

In virtually all cultures, people knowingly inhabit hazardous zones, especially floodplains, exposed coastal sites, drought-prone regions, and the environs of active volcanoes. More Americans than ever now live in areas likely to be devastated by hurricanes along the coast of the Gulf of Mexico and atop earthquake faults in California. How accurately do they perceive the hazard involved? Why have they chosen to live there? How might we minimize the eventual disasters? The cultural geographer seeks the answers to such questions and aspires, with other geographers, to mitigate the inevitable disasters through such devices as land-use planning.

Perhaps the most fundamental expression of environmental perception lies in the way different cultures see nature itself. Nature is a culturally derived concept that has different meanings to different peoples. In the **organic view**, held by many traditional groups, people are part of nature. The habitat possesses a soul, is filled with nature-spirits, and must not be offended. By contrast, most Western peoples believe in the **mechanistic view** of nature. Humans are separate from and hold dominion over nature. They see the habitat as an integrated system of mechanisms governed by external forces.

**Organic view of nature** The view that humans are part of, not separate from, nature and that the habitat possesses a soul and is filled with spirits.

**Mechanistic view of nature** The view that humans are separate from nature and hold dominion over it and that the habitat is an integrated system governed by external forces that the human mind can understand and manipulate.

It can be rendered into natural laws and understood by the human mind.

**Humans as Modifiers of the Earth** Many cultural geographers, observing the environmental changes people have brought, emphasize humans as modifiers of the habitat. This presents yet another facet of cultural ecology. In a sense, the humans-as-modifier school of thought is the opposite of environmental determinism. Whereas the determinists proclaim that nature molds humankind and ecocritics believe that nature presents possibilities for people, geographers who study the human impact on the environment assert that humans mold nature (**Figure 1.16**).

In addition to the deliberate modifications of the environment through such activities as mining, logging, and irrigation, we now know that even seemingly innocuous behavior, repeated for millennia, for centuries, or in some cases for mere decades, can have catastrophic effects on the environment. Plowing fields and grazing livestock can eventually denude regions. The increasing release of fossil-fuel emissions from vehicles and factories—what are known as *greenhouse gases*—is arguably leading to global warming, with potentially devastating effects on Earth's environment. Clearly, access to energy and technology is the key variable that controls the magnitude and speed of



**FIGURE 1.16** Human modification of Earth includes severe soil erosion. This asphalt road in Koh Chang, Thailand, has collapsed due to soil erosion. (Oleg D./Shutterstock.)

**THINKING GEOGRAPHICALLY** How can we adopt less destructive ways of modifying the land?

environmental alteration. Geographers seek to understand and explain the processes of environmental alteration as they vary from one culture to another and, through applied geography, to propose alternative, less destructive modes of behavior.

Cultural geographers began to concentrate on the human role in changing the face of Earth long before the present level of ecological consciousness developed. They learned early on that different cultural groups have widely different outlooks on humankind's role in changing Earth. Some, such as those rooted in the mechanistic tradition, tend to regard environmental modification as divinely approved, viewing humans as God's helpers in completing the task of creation. Other groups, organic in their view of nature, are much more cautious, taking care not to offend the forces of nature. They see humans as part of nature, meant to be in harmony with their environment.

