in FIRE industries, there was a huge gap between Hartford’s richest and poorest residents. While Hartford recently ranked as the world’s wealthiest metropolitan area in terms of Gross Domestic Product per Capita (GDP), it consistently has one of the highest poverty rates for a big city the United States (over 30% in 2012).

**Dover – The Credit Card Capital**

As you begin to develop a geographer’s habit of mind, and begin thinking spatially, you will notice the return address on some of your least favorite pieces of US mail is in 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. Nor do credit cards. Bank of America (now VISA) 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. Faced with virtually no cap on interest rates, and few other government regulations regarding how they treat customers, credit card companies in Delaware quickly became far more profitable than those operating elsewhere. Banks moved their credit card divisions to Delaware in droves. Utah and South Dakota have tried to emulate Delaware’s success by weakening laws protecting credit card users to some limited success. Variations in usury law in the United States create a wildly uneven distribution of predatory lending companies engaged in things like payday lending, car title lending and check cashing.

**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 is lost by companies that do a poor job locating factories or warehousing facilities. Geography offers many protections against costly mistakes. Geography also is a key element in expanding the customer base 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 are serving 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 to map and identify 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 less competition.

**LOCATION QUOTIENT**

Say for example, there are 10 hotels in your town, and 100 total businesses. So, ten percent of your 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 percent 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 could expect based on statewide trends. This might indicate that your town’s tourism industry is doing well, or that too many hotels operate in your town, and that some were destined to go out of business. You could repeat this calculation for every town in the state, and then repeat it again 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.

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.

**Site Location Analysis**

As the saying goes, “the three most important words in business are 'location, location, location!”' Picking out sites for new businesses or services is a key element in the success of many businesses. Site location analysis, a task of geographers working in location intelligence is a major source of high quality employment those with a geography degree. Many
companies, including McDonald’s, Kohl’s, Wal-Mart, and Sears 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 service center. 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, zoning laws, competition, the socio-economic, ethnicity and age structure of nearby customers or citizens and real estate costs among other things. Doing fieldwork to collect data about potential site locations is another important step in the decision making process.

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 if competing firms are selling a similar product, then 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 logic of their retail locations creates an incentive to agglomerate at a point that maximizes the potential number of customers.

Figure 0:18: 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. In order to capture the maximum number of customers, the Firm A (Amy in the graphic) should move next door to Firm B (Joe), thereby making itself an *intervening opportunity*. That way Firm A (Amy) can capture the maximum number of customers traveling along Main Street. If Firm B (Joe) is smart, it will then leap frog 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 and each is nearest 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 effectively 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 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 really worth it. Successful stores, according to the model are bigger, have highly desirable goods and lack competition. Those three elements are all calculated using the formula at the 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 formal millions of times over, permitting geographers to estimate the number 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*.

**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, which is a humanities-flavored component of cultural geography, features prominently in many contemporary marketing campaigns. Landscapes, because they are saturated with meaning, form an important component of a 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 2000’s Volkswagen had an entire series of car commercials featuring nothing more than cool people riding around in cool places. If you saw them, you may not have even known what product was for sale until the very end, when the VW slogan flashed across the TV screen. The message VW was sending was “buy this car and could be like the cool, youthful, urban people in this commercial.” Many marketing campaigns use the exact same strategy. Alcohol advertisements are especially fond of using landscape to see beer, wine and liquor. Corona Beer’s marketing campaign is a classic example. These ads never tell you the beer tastes great, they only try to get you to imagine yourself on a secluded, paradisiacal beach. They want you to associate luxurious relaxation on an exclusive beach with a relatively inexpensive beer; and perhaps help those who drink Corona to project an personal identity of 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.

This Family. In fact, an argument can be made that the Kennedy Family are the models for the A&F models. landscape is 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 there would suggest that the Abercrombie & Fitch 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 Kennedy

**Place Product Packaging**

Landscape geography also is an effective element of marketing outside of the ad world. Many chain stores use what geographer John Jakle calls *place-product-packaging* to help sell goods and services. Essentially, the goal is to attract repeat customers to chain or franchise stores through the architecture and landscape. By using a consistent architectural designs, interior décors, worker uniforms, logos and even parking lot layouts, customers know they can expect uniform service, product and price. Customers, especially tourists who are far from home, quickly learn that restaurants that looked exactly like those back home offered a safe and entirely “predictable oasis for strangers away from home”. Hotels (especially Holiday Inn) followed suit, because their operators know that most travelers are not interested in experimentation with food or lodging. This is especially true when families are travelling with children. Scads of other commercial interests have followed suit. It contributes greatly to the creation of placelessness discussed in an earlier chapter. However, strict conformity to corporate designs and architecture have loosened in recent years for most chains. McDonald’s and Holiday Inns don’t all look exactly the same today they way they did in the 1970s. Each business has long since established its reputation and do not need to 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 place is used to manipulate you as a consumer.

**Hamburger 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 American 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. But the white porcelain, glass and stainless steel motif is much older and is tied to suspicions Americans had about hamburger meat 100 years ago. Americans first began eating
hamburgers, as fast food around the turn of the 20th 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 to convince the public that ground meat 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 office aesthetic to assure the public that the food was safe. Even the cooks wore all-white uniforms, to mimic the uniforms 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 the most high-tech machinery, steamships and streamliner trains. Actual dining cars from railroads were used for several decades as hamburger stands. Today we call these places diners. Others tried to evoke through architecture the slick, luxurious ocean-going streamliners of the day. After the war, jet airplanes and spaceships served as inspiration for a period.

Once Americans were assured that hamburgers were indeed reasonably safe to eat, restaurant owners no longer needed to reference 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 was painted in brown, burnt orange and yellowish earth tones. Burger King, Wendy’s, Pizza Hut and a host of other retail chains followed suit.

By the 1990s however, the 1970s “environmental” look itself faded from fashion and a number of fast food chains adopted nostalgic looks, mostly in an attempt 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 more subtle, because they never really abandoned the 1950s motif in the first place.
Link Glossary:

Twitter Trend Map: http://trendsmap.com/

US Census Bureau:
- http://tigerweb.geo.census.gov/datamapper/map.html
- http://www.census.gov/geo/maps-data/maps/datamapper.html
- http://www.census.gov/2010census/popmap/

Centers for Disease Control:
- http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html
- http://www.cdc.gov/flu/weekly/fluviewinteractive.htm

British Broadcasting Center (BBC):

For Further Reading
http://billmoyers.com/content/epa-ghg-emissions/

http://www.smithsonianmag.com/science-nature/see-how-humans-have-reshaped-globe-interactive-atlas-180952971/

Starbucks in San Francisco: http://coolmaps.esri.com/Starbucks/
This glossary contains vocabulary terms and concepts either not yet available via Wikipedia, or inappropriately listed within Wikipedia.

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
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<tbody>
<tr>
<td>Huff Model</td>
<td>The Huff Model is used to calculate market areas for stores by generating the likely number of customers for stores competing in a region. Potential sales and profitability can be estimated for locations where customers live, once population, income and other variables are considered.</td>
</tr>
<tr>
<td>Intervening Opportunity</td>
<td>In business geography, an intervening opportunity is a location in which an opportunity is available between a customer and a store.</td>
</tr>
<tr>
<td>Place Product Packaging</td>
<td>A marketing strategy used by many chain or franchised businesses that build customer expectations for price, quality, etc. by creating retail sites with a common look and design features. McDonald’s and Holiday Inn helped pioneer this strategy.</td>
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