Chapter 1: Introduction to Human Geography

Mumbai, India
"Dragging myself out of bed for a 9:00 A.M. lecture, I decide I need to make a stop at Starbucks. “Grande coffee of the day, please, and leave room for cream.” I rub my eyes and look at the sign to see where my coffee was grown. Kenya. Ironically, I am about to lecture on Kenya’s coffee plantations. Just the wake-up call I need. When I visited Kenya in eastern Africa, I drove from Masai Mara to Kericho and I noticed nearly all of the agricultural fields I could see were planted with coffee or tea (Fig. 1.1). I also saw the poor of Kenya, clearly hungry, living in substandard housing. I questioned, “Why do farmers in Kenya grow coffee and tea when they could grow food to feed the hungry?” Trying to answer such a question sheds light on the complexities of globalization. In a globalized world, connections are many and simple answers are few."
Key Question

What is human geography?
What Is Human Geography?

Human Geography

Human geography focuses on:

• How people make places
• How we organize space and society
• How we interact with each other
• How we make sense of ourselves and others
What Is Human Geography?

• Advances in communication and transportation technologies are making places and people more interconnected.

• Economic globalization and the rapid diffusion of elements of popular culture, such as fashion and architecture, are making many people and places look more alike.
What Is Human Geography?

- **Globalization**: A set of processes that are increasing interactions, deepening relationships, and accelerating interdependence across national borders.

[Image: Levi's in Lucca, Italy]
What Is Human Geography?

• Geographers employ the concept of scale to understand individual, local, regional, national, and global interrelationships.

• What happens at the global scale affects the local, but it also affects the individual, regional, and national. Similarly, the processes at these scales influence the global.
Imagine and describe the most remote place on Earth you can think of 100 years ago. Now, describe how globalization has changed that place and how the people there continue to shape it and make it the place it is today.
Key Question

What are geographic questions?
What Are Geographic Questions?

Maps in the Time of Cholera Pandemics

• Medical geography: Mapping the distribution of a disease is the first step to finding its cause.

• Dr. John Snow, a noted anesthesiologist in London, mapped cases of cholera in London’s Soho District in 1854 and found a link to contaminated water.
What Are Geographic Questions?

Cholera:
• An ancient disease associated with diarrhea and dehydration
• Was confined to India until 1816
• Spread to China, Japan, East Africa, and Mediterranean Europe in the first of several pandemics: worldwide outbreaks
• Second pandemic: 1826–1837: North America
• Third pandemic: 1842–1862: England and North America
What Are Geographic Questions?

- Cholera has not been defeated completely.
- We expect to find cholera in places that lack sanitary sewer systems and in places that are flood prone.
The Spatial Perspective

• Immanuel Kant: We need disciplines focused not only on particular phenomena (such as economics and sociology) but also on the perspectives of time (history) and space (geography).
• The five themes of geography
• Cultural landscape
What Are Geographic Questions?

The Five Themes

• The National Geographic Society introduced the five themes of geography in 1986.
• The five themes were derived from geography’s spatial concerns.
What Are Geographic Questions?

First theme: Location

• Highlights how the geographical position of people and things on Earth’s surface affects what happens and why

• Helps to establish the context within which events and processes are situated
What Are Geographic Questions?

Second theme:
Human-environment interactions

• A spatial perspective invites consideration of the relationship between humans and the physical world.

• Asking locational questions often means looking at the reciprocal relationship between humans and environments.
What Are Geographic Questions?

Third theme: Region

- Features of the Earth’s surface tend to be concentrated in particular areas, which we call regions.
- Understanding the regional geography of a place allows us to make sense of much of the information we have about places.
Fourth theme: Place

- People develop a sense of place by infusing a place with meaning and emotion.
- We also develop perceptions of places where we have never been through books, movies, stories, and pictures.
Figure 1.7a
Figure 1.7b
Fifth theme: Movement

• Movement refers to the mobility of people, goods, and ideas across the surface of the planet.