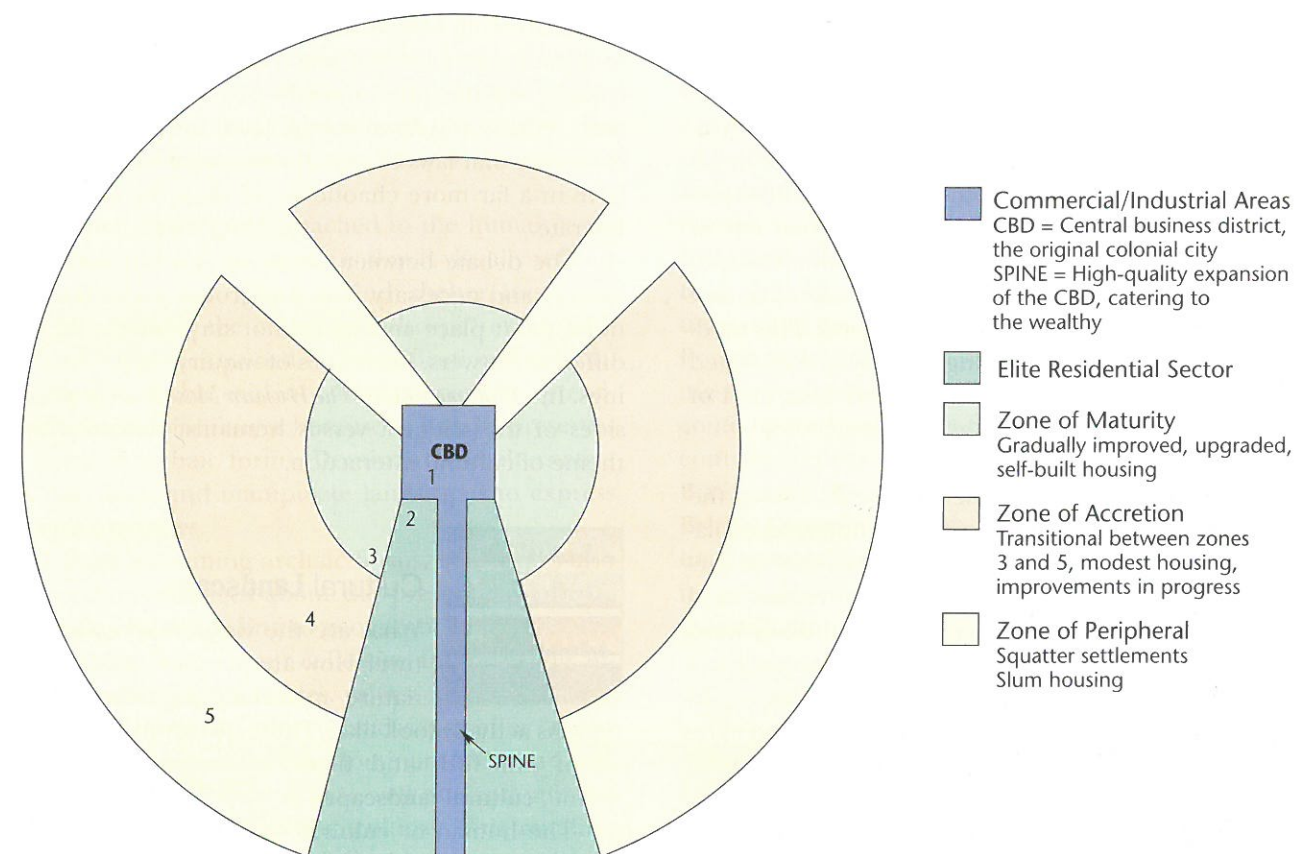


### Cultural Interaction

The relationship between people and the land, the theme of cultural ecology, lies at the heart of traditional geography. However, the explanation of human spatial variations also requires consideration of a whole range of cultural and economic factors. The cultural geographer recognizes that all facets of culture are systematically and spatially intertwined or integrated. In short, cultures are complex wholes rather than series of unrelated traits. They form integrated systems in which the parts fit together causally. All aspects of culture are functionally interdependent on one another.

The theme of **cultural interaction** addresses this complexity. Cultural interaction recognizes that (1) the immediate causes of some cultural phenomena are other cultural phenomena and (2) a change

**cultural interaction** The relationship of various elements within a culture.



**FIGURE 1.17** A generalized model of the Latin American city.

Urban structure differs from one culture to another, and in many ways the cities of Latin America are distinctive, having much in common with one another. Geographers Ernst Griffin and Larry Ford developed the model diagrammed here to help describe and explain the

processes at work shaping the cities of Latin America. (After Griffin and Ford, 1980: 406.)

**THINKING GEOGRAPHICALLY** In what ways would this model not be applicable to cities in the United States and Canada?

in one element of culture requires an accommodating change in others.

For example, religious belief has the potential to influence a group's voting behavior, diet, shopping patterns, type of employment, and social standing. Traditional Hinduism, the majority religion of India, segregates people into social classes called *castes* and specifies what forms of livelihood are appropriate for each. The Mormon faith forbids the consumption of alcoholic beverages, tobacco, and caffeine, thereby influencing both the diet and shopping patterns of its members.

Geographers have employed two fundamentally different approaches to studying cultural interaction: the scientific and the humanistic.

**Social Science** Those who view cultural geography as a social science, also called "modernists," believe that we should apply the scientific method to the study of people. Emulating physicists and chemists, they devise theories and seek regularities or universal spatial principles that cut across cultural lines to govern all of humankind. These principles ideally become

the basis for laws of human spatial behavior. **Space** is the word that perhaps best connotes this scientific approach to cultural geography.

Social scientists face several difficulties. First, they tend to overemphasize economic factors at the expense of culture. Second, they have no laboratories in which to test their theories. They cannot run controlled experiments in which certain forces can be neutralized so that others can be studied. Their response to this deficiency is a technique known as **model building**. Aware that in the real world many causal forces are involved, they set up artificial model situations in order to focus on one or several potential factors. **Figure 1.17** is an example of a model. Throughout *Fundamentals of The Human Mosaic*, we will see many of the classic models built by cultural geographers.

