Human Geography: Culture, Society and Space

Here you will find the outlines for the Human Geography: Culture, Society and Space, 8th Edition Textbook. These AP Human Geography outlines will help you prepare for the AP Human Geography exam.

Chapter 01 - Geography and Human Geography

CHAPTER INTRODUCTION

Humans are geographers by nature. They can think territorially or spatially and have an awareness of, and curiosity about the distinctive nature of places. Even children possess qualities of geographers, creating carefully mapped realms in tiny places. Places possess an emotional quality, and we all must belong somewhere. Humans' insatiable curiosity and the place-centered element within us gave birth to geography as an academic discipline. Conquest and commerce generated a need to know about the world and pragmatism was added long ago by traders and explorers. Geography literally means "to describe the Earth," and the practical aspects of geography first arose among the Greeks, Romans, Mesopotamians, and Phoenicians.

Divisions

Physical and human geography are two great branches of the discipline, and their origins can be traced to the Greeks and later the Romans. Greek scholars were curious about the world, particularly the physical aspects, and collected information from traders and travelers. The Romans, un-like the Greeks, were empire builders and brought many different cultures under their control. They added to the Greek knowledge of the physical Earth and added information about different cultures they encountered or conquered. By the end of the Roman era, theories about a spherical Earth, latitudinal climatic zones, environmental influences on humans, and humans' role in modifying the Earth were established. The latter two are quite significant
because today environmental geography is emerging as a link between human and physical geography.

Traditions

During the twentieth century, geography was marked by four durable traditions: earth-science (physical geography); cultural-environmental (encompasses a wide range of topics with a difficult, even controversial history); locational theory (the spatial focus of the discipline), which has be-come a modern element of human geography; and area-analysis (primarily involving the description of areas and regions), giving rise to what is today called regional science. These Four Traditions of Geography were first identified in an article by University of Chicago geographer W.D. Pattison in 1964. He argued that these were the four areas where geographic teaching, research, and other activity were concentrated.

New Themes

In the 1980s, rising concerns about geographic illiteracy in America prompted the National Geo-graphy Society, and several other organizations, to begin campaigns to reintroduce geography into school curricula. In a 1986 publication, the NGS proposed a useful five-theme framework for geography as developed by the Geography Education National Implementation Project (GENIP). Three of the themes correspond to traditions identified earlier: location, human-environment inter-action, and regions. As the fourth tradition, the NGS proposed a single word, place, because all places on the surface of the Earth have distinguishing human and physical characteristics. A fifth theme, movement, refers to the mobility of goods, ideas, and people, an appropriate theme in light of the mobile world we live in today.

Maps

Maps—graphic representations of all or part of the Earth's surface drawn to scale—are the most important tool of geographers. Maps and geography are practically synonymous, and mapmaking (cartography) is as old as geography itself. The spatial perspective is geography's unifying bond and there is no better way to demonstrate insights gained through spatial analysis than through the use of maps. Maps are our "window on the world."
Maps are used to portray the distinctive character of places; their relationship to environmental issues; the movements of people, goods, and ideas; and regions of various types. Maps are used to wage war, make political propaganda, solve medical problems, locate shopping centers, bring relief to refugees, warn of natural hazards—in short, for countless purposes.

Maps are not always printed. Everyone has a mental map—a map in their mind—that has developed over years of looking at wall maps, atlas maps, and maps in books, magazines, and newspapers. People’s perception of places and regions is influenced by their individual mental maps as well as printed maps. Since one’s perception of different places is a combination of general information, personal experiences, and what is called "hearsay" in the legal profession, that perception is not always accurate. Look carefully at text Figure 1-9 in your text and you will begin to get some idea of the influence that mental maps and perception of places have on people.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. This text focuses on human geography. What is the other half of geography called?
   a. environmental
   b. spatial
   c. physical
   d. regional

2. When geographers look at the way places and things are laid out on the cultural landscape, they are taking a:
   a. pattern analysis
b. distribution measurement

c. spatial perspective

d. map measurement

3. Which of the following is not true regarding remote sensing?
   a. began with air photography
   b. does not involve satellites
   c. involves aircraft
   d. reveals environmental changes

4. When the National Geographic Society developed what they called the "five themes" of geography they did not specifically include a traditional theme of geography, which is:
   a. location
   b. human-environment
   c. landscape
   d. movement

5. Of the following, which cannot be shown on a map?
   a. housing styles
   b. river flow direction
   c. diffusion of disease
   d. relative location
6. What event markedly changed Chicago's relative location (which already had good centrality)?
   a. new interstate highway
   b. more railroads
   c. opening of the St. Lawrence Seaway
   d. new airport