• Spatial interaction between places depends on:
  • The distances among places
  • The accessibility of places
  • The transportation and communication connectivity among places
What Are Geographic Questions?

Cultural Landscape

• The visible imprint of human activity on the landscape
Sequent occupance refers to sequential imprints of occupants, whose impacts are layered one on top of the other, each layer having some impacts on the next.

Mumbai, India (left) and Dar-es-Salaam, Tanzania (right). Apartment buildings throughout Mumbai (formerly Bombay), India, are typically four stories with balconies. In Dar-es-Salaam, Tanzania, this four-story walkup with its laundry and other household items festooned on balconies and in doorways (right) stands where single-family African dwellings once stood, reflecting the sequential occupance of the city. © Alexander B. Murphy.
“Hiking to the famed Grinnell Glacier in Glacier National Park brings one close to nature, but even in this remote part of the United States the work of humans is inscribed in the landscape. The parking lot at the start of the six-mile trail, the trail itself, and the small signs en route are only part of the human story. When I hiked around the turn in this valley and arrived at the foot of the glacier, I found myself looking at a sheet of ice and snow that was less than a third the size of what it had been in 1850. The likely reason for the shrinkage is human-induced climate change. If the melt continues at present rates, scientists predict that the glacier will be gone by 2030.”
Geographers who practice fieldwork keep their eyes open to the world around them and through practice become adept at reading cultural landscapes. Take a walk around your campus or town and try reading the cultural landscape. Choose one thing in the landscape and ask yourself, “What is that, and why is it there?” How might the existence of that thing influence the future development of the neighborhood? Take the time to find out the answers!
Key Question

Why do geographers use maps, and what do maps tell us?
Why Do Geographers Use Maps, and What Do Maps Tell Us?

• Cartography: the art and science of making maps

• Reference maps: show locations of places and geographic features

• Thematic maps: tell stories, typically showing the degree of some attribute or the movement of a geographic phenomenon
Why Do Geographers Use Maps, and What Do Maps Tell Us?

• **Reference maps** focus on accuracy in showing the **absolute locations** of places, using a coordinate system that allows for the precise plotting of where on Earth something is.

• **Satellite-based global positioning system (GPS)** allows us to locate things on the surface of Earth with extraordinary accuracy.

• **Click here to view a description of NAVSTAR**, the system of orbiting satellites designed for Global Positioning.
Why Do Geographers Use Maps, and What Do Maps Tell Us?

- **Thematic maps:** tell stories showing the degree of some attribute or the movement of a geographic phenomenon.

- **Relative location:** describes the location of a place in relation to other human and physical features.
Why Do Geographers Use Maps, and What Do Maps Tell Us?

- Absolute locations do not change.
- Relative locations are constantly modified and change over time.
Mental Maps

- Mental maps are maps in our minds of places we have been and places we have merely heard of.
- Activity spaces are those places we travel to routinely in our rounds of daily activity.
- Mental maps include terra incognita, unknown lands that are off limits.
Why Do Geographers Use Maps, and What Do Maps Tell Us?

Figure 1.11
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Why Do Geographers Use Maps, and What Do Maps Tell Us?

Generalization in Maps

• Generalized maps help us see trends.

Figure 1.11
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Why Do Geographers Use Maps, and What Do Maps Tell Us?

Remote Sensing and GIS

• Geographers monitor Earth from a distance, using remote sensing technology that gathers data at a distance from Earth’s surface.

• Remotely sensed images can be incorporated in a map, and absolute locations can be studied over time by plotting change in remotely sensed imagery over time.
Figure 1.12 Concepcion, Chile.
Satellite image of the cities of Concepcion and Hualpen, Chile hours after an 8.8 magnitude earthquake occurred in 2010. The damage to the city is not noticeable in this satellite image except for the smoke plume from an oil refinery in the lower left corner.
Why Do Geographers Use Maps, and What Do Maps Tell Us?