**space** A term used to connote the objective, quantitative, theoretical, model-based, economics-oriented type of geography that seeks to understand spatial systems and networks through application of the principles of social science.

**model** An abstraction, an imaginary situation, proposed by geographers to simulate laboratory conditions so that they may isolate certain causal forces for detailed study.

Some culture-specific models are particularly sensitive to cultural variables. Such models still seek regularities and universal principles but do so relatively modestly within the bounds of individual cultures. For example, several geographers proposed a model for Latin American cities in an effort to stress similarities among them and to understand underlying causal forces (Figure 1.17). No actual city in Latin America conforms precisely to this model. Instead, the model is deliberately simplified and generalized so that Latin American cities can be better understood. This model will look strange to a person living in a city in the United States or Canada, for it describes a very different kind of urban environment based in another culture.

**Humanistic Geography** If the social scientist seeks to level the differences among people in the quest for universal explanations, the humanistic geographer celebrates the uniqueness of each region and place.

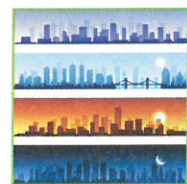
A term used to connote the humanistic, culturally sensitive type of geography that seeks to understand the unique character of all regions and places, rejecting the principles of science as flawed and objectively biased.

**Topophilia** Love of place; used to describe people who exhibit a strong sense of place and the geographers who are attracted to the study of such places and peoples.

Geographer Edward Relph tells us that “to be human is to have and know your place” in the geographical sense. To the humanist, cultural geography is an art rather than a science.

Traditional humanists in geography are as concerned with explanation as the social scientists, but they seek to explain unique phenomena—place and region—rather than seeking universal spatial laws. Indeed, most humanists doubt that laws of spatial behavior even exist. They believe in a far more chaotic world than the scientist could tolerate.

The debate between scientists and humanists is both healthy and necessary. The two groups ask different questions about place and space; not surprisingly, they obtain different answers. Both lines of inquiry yield valuable findings. In *Fundamentals of The Human Mosaic*, we present both sides of the scientist versus humanist debate within the theme of cultural interaction.



### Cultural Landscape

What are the visible expressions of culture? How are peoples' interactions with nature materially expressed? What do regions actually look like? These questions provide the basis of our fifth and final theme, **cultural landscape**.

**cultural landscape** The artificial landscape; the visible human imprint on the land.

The human or cultural landscape is composed of all the built forms that cultural groups create in inhabiting Earth—roads, agricultural fields, cities, houses, parks, gardens, commercial buildings, and so on. Every inhabited area has a cultural landscape, fashioned from the natural landscape, and each uniquely reflects the culture or cultures that created it (Figure 1.18). Landscape mirrors a



**FIGURE 1.18** Terraced cultural landscape of an irrigated rice district in Yunnan Province, China. In such areas, the artificial landscape made by people overwhelms nature and forms a human mosaic on the land. (Yann Layma/The Image Bank/Getty Images.)

**THINKING GEOGRAPHICALLY** Why is rice cultivated in such hilly areas in Asia, while in the United States rice farming is confined to flat plains?

culture's needs, values, and attitudes toward Earth, and the cultural geographer can learn much about a group of people by carefully observing and studying the landscape. Indeed, so important is this visual record of cultures that some geographers regard landscape study as geography's central interest.

Why is such importance attached to the human landscape? Perhaps part of the answer is that it visually reflects the most basic strivings of humankind: shelter, food, and clothing. In addition, the cultural landscape reveals people's different attitudes toward the modifications of Earth. It also contains valuable evidence about the origin, spread, and development of cultures because it usually preserves various types of archaic forms. Dominant and alternative cultures use, alter, and manipulate landscapes to express their diverse identities.

Aside from containing archaic forms, landscapes also convey revealing messages about the present-day inhabitants and cultures. According to geographer Pierce Lewis, “The cultural landscape is our collective and revealing autobiography, reflecting our tastes, values, aspirations, and fears in tangible forms.” Cultural landscapes offer “texts” that geographers read to discover dominant ideas and prevailing practices within a culture, as well as less dominant and alternative forms within that culture. This reading, however, is often a very difficult task, given the complexity of cultures, cultural change, and recent globalizing trends that can obscure local histories.