7. Symbols on maps represent many different things. Arrows can show:
   a. direction of migration
   b. numbers of people
   c. intensity of traffic on routes
   d. all of the above

8. The spread of various aspects of culture, such as language, knowledge, skills, religion, etc., from one place to another is called:
   a. distribution
   b. relocation
   c. diffusion
   d. infection

9. Geographers define and delimit a region by:
   a. establishing criteria
b. walking the region

c. asking others how they define the region

d. using climate changes

10. A city is an example of a region.

   a. formal
   b. functional
   c. perceptual
   d. physical

TRUE/FALSE QUESTIONS

1. Human geography encompasses several sub-fields and has an environmental component. (TF)

2. Medical geography is not a part of human geography. It belongs to physical geography. (TF)

3. Movement is not an important theme in the study of geography. (TF)

4. The geographical hypothesis of continental drift was actually developed by a climatologist. (TF)

5. The only thing maps can tell us is the absolute location of places. (TF)

6. The relative location of a place can change constantly but only for the better. (TF)

7. A map of worldwide precipitation can show us areas prone to droughts and floods. (TF)
8. The Pacific Ocean affects precipitation on more continental landmasses than any other ocean. (TF)

9. All regions have clear and concise boundaries. (TF)

10. A country is divided into separate regions. No region overlaps another and each is equal in importance. (TF)

STUDY QUESTIONS

1. We all live in a region as well as a country or state. What region do you live in? How is it defined? Is it a formal, functional, or perceptual region as defined in your text? Do you have different perceptions about your region?

2. Make a list of some of the many ways maps are used. Do you understand the importance of relative location as shown in Figure 1-3? Can you find a map of another place that shows good relative location as described in the text?

3. Why is the spatial perspective so important to geographers? How do patterns and distribution fit into this concept?

4. How is your mental map of the city and/or region you live in? After reading the part about mental maps in this chapter, do you think you need to improve yours? Close your eyes. How many Western European nations can you visualize? Go to a map of Europe and see how well you did. Can you accurately visualize the major city locations in your country?
Chapter 02 - Cultures, Environments and Regions

CHAPTER INTRODUCTION

Culture is an all-encompassing term that defines the tangible lifestyle of a people and their prevailing values and beliefs. The concept of culture is closely identified with anthropology. Over more than a century ago most anthropologists believed that culture was learned. However, recent advances in sociobiology and related fields suggest that certain behaviors may be genetically determined, so that culture has an "instinctive" component as well as a "learned" one. This chapter discusses the development of culture, the human imprint on the landscape, culture and environment, and cultural perceptions and processes. The key points covered in this chapter are outlined below.

Culture and Human Geography

The concept of culture lies at the heart of human geography. Locational decisions, patterns, and landscapes are fundamentally influenced by cultural attitudes and practices. The concept of culture, like the regional concept discussed in the previous chapter, appears to be deceptively simple, but in fact is complex and challenging. The definitions of culture vary widely, as does our use of the word itself, but all refer in one way or another to humans—their development, ideas, and adaptation to the world in which they live.

Components

Culture is made up of four major components. The first of these is a cultural trait—a single attribute of a culture—such as eating with certain utensils. The second component is a cultural complex—a discrete combination of traits exhibited by a particular culture—such as keeping cattle for different purposes. The third component is a culture system—culture complexes with traits in common that can be grouped together—such as ethnicity, language, religion, and other cultural elements. The final component, the cultural region—the area within which a particular culture system prevails—is marked by all the attributes of a culture. Cultural regions may be expressed on a map, but many geographers prefer to describe these as geographic regions since their definition is based on a combination of cultural properties plus locational and environmental circumstances.

Topics
Key topics in cultural geography include cultural landscapes—the human imprint on the Earth's surface. These create a distinct and characteristic landscape that reveals much about the culture presently occupying the area, as well as those that came before. A second key topic focuses on cultural hearths—the sources of civilizations from which radiate ideas, innovations, and ideologies. Cultural geographers identify both ancient and modern cultural hearths.