Remote Sensing and GIS

• GIS (geographic information systems) compare spatial data by creating digitized representations of the environment, combining layers of spatial data and creating maps in which patterns and processes are superimposed.
Why Do Geographers Use Maps, and What Do Maps Tell Us?

Remote Sensing and GIS

- Geographers use GIS to analyze data.
- Geographers use GIS in both human and physical geographic research.

Click here to view an explanation of GIS and how they are implemented.
Why Do Geographers Use Maps, and What Do Maps Tell Us?

Remote Sensing and GIS

- The amount of data digestible in a GIS, the power of the location analysis that can be undertaken on a computer platform, and the ease of analysis that is possible using GIS software applications allow geographers to answer complicated questions.
- Geographic information science (GISci) is an emerging research field concerned with studying development and use of geospatial concepts and techniques to examine geographic patterns and processes.
The diffusion of diseases carried by vectors, such as the *Aedes* mosquito that transmits dengue, is not solely a result of the environmental factors in a place. I use disease ecology to understand the ways in which environmental, social, and cultural factors interact to produce disease in a place.

Maui, Hawaii

Through a combination of fieldwork and geographic information systems (GIS) modeling, I studied the environmental habitat of the *Aedes* mosquito in Hawaii and the social and cultural factors that stimulated the outbreak of dengue in Hawaii. When I went into the field in Hawaii, I observed the diversity of the physical geography of Hawaii, from deserts to rainforests. I saw the specific local environments of the dengue outbreak area, and I examined the puddles in streams (Fig. 1.15A) in which the mosquitoes likely bred during the 2001–2002 dengue outbreak.
Figure 1.15B. Total annual precipitation

Figure 1.15C. Average June Precipitation

Figure 1.15D. Average February minimum temperature

Figure 1.15E. Dengue potential areas
Key Question

Why are geographers concerned with scale and connectedness?
Why Are Geographers Concerned with Scale and Connectedness?

Scale has two meanings in geography:
1. The distance on a map compared to the distance on the Earth
2. The spatial extent of something
Why Are Geographers Concerned with Scale and Connectedness?

- Geographers’ interest in the scale involving the spatial extent of something derives from the fact that phenomena found at one scale are usually influenced by what is happening at other scales.
- The scale of our research matters because we can make different observations at different scales.
**Why Are Geographers Concerned with Scale and Connectedness?**

- The scale at which we study a geographic phenomenon tells us what level of detail we can expect to see.
- Geographers’ concern with scale goes beyond an interest in the scale of individual phenomena to how processes operating at different scales influence one another.
- Geographer Victoria Lawson: *Jumping Scale*: Politically rescaling activities
Why Are Geographers Concerned with Scale and Connectedness?

Regions

- A formal region has a shared cultural or physical trait. Example: French-speaking region of Europe
- In geography, a region constitutes an area that shares similar characteristics.
Why Are Geographers Concerned with Scale and Connectedness?

• A functional region is defined by a particular set of activities or interactions that occur within it. Ex: the City of Chicago

• Perceptual regions are intellectual constructs designed to help us understand the nature and distribution of phenomena in human geography.
Why Are Geographers Concerned with Scale and Connectedness?

Perceptual Regions in the United States
- Cultural geographer Wilbur Zelinsky identified 12 major perceptual regions on a series of maps in “North America’s Vernacular Regions.”
“Located in a predominately African American neighborhood in Montgomery, Alabama, the street intersection of Jeff Davis and Rosa Parks is symbolic of the debates and disputes in the American South over how the past is to be commemorated on the region’s landscape. The Civil War and civil rights movement are the two most important events in the history of the region.”
Why Are Geographers Concerned with Scale and Connectedness?

Culture
• Culture is an all-encompassing term that identifies not only the whole tangible lifestyle of peoples but also their prevailing values and beliefs.
• It is closely identified with the discipline of anthropology.
• Cultural geographers identify a single attribute of a culture as a culture trait.
Why Are Geographers Concerned with Scale and Connectedness?