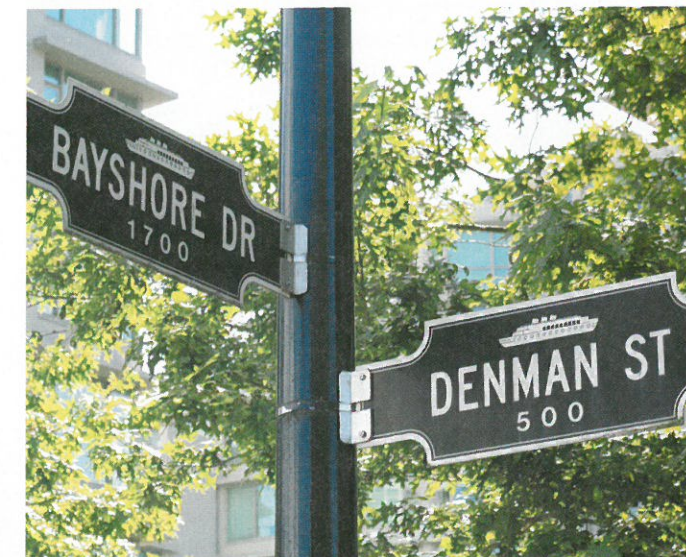
(a)

**FIGURE 1.19** Canadian street signs in (a) Montréal, Québec and (b) Vancouver, British Columbia. The street names in these two cities reflect different cultural histories and influences. Montréal is home to many French-speaking people and incorporates many aspects of French culture. Vancouver is a cosmopolitan city with English as its official language. (a: Athit Perawongmetha/Getty Images; b: Hisham Ibrahim/Alamy.)

Lewis attempted to simplify the reading of cultural landscapes by devising a set of five axioms (or rules) with a number of associated corollaries (something that naturally follows a stated rule). One such axiom in Lewis's work is the axiom of landscape as a clue to culture. This axiom states that cultural landscapes provide strong evidence of the people who live there and their history. In the regional corollary to this rule, Lewis states the following: If one region looks substantially different from another region, it is likely that the cultures of the two places are also different. Figure 1.19a shows French street names on signs in Montréal, Québec, reflecting the region's early settlement by the French as well as its contemporary use of the French language. Figure 1.19b, in contrast, reflects a settlement history dominated by the British and the use of the English language in Canada's British Columbia region. These clues to reading the cultural landscapes in these two regions of Canada lead us to investigate other cultural differences that may exist between them.

### REFLECTING ON GEOGRAPHY

As we will learn throughout this book, landscapes are often created from more than one set of cultural values and beliefs, which are often in conflict with one another. How then can we read conflict into the landscape, when it appears so natural and unified? What sort of information would we need?



(b)

**THINKING GEOGRAPHICALLY** What other examples of regional differences in the cultural landscape may provide clues to differences in cultural influence on those regions?

Since the time of Lewis's groundbreaking work in the 1970s, geographers have pushed the idea of reading the landscape further in order to focus on the symbolic and ideological qualities of landscape. In fact, as geographer Denis Cosgrove has suggested, the very idea of landscape itself was ideological, in that its development in the Renaissance served the interests of the new elite class for whom agricultural land was valued not for its productivity but for its use as a visual subject. Land, in other words, was important to look at as a scene, and the actual workings that were necessary for agriculture were thus hidden from these views. If you go to an art museum, for example, it will be difficult, if not impossible, to find in the Italian Renaissance room any landscape paintings that depict agricultural laborers.

Closer to home, we need only look outside our windows to see other symbolic and ideological landscapes.

**Symbolic landscape** Landscape expresses the values, beliefs, and meanings of a particular culture.

One of the most familiar and obvious **symbolic landscapes** is the urban skyline. Composed of tall buildings,

many of which house financial service industries, it represents the power and dominance of finance and economics within that culture (**Figure 1.20**). However, other cities are dominated by tall structures that have little to do with economics but more with religion. In medieval Europe, for example, cathedrals and churches rose high above other buildings, symbolizing the centrality and dominance of Roman Catholicism in this culture.

Even the most mundane landscape element can be interpreted as symbolic. The typical middle-class suburban American or Canadian home, for example, can be interpreted as an expression of a dominant set of ideas about culture and family structure (**Figure 1.21**). These homes are often composed of a living room, dining room, kitchen, and bedrooms, all separated by walls. The cultural assumptions built into this division of space include the assumed value of individual privacy (everyone has his or her own bedroom); the idea that certain functions should be spatially separate from others (cooking, eating, socializing, sleeping); and the notion that a family is composed of a mother, father, and children (indicated by the "master"

**FIGURE 1.20 Yokohama at dusk.** This skyline is a powerful symbol of the economic importance of the world's largest city, Tokyo-Yokohama. (Jose Fuste Raga/CORBIS.)

**THINKING GEOGRAPHICALLY** What landscape form best symbolizes your town or city?



**FIGURE 1.21 American ranch house.** The horizontally expansive ranch is a common house form in the United States and Canada. (iStockphoto/Thinkstock.)