Cultural diffusion—the process by which innovations and ideas spread to other areas—involves several types of diffusion. Expansion diffusion may take the form of contagious diffusion, where some item of culture is spread through a local population by contact from person to person. In the case of hierarchical diffusion, another form of expansion diffusion, an idea or innovation spreads by trickling down from larger to smaller adoption units. Innovations often leapfrog over wide areas, with geographic distance a less important influence. The early spread of the FAX machine is a good example of this type of diffusion. A third type of expansion diffusion is stimulus diffusion, a process where an idea or innovation is not readily adopted by a population but results in local experimentation and eventual changes in the way of doing things. The Industrial Revolution, for example, did not immediately spread to pre- or non-industrial societies, but did stimulate attempts to mechanize local handicraft production.

The different forms of expansion diffusion take place through populations that are stable. It is the innovation or idea that does the moving. Relocation diffusion—the spreading of innovations by a migrating population—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 disseminate it. The spread of European emigrants around the world during the period of Europeanization is a classic example.

The topic of cultural perception—the way that members of a culture view themselves as well as how they view other cultures—is a combination of tangible and intangible elements that help to define the personality of a region. We all have impressions and images of various regions and cultures, even though they may not always be accurate. Perceptual regions are intellectual constructs designed to help us understand the nature and distribution of phenomena in human geography. These perceptions are based on our accumulated knowledge about such regions and cultures. Perceptual regions can differ considerably, depending on the individual's mental maps of various communities and cultures.

The final considered topic, cultural environment—the relationships between human societies and the natural environment—is complex. Environment affects societies in countless ways from the types of crops grown to the houses they build, but
societies also modify their natural environments in ways that range from slight to severe. One thing is certain, however. While human behavior is not controlled by the environment (as the now-defunct concept of environmental determinism suggested), no culture, no matter how sophisticated, can completely escape the forces of nature.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. When a discrete number of culture traits is combined it is referred to as a culture:
   a. region
   b. complex
   c. realm
   d. system

2. Features placed on the land change its natural look. Geographers call this the cultural:
   a. realm
   b. system
   c. landscape
   d. land change

3. The birth place of a civilization is called a/an:
   a. culture hearth
   b. origin region
   c. agricultural home base
   d. source region
4. When an idea or invention spreads outward from its source area and also remains strong in its source area, it is said to have spread by:
   a. stimulus diffusion
   b. migrant diffusion
   c. expansion diffusion
   d. transculturation

5. When the Spanish overthrew the Aztecs in Mexico, they adopted some of the Aztec ways and ideas. At the same time the Aztecs adopted some of the Spanish ways and ideas. This process is called:
   a. migrant diffusion
   b. relocation diffusion
   c. transculturation
   d. acculturation

6. An assemblage of cultural or geographic regions forms a cultural:
   a. system
   b. realm
   c. complex
   d. trait

7. Perceptual culture regions are:
   a. known to have sharply defined boundaries
   b. different in definition from person to person
   c. defined by using at least three criteria
d. found only on islands

8. The idea that human cultural behavior is controlled by the environment in which we live is called:
   a. possibilism
   b. environmental ecology
   c. environmental determinism
   d. environmental regional identity

9. The influence of the natural environment on humanity declines:
   a. toward higher latitudes
   b. with increasing technology
   c. in agrarian societies
   d. in urban societies

10. Broad generalizations about the impact of the environment on humans are:
    a. more accurate today than in the past
    b. almost always sustained
    c. rarely sustained
    d. more accurate for traditional agrarian societies

TRUE/FALSE QUESTIONS

1. Culture does not include the behavior of people. (TF)

2. The same cultural trait can often be found in more than one culture. (TF)

3. Cultural systems are only found in the developed countries of the world. (TF)

4. Cultural landscapes usually vary from one country to another. (TF)
5. Nomadic people leave a large imprint on their cultural landscape because they keep traveling the same routes over and over. (TF)

6. Culture hearths first appeared in the Eastern Hemisphere. (TF)

7. Most information spread from culture hearths by hierarchical diffusion. (TF)

8. The wheel, after being introduced into Mesopotamia, did not diffuse quickly to Egypt. (TF)

9. Culture regions can become political battlegrounds and even physical battlegrounds because of people's emotional attachments to the land and traditions. (TF)

10. People must learn to live with their physical environment because changing or trying to control it causes problems. (TF)

STUDY QUESTIONS

1. Define the components of culture. In your own geographical region, can you think of any culture traits that seem to stand out from the normal traits with which you are familiar?

2. After reading about cultural landscapes, can you see signs of how your culture region's landscape has changed over time? If you are attending a college or university away from home, look for material changes in the landscape. Talk to a long-time resident who can tell you about changes that have taken place.

3. Why do you think it is important to study cultural hearths? When you look at Figure 2-4 in your text, can you understand how expansion and relocation diffusion worked in carrying ideas and inventions to distant lands?