Culture

• Culture complex: More than one culture may exhibit a particular culture trait, but each consists of a discrete combination of traits.

• A cultural hearth is an area where cultural traits develop and from which cultural traits diffuse.

• When a cultural trait develops in more than one hearth without being influenced by its development elsewhere, each hearth operates as a case of independent invention.
Connectedness through Diffusion

• Expansion diffusion: when an innovation or idea develops in a hearth and remains strong there while also spreading outward.

• Contagious diffusion: a form of expansion diffusion in which nearly all adjacent individuals and places are affected. Ex: Silly Bandz
Why Are Geographers Concerned with Scale and Connectedness?

- **Hierarchical diffusion** is a pattern in which the main channel of diffusion is some segment of those who are susceptible to (or adopting) what is being diffused. Ex: Crocs footwear.

- **Stimulus diffusion**: Not all ideas can be readily and directly adopted by a receiving population; yet, these ideas can still have an impact.
A. Contagious Diffusion

B. Hierarchical Diffusion

LEGEND
- Hearth
- Early diffusion
- Later diffusion
- Important person or place
- No diffusion

Figure 1.22
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Why Are Geographers Concerned with Scale and Connectedness?

Relocation Diffusion

• Occurs most frequently through migration
• Involves the actual movement of individuals who have already adopted the idea or innovation, and who carry it to a new, perhaps distant, locale, where they proceed to disseminate it
Once you think about different types of diffusion, you will be tempted to figure out what kinds of diffusion are taking place for all sorts of goods, ideas, or diseases. Please remember that any good, idea, or disease can diffuse in more than one way. Choose a good, idea, or disease as an example and describe how it diffused from its hearth across the globe, referring to at least three different types of diffusion.
Key Question

What are geographic concepts, and how are they used in answering geographic questions?
What Are Geographers Concepts, and How Are They Used in Answering Geographic Questions?

• Geographic concepts: Examples: place, relative location, mental map, perceptual region, diffusion, cultural landscape.

• Geographers use fieldwork, remote sensing, GIS, GPS, and qualitative and quantitative techniques to explore linkages among people and places and to explain differences across people, places, scales, and times.
What Are Geographers Concepts, and How Are They Used in Answering Geographic Questions?

Rejection of Environmental Determinism

- Environmental determinism holds that human behavior, individually and collectively, is strongly affected by, even controlled or determined by, the physical environment.
- Geographers argued that the natural environment merely serves to limit the range of choices available to a culture.
What Are Geographers' Concepts, and How Are They Used in Answering Geographic Questions?

Possibilism

- **Possibilism** is the doctrine that the choices that a society makes depend on what its members need and on what technology is available to them.
- Cultural ecology has been supplemented by interest in political ecology.
What Are Geographers Concepts, and How Are They Used in Answering Geographic Questions?

Possibilism

- Cultural ecology: an area of inquiry concerned with culture as a system of adaptation to and alteration of environment
- Political ecology: an area of inquiry concerned with the environmental consequences of dominant political economic arrangements and understandings
What Are Geographers Concepts, and How Are They Used in Answering Geographic Questions?

Today’s Human Geography

- Encompasses many subdisciplines, including political geography, economic geography, population geography, and urban geography.
- Human geography also encompasses cultural geography, which can be seen as a perspective on human geography as much as a component of it.
Choose a geographic concept introduced in this chapter. Think about something that is of personal interest to you (music, literature, politics, science, sports), and consider how whatever you have chosen could be studied from a geographical perspective. Think about space and location, landscape, and place. Write a geographic question that could be the foundation of a geographic study of the item you have chosen.
Additional Resources

Careers in Geography
www.aag.org

Geocaching
www.geocaching.org

Globalization and Geography
www.lut.ac.uk/gawc/rb/rb40.html

John Snow and His Work on Cholera
http://www.ph.ucla.edu/epi/snow.html

State of Food Insecurity in the World
www.fao.org

World Hunger
www.wfp.org

Google Earth
www.googleearth.com