**THINKING GEOGRAPHICALLY** Can you think of other countries where ranch houses are common?

bedroom and smaller children's bedrooms). Thus, even the most common of landscapes can be seen as symbolic of a particular culture.

**Aspects of the Cultural Landscape** As we have seen, the physical content of the cultural landscape is both varied and complex. To better study and understand these complexities, geographical studies focus on three principal aspects of landscape: settlement forms, land-division patterns, and architectural styles.

In the study of **settlement forms**, geographers describe and explain the spatial arrangement of buildings, roads, and other features that people construct while inhabiting an area.

**settlement form** The spatial arrangement of buildings, roads, towns, and other features that people construct while inhabiting an area.

**nucleation** A settlement form characterized by density.

**dispersed** A settlement form in which people live relatively distant from one another.

One of the basic ways in which geographers categorize settlement forms is to examine their degree of **nucleation**, or the relative density of landscape elements. Urban centers are of course very nucleated, whereas rural farming areas tend to be

much less nucleated, what geographers call **dispersed**. Another common way to think about settlement forms is the degree to which they appear standardized and planned, such as the grid form of much of the American West (**Figure 1.22**), versus the degree to which the forms appear to be organic (that is, to have been built without any apparent geometric plan), such as the central areas of most European cities. Thinking about settlement forms in terms of these two basic categories helps geographers begin their analysis of the relationships between cultures and the landscapes they produce.

### Land-division patterns

indicate the uses of particular parcels of land and reveal the way people have divided the land for economic, social, and political uses. Within a particular nucleated settlement form—a city, for example—you can see different patterns of land use. Some areas are devoted to economic uses, others to residential, political (city hall, for example), social, and cultural uses. Each of these areas can be further divided. Economic uses can include offices for financial services, retail stores, warehouses, and factories. Residential areas are often divided into middle-class, upper-class, and working-class districts and/or are grouped by ethnicity and race (see Chapter 11). Such patterns, of course, vary a great deal from place to place and culture to

**land-division pattern** The spatial pattern of various types of land use.

**FIGURE 1.22 The town of Westmoreland in the Imperial Valley of California.** It's difficult to find a more regularized, geometric land pattern than this. (Jim Wark/Airphoto.)

**THINKING GEOGRAPHICALLY** Why do you think geometric patterns dominate the western United States?





**FIGURE 1.23 Architecture as a reflection of culture.** (a) This log use near Ottawa, Canada, is a folk dwelling that stands in sharp contrast to the professional architecture of (b) the Toronto skyline. Courtesy of Terry G. Jordan-Bychov; b: Photodisc/Getty Images.)



(b)

**THINKING GEOGRAPHICALLY** What conclusion might a perceptive person from another culture reach (considering the “virtues” of height, durability, and centrality) about the ideology of the culture that produced the Toronto landscape?

## Key Terms

absorbing barrier, 12  
adaptive strategy, 17  
architectural style, 26  
border zone, 6  
contagious diffusion, 11  
core-periphery, 6  
cultural adaptation, 17  
cultural diffusion, 10  
cultural ecology, 16  
cultural geography, 3  
cultural interaction, 20  
cultural landscape, 22  
culture, 2  
culture region, 4  
cybergeography, 12  
dispersed, 25  
ecosystem, 16  
environmental determinism, 17  
environmental perception, 19  
expansion diffusion, 10  
formal culture region, 4  
functional culture region, 7  
geography, 2  
globalization, 13

hierarchical diffusion, 10  
independent invention, 10  
land-division pattern, 25  
mechanistic view of nature, 20  
migration, 13  
model, 21  
natural hazard, 19  
neighborhood effect, 13  
node, 7  
nucleation, 25  
organic view of nature, 20  
permeable barrier, 12  
physical environment, 3  
place, 22  
possibilism, 17  
relocation diffusion, 10  
settlement form, 25  
space, 21  
stimulus diffusion, 11  
symbolic landscape, 24  
time-distance decay, 12  
topophilia, 22  
transnationalism, 13  
uneven development, 15  
vernacular culture region, 8

ulture, as we will see throughout this book. One of the st ways to glimpse settlement and land-division patterns through an airplane window. Looking down, you can see e multicolored abstract patterns of planted fields, as vivid any modern painting, and the regular checkerboard or aotic tangle of urban streets.