4. If you live in a large city, can you see signs of acculturation in ethnic neighborhoods? If you come from a rural environment, is everyone alike or are there ethnic differences that might be evident in the way people layout farm buildings or in house-building styles dating from an earlier time?

5. Look at Figure 2-8 in your text. In which perceptual region is your home state? Does this map fit with your perception of what region you live in? If not, how do you perceive where you live? On what do you base your reasoning?
Chapter 03 - The Earth as Humanity's Home

CHAPTER INTRODUCTION

This chapter introduces you to the physical and environmental aspects of the Earth, both past and present, and the impact of human occupancy. It also focuses on the development of humanity during one of the most fascinating geologic epochs, the Holocene. During this epoch, humanity developed socially, politically, and economically. In addition, the number of humans occupying Earth soared. There is much to learn from this chapter, both to lay the foundation for the remainder of the text and to broaden your knowledge of human and Earth history that led to the world we live in today.

Environment

Despite what you may think, the Earth's environment is not stable and environmental change is humankind's constant companion. To understand the geography of culture, it is necessary to understand the complexity of the environment within which humanity lives. Many changes in the environment have occurred since early hunter-gatherers began to exploit the Earth's resources and deal with their environment. The survival of humanity may well depend on an understanding and appreciation of environmental conditions.

Earth's environment frequently changes, and warming and cooling of the planet are natural. Far more of the Earth's surface is water than land, as a glance at any world map will reveal, and only a small percentage of the total surface is suitable for human occupancy. Humanity is quite old, but compared to the age of the Earth, we are recent occupiers. The Earth is currently in the grip of a long series of glacial advances (cooling periods) and retreats (warming periods); modern human civilization emerged during a warm spell between glacial periods.

Technological progress notwithstanding, terrain and climate continue to influence the distribution and nature of human life and activity. Compare, for example, text Figure 3-4 (Global Terrain), text Figure 3-5 (World Climates), and text Figure 4-1 (World Population Distribution). Ask yourself why people are where they are and why they are not in other places. In essence, humans are "where they have always been," relative to terrain and climate. What has changed are the numbers.
Human Development and Innovation

The various stages in Earth history have been divided into periods of geologic time. The most recent geologic time period, the Holocene epoch, refers to the most recent 12,000 plus years of Earth's history. Because of the unique cultural-geographical characteristics of this period of great environmental variation, it is sometimes referred to as "Holocene humanity." Within this short time humanity did what it had not done in previous interglaciations.

Perhaps the single most significant event of the early Holocene was the domestication by humans of plants and animals, which may have occurred nearly simultaneously in areas as far removed as the Middle East and Southeast Asia. Agriculture developed and surpluses were stored for future use. Villages grew larger, towns and cities emerged, and political organization became increasingly complex; inventions multiplied, and tools became more efficient. Certain communities thrived, sometimes at the expense of others. The earliest states appear to have emerged about 5500 years ago in the middle East and southeastern Turkey. The spiral leading toward empires, colonial realms, and global power struggles had begun.

Human Population

Humans have always used resources (sometimes defined as anything that humans value), but that use is dependent on, among other things, the number of humans and the technology available to them. The human population growth spiral began during the Holocene epoch. Numbers at the beginning of this epoch have been estimated at between 4 and 8 million. Population growth during the Holocene began slowly at first, then accelerated. Modern humanity is indeed the product of the Holocene epoch.

During the Holocene the Earth changed as never before, not because of geologic forces but because of humanity’s humanity. That imprint has become stronger over time, especially over the last 200 years when human population growth and pressure on resources have reached unprecedented levels. This began with the Industrial Revolution in Europe and spread globally during the period of Europeanization and colonialization. During the twentieth century, the Earth especially felt the strains created by the human population. Raw materials were used up at an ever faster rate while the air, water, and land became polluted or damaged. Together, these events have rendered environmental change one of the key issues of the twenty-first century.

CHAPTER QUIZ
MULTIPLE-CHOICE QUESTIONS

1. When America’s first lunar astronauts first looked at the Earth, the dominant color they saw was:
   a. blue
   b. green
   c. brown
   d. gray

2. Approximately 70 percent of the land surface of the earth is:
   a. plateaus
   b. desert
   c. tropical forest
   d. ice caps

3. A glacial period was in progress as recently as ? years ago.
   a. 6,000
   b. 8,000
   c. 10,000
   d. 20,000

4. Human population growth began during which of the following geologic epochs.
   a. Miocene
   b. Holocene
   c. Paleocene
d. Pleistocene

5. Cultural geographer Carl Sauer suggested that plant domestication may have begun more than 14,000 years ago in:
   a. Mesopotamia
   b. Mesoamerica
   c. Southeastern Asia
   d. eastern China

6. The development of sedentary and irrigated agriculture and the rise of villages and towns initially occurred in:
   a. Southwest Asia
   b. East Africa
   c. South America
   d. Southeast Asia

7. Ancient Babylon was located on the Euphrates River in present-day:
   a. Iran
   b. Turkey
   c. Iraq
   d. Greece

8. Which of the following human activities transforms more of the Earth's surface than any other.
   a. manufacturing
b. urbanization

c. farming

d. transportation

9. Africa’s most populous country is:

   a. Nigeria
   b. Kenya
   c. Egypt
   d. Tanzania

10. The continent which consists mainly of plateaus, and therefore supports fewer people than the single country of India, is:

    a. Australia
    b. Africa
    c. South America
    d. Asia

TRUE/FALSE QUESTIONS

1. Climatic fluctuations during ice ages have little effect on Earth’s livable space. (TF)

2. Today Earth is going through the end of an ice age caused by global warming. (TF)

3. The Holocene epoch has been humankind's time of the greatest cultural development. (TF)
4. The Paleolithic period is the latest stage of the Stone Age. (TF)

5. The world’s oldest continuous civilization may have started in China. (TF)

6. Domestication of plants and animals kept people nomadic because animals ate all the nearby grass and land was worn out from farming. (TF)

7. The first cities arose in the Fertile Crescent. (TF)

8. Caring for plants is the same as plant domestication. (TF)

9. In general, mountainous regions do not support any population clusters, and never have. (TF)

10. Industries could be found in different parts of the world 6000 years ago. (TF)

STUDY QUESTIONS

1. Why do geographers consider Köppen's climate classifications so important? Compare text Figure 3-5 (World Climates) with text Figure 20-1 (World Agriculture Regions). What correlations can you find between climate and crops grown? How can you tell from the climate map where people are most likely to live?

2. Why is the Holocene epoch different from previous epochs? List the accomplishments of humankind during this period and contrast it to previous periods. What do you think might happen when Earth goes into another ice age? How might people survive?

3. Explain what caused the changes in early settlement. How was the social structure changed? Was this change uniform among the settlements?

4. When you read about the Pleistocene epoch can you understand the environmental problems our human ancestors faced? Can you understand why some branches of the early human family tree died out?
Chapter 04 - Fundamentals of Population: Location, Distribution and Density

CHAPTER INTRODUCTION

No event in human history has equaled the rapid increase in population over the last 10,000 years. This is in sharp contrast to the 200,000 years following the emergence of Homo sapiens in Africa, during which the earth’s human population grew very slowly, its numbers rising and falling in response to the "traditional" controllers of population: environmental change, disease, and availability of food. As the last glaciation retreated and the Holocene epoch began, the amount of habitable space increased and unprecedented events began to occur in Earth’s history.

The study of population is termed demography, derived from ancient Greek words roughly meaning to "describe and write about people." The focus of population geography is on the spatial aspects of demography. The key questions in geography are where and why there? These lead to some penetrating insights into population issues.

Population Growth

The dominant issue in population geography remains growth. The world's population is currently growing at a rate that is more than ten times the total estimated world population at the beginning of the Holocene and the bulk of this growth is occurring in the world's poorer countries. The Earth's environments and natural resources are strained as never before by the needs of a mushrooming human population, a population that has more than doubled in the last 50 years. Problems resulting from unprecedented population growth became especially acute in the twentieth century. A continued high rate of population growth in the twenty-first century can have a calamitous impact, causing irreversible damage to the natural systems on which we depend for our existence and survival.

Population Distribution

From the beginning, humanity has been unevenly distributed over the land and this pattern was intensified during the twentieth century. Whether urban or rural, populations tend to cluster in certain areas (see text Figure 4-1) because, as you will recall from earlier discussions, much of the Earth is unsuitable for human occupancy (refer back to text figures 3-4 and 3-5). To handle contrasts of this type on maps, geographers use measures of population distribution—the locations on the Earth’s
surface where individuals or groups (depending on the scale of the map) are concentrated—and the density of the population figured as the number of people per unit area of land.

Text Figure 4-1 shows patterns of population distribution for the world using the dot method. It shows that the world's three largest population concentrations all lie on the Eurasian landmass—East Asia, South Asia, and Europe—each associated with a major civilization. It also reminds us that the overwhelming majority of the world's population inhabits the Northern Hemisphere.