Perhaps no other aspect of the human landscape is as adily visible from ground level as the **architectural style**

**architectural style** The exterior and designs and layouts of the land and physical landscape.

of a culture. Geographers look at the exterior materials and decoration, as well as the layout and design of

e interiors. Styles tend to vary both through time, as cul- res change, and across space, in the sense that different ltures adopt and invent their own stylistic detailing ac- rding to their own particular needs, aesthetics, and de- es. Thus, examining architectural style is often useful en trying to date a particular landscape element or en trying to understand the particular values and be- fs that cultures may hold. In North American culture, ferent building styles catch the eye: modest white New gland churches and giant urban cathedrals, hand-hewn rns and geodesic domes, wooden one-room school- uses and the new windowless school buildings of urban as, shopping malls and glass office buildings. Each tells something about the people who designed, built, or abit these spaces. Thus, architecture provides a vivid ord of the resident culture (**Figure 1.23**). For this rea- n, cultural geographers have traditionally devoted con- erable attention to examining architecture and style in e cultural landscape.

## Geography on the Internet

You can learn more about the discipline of geography and the subdiscipline of human geography on the Internet at the following Web sites:

### American Geographical Society

<http://www.amergeog.org/>

America's oldest geographical organization, with a long and distinguished record; publisher of the *Geographical Review*.

### Association of American Geographers

<http://www.aag.org/>

The leading organization of professional geographers in the United States. This site contains information about the discipline, the association, and its activities, including annual and regional meetings.

### National Geographic Society

<http://www.nationalgeographic.com/>

An organization that for more than a century has served to popularize geography with active programs of publishing and television presentations prepared for the public.

### Royal Geographic Society/Institute of British Geographers

<http://www.rgs.org/>

Explore the activities of these allied British organizations, whose collective history goes back to the Age of Exploration and Discovery in the 1800s.

## Recommended Books on Cultural Geography

Anderson, Kay, Mona Domosh, Steve Pile, and Nigel Thrift (eds.). 2003. *Handbook of Cultural Geography*. London: Sage Publications. An edited collection of essays that push the boundaries of cultural geography into such subdisciplines as economic, social, and political geography.

Conzen, Michael P. (ed.). 2010. *The Making of the American Landscape*, 2<sup>nd</sup> ed. New York: Routledge. A collection of essays examining environmental and cultural forces, from early American Indian landscapes to contemporary landscapes of mass culture, that have shaped the visual character and geographical diversity of settled America.

Cosgrove, Denis. 1998. *Social Formation and Symbolic Landscape*. Madison: University of Wisconsin Press. The landmark study that outlines the relationships between the idea of landscape and social and class formation in such places as Italy, England, and the United States.

Foot, Kenneth E., Peter J. Hugill, Kent Mathewson, and Jonathan M. Smith (eds.). 1994. *Re-Reading Cultural Geography*. Austin: University of Texas Press. A beautifully compiled representative collection of some of the best works in American cultural geography at the end of the twentieth century and a useful companion to the book edited by Wagner and Mikesell.

Goudie, Andrew. 2000. *The Earth Transformed: An Introduction to Human Impacts on the Environment*, 5<sup>th</sup> ed. Cambridge, MA: MIT Press. A fine introduction to the theme of cultural ecology—in particular, habitat modification—as viewed by a British geographer.

Mitchell, Don. 1999. *Cultural Geography: A Critical Introduction*. New York: Blackwell. An introductory text on cultural geography that emphasizes the material and political elements of the discipline.

Oakes, Timothy S., and Patricia L. Price (eds.). 2008. *The Cultural Geography Reader*. New York: Routledge. A collection of 52 classic and contemporary readings in cultural geography that discusses key geographic concepts and their connections to other disciplines and academic traditions from both the United States and the United Kingdom.

Radcliffe, Sarah (ed.). 2006. *Culture and Development in a Globalizing World: Geographies, Actors, and Paradigms*. London: Routledge. A series of essays that provide case studies from around the world showing the various ways that culture and economic development are integrally related.

Tuan, Yi-Fu. 1974. *Topophilia: A Study of Environmental Perception, Attitudes, and Values*. Englewood Cliffs, NJ: Prentice-Hall. A Chinese-born geographer's innovative and imaginative look at people's attachment to place, a central concern of the cultural approach to human geography.

## Journals in Human and Cultural Geography

*Annals of the Association of American Geographers*. Volume 1 was published in 1911. The leading scholarly journal of American geographers.

*Cultural Geographies* (formerly known as *Ecumene*). Volume I was published in 1994.

*Journal of Cultural Geography*. Published semiannually by the Department of Geography, Oklahoma State University, Stillwater, OK. Volume 1 was published in 1980.

*Progress in Human Geography*. A quarterly journal providing critical appraisal of developments and trends in the discipline. Volume 1 was published in 1977.

*Social and Cultural Geography*. Volume 1 was published in 2000 by Routledge, Taylor, & Francis Ltd. in Great Britain.

## Answers to Thinking Geographically Questions

**Figure 1.1:** Both mark off sacred space from its surroundings; both are built in traditional styles; both are carefully maintained. The external symbols are different, as are the architectural styles.

**Figure 1.2:** A major force would be climate: sufficient water (but not too much) and warm temperatures for wheat growing, plus flat land for fields. Another important force is dietary preference.

**Figure 1.3:** The gun is obviously a piece of introduced technology. The dogs' harnesses also appear to be made from materials brought from elsewhere.

**Figure 1.4:** Most cultures are separated by a transition zone where characteristics of one culture gradually replace those of the neighboring one, rather than a sharp dividing line.

**Figure 1.5:** Identification of the border is difficult at best. In the background there appears to be rural farmland, but even that is dependent on the city core—the node—for important services like banking, medical care, legal services, stores, and (because Denver is a state capital) government.

**Figure 1.6:** A major divide is still the former East Germany, which poorer, has major pollution problems, and even has slightly different speech patterns from the western part of the country. Although the religious configuration is more complex, after movements of population in the late twentieth century, religion still instills different worldviews and concepts of right and wrong behavior. Differences in landholding laws can be extremely persistent and require special accommodation.

**Figure 1.7:** Silicon Valley and the Lower Rio Grande in Texas are amplexes. You may know of other examples from your local area.

**Figure 1.8:** The American West, Siberia, and the African bush are macular regions that are imagined by most people to be wild, remote, hostile environments. They loosely correspond to climate zones but have formally undefined boundaries.

**Figure 1.9:** Answers will vary, but people who live outside the Riviera define the region by its extreme affluence and “society life,” while people who live or vacation there may characterize it more by its desirable climate and amenities than by its affluence.

**Figure 1.10:** Centers of power, such as government, financial institutions, and cultural institutions, are frequently located in large cities, where individual leaders often live.

**Figure 1.11:** Answers will vary, but it is likely that Facebook usage will continue to spread and may eventually decline as new social working forms (and sites) develop and the novelty of Facebook diminishes.

**Figure 1.12:** Your answers will vary depending on your acquaintance with world regions. The Middle East, especially Turkey; India and South America; and China and Southeast Asia may be surprisingly high.

**Figure 1.13:** American and European cities probably do not display many African influences because Americans and Europeans are generally less interested in adopting cultural trends and ideas from Africa than Africans are in copying trends from the United States or Europe. The United States and Europe have longstanding worldwide reputations for being on the vanguard of new ideas, offering affluent lifestyles.

**Figure 1.14:** Both cities, as they grew, had to face the challenge of connections to a hinterland across considerable bodies of water. However, internally, Chongqing allowed the street pattern to follow the lay of the land because the leaders felt no compulsion to do otherwise. (In flatter areas, Chinese cities were carefully laid out in a square.) San Francisco shows the imposition of the modern grid pattern from the initial Spanish settlement and the public land survey. In this way, leaders faced certain needs but had the flexibility of solving the problems in different ways.

**Figure 1.15:** Answers will vary, but it is likely that people surviving the 2011 Japanese disaster will feel more fearful and wary of the

physical environmental forces that could affect their region in the future. They may also become less trusting of technology's ability to protect them against such events.

**Figure 1.16:** Erosion can be controlled by allowing trees and grass to continue to grow, because they hold the soil in place. Also, clear-cutting promotes erosion, so forests that are more selectively cut can be a controlling factor. Roads can be engineered to keep soil in place and follow contours.

**Figure 1.17:** In the United States and Canada, the outskirts (the light yellow, labeled 5) tend to house the wealthy and middle-class residents in suburbs. Slums tend to be in the center of town, just outside the central business district. North American cities have less self-built housing.

**Figure 1.18:** In Asia the pressure of population has led to turning steep slopes into farmland by terracing them (which also helps to control the flow of water). In the United States, there is sufficient farmland (and a smaller population dependent upon it), so there is less pressure for additional farmland created this way. The mainstream American diet is also based on wheat, rather than rice, as the staple grain, so that the market demands less rice production.

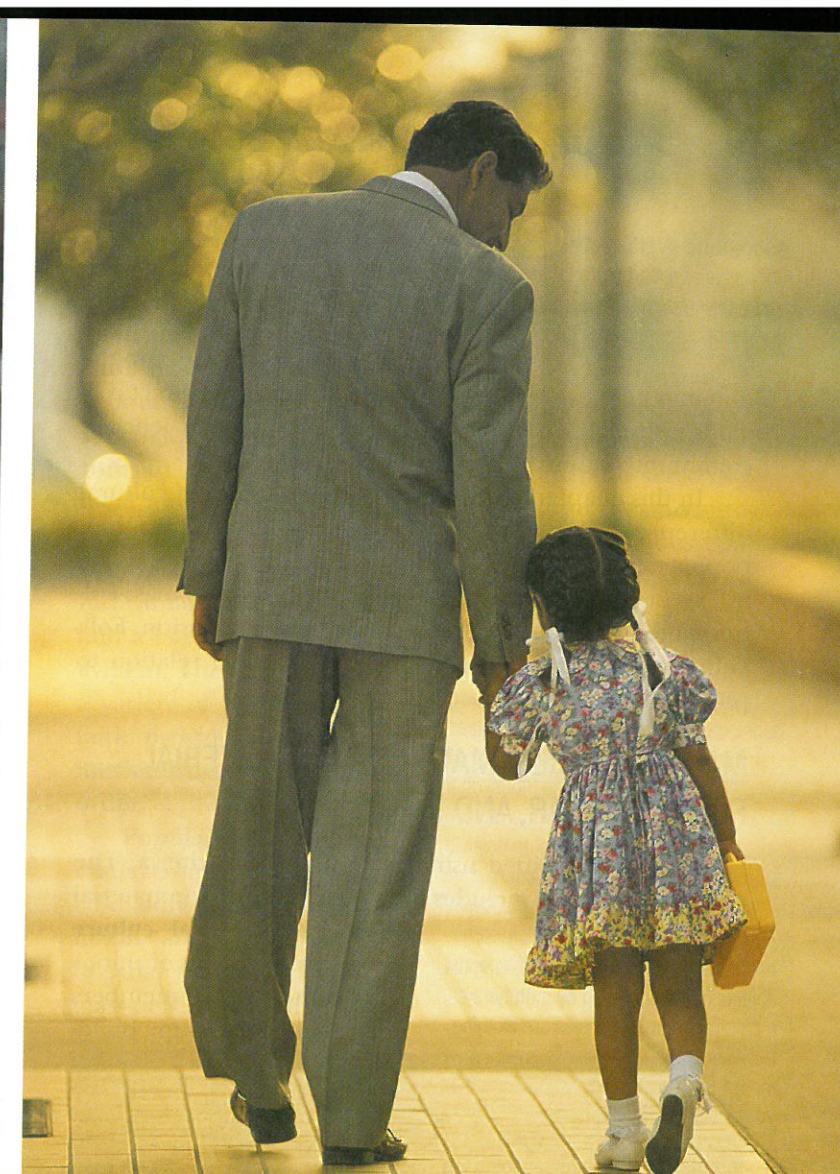
**Figure 1.19:** Answers will vary, but you may find such clues in (1) the architectural styles of houses in a particular region (e.g., wood-frame cabin-style houses in the American Midwest or ranch-style adobe houses in the American Southwest) or (2) the types of ethnic restaurants in a particular region (e.g., Mexican restaurants in the American Southwest, Cuban restaurants in Miami).

**Figure 1.20:** Answers will vary, depending on landmarks in your home city. Among the possibilities are the hills and major bridges of San Francisco, the skyscrapers of New York, the historic buildings of Boston, and the adobe (and its replication) of Santa Fe.

**Figure 1.21:** Such houses, often called bungalows or villas, are common in Australia and New Zealand, and they have also been widely built in Great Britain.

**Figure 1.22:** The Public Land Survey (Township and Range Survey) was devised to make the legal description, and thus the subdivision and sale of, land in the West easy to attract settlers. Americans regarded “taming the wilderness” as a manifest destiny and responsibility. Because cadastral (land-ownership) patterns are so durable, the result has been a landscape of rectangular parcels and fields.

**Figure 1.23:** Toronto's highest buildings are centrally located, and they are built of durable materials (reinforced concrete and structural steel). The highest buildings are commercial structures, not buildings for religious purposes, indicating that the most important activity is economic. Even residences (high-rise apartment buildings) are tall.



Two American father-daughter couples. (Left: Richard T. Nowitz/Corbis; Right: Rob Gage/Getty Images.)

## Folk and Popular Cultures

# 2

No matter where you live, if you look carefully, you will be reminded constantly of how important the expression of cultural identity is to people's daily lives. The geography of cultural difference is evident everywhere—not only in the geographic distribution of different cultures but also in the way that difference is created or reinforced by geography. For example, in the United States, the history of legally enforced spatial segregation of “whites” and “blacks” has been important in establishing and maintaining cultural differences between these groups.

In Chapter 1 we noted that cultural geographers are interested in studying the geographic expression of difference both among and within cultures. For example, using the concept of formal region, we can identify and map differences among cultures. This sort of analysis is usually done on a very large geographic scale—a continent or even the entire world. Geographers are also interested in analyses at smaller scales. When we look more closely at a formal culture region, we begin to see that differences appear along racial, ethnic, gender, and other lines of distinction. Sometimes