East Asia, centered on China but extending to Korea and Japan, contains about one-quarter of the world's population—nearly 1.3 billion in China alone. The map shows that the population is concentrated toward the coast with ribbon-like extensions found on the basins and lowlands of China's major rivers. The great majority of people in East Asia are farmers.

India lies at the center of the South Asian concentration with extensions to Pakistan, Bangladesh, and the island of Sri Lanka. This is one of the greatest concentrations of people on Earth with about 1.5 billion people. It is a confined region (the Himalaya Mountains on the north and the desert west of the Indus River in Pakistan) with a rapidly growing population. By almost any estimate, the capacity of the region to support this population has been exceeded. As in East Asia, the majority are farmers.

Europe, the third-ranking population cluster, also lies in Eurasia but at the opposite end from China. This cluster contains about 700 million people, which puts it in a class with the South Asian concentration, but the similarity ends there. In Europe, unlike East and South Asia, terrain and environment are not as closely related to population distribution. Another contrast lies in the fact that the majority of the European population live in cities and towns, leaving the rural countryside more open and sparsely populated. These contrasts with the East and South Asian clusters reflect the impact of the Industrial Revolution on Europe over the last 200-plus years.

**Population Density**

Population density can be measured on the basis of several different criteria, revealing contrasting aspects of a country's demography. Text Figure 4-2 illustrates density via the isopleth method. The data in Resource B at the end of your textbook provide area, total population, and density per square mile for every country. One must examine such data with caution, however, since the high cost and organizational challenges of census taking often produce unreliable data. Arithmetic and physiologic population
densities are the two most common approaches. These two methods become more meaningful and useful when compared with each other.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. Demography is the study of:
   a. physical geography
   b. population
   c. animals
   d. climate

2. Which country has the highest arithmetic density of people.
   a. Japan
   b. Bangladesh
   c. India
   d. Netherlands

3. Physiologic density of a country relates the total population of a country to the:
   a. number of people living on farmlands
   b. population divided into total acres of farmland
   c. acres of farmland available
   d. population living in villages and cities

   a. one-half
   b. one-third
c. one-fifth 

d. one-fourth 

5. One of the greatest concentrations of population, according to your text, is: 
   a. in Argentina 
   b. on the Ganges River plain in northern India 
   c. in Bangladesh 
   d. on the Nile River 

6. In Germany  
   percent of the people live in cities. 
   a. 85 
   b. 90 
   c. 50 
   d. 75 

7. In the United States, the largest urban complex, called a megalopolis, lies: 
   a. in Florida and north to South Carolina 
   b. along the Pacific coast in Southern California 
   c. in Chicago and its surrounding area 
   d. from Boston to Baltimore 

8. Southeast Asia has  
   clusters of population. 
   a. contiguous 
   b. few 
   c. discrete 
   d. large
9. The population of Sub-Saharan Africa is nearly:
   a. 200 million
   b. 350 million
   c. 400 million
   d. 650 million

10. Geographically, the spatial distribution of population in Australia and South America is:
   a. very scattered
   b. concentrated in the interior regions
   c. peripheral
   d. concentrated on plateaus

TRUE/FALSE QUESTIONS

1. In the poorer countries, people tend to cluster in the urban areas because there is little farmland. (TF)

2. Population distribution dot-maps are used primarily to show where people live. (TF)

3. Physiologic density maps more accurately show population densities because they are based on urban land clusters. (TF)

4. In China, farmers far outnumber people living in cities. (TF)

5. The country of Bangladesh has a population of nearly 133 million people living in an area about the size of Iowa. (TF)

6. In contrast to East and South Asia, Europe's population centers are not closely related to terrain and environment. Instead they are related exclusively to the coal-fields. (TF)
7. In the United States the largest urban agglomeration is located along the Pacific coast. (TF)

8. Southeast Asia does not have large contiguous urban areas because it is made up of islands. (TF)

9. In Africa, there are no agglomerations comparable to those in Asia. (TF)

10. With land reforms it would be possible for South America to support a much larger population. (TF)

**STUDY QUESTIONS**

1. List and explain the problems high population growth rates are causing in the world today.

2. Define and discuss the difference between arithmetic and physiologic densities. What is lacking in each? Why aren't either of these completely accurate?

3. How does the spatial distribution of population of North America and Europe differ from that of East Asia and South Asia? How are populations spatially distributed in South America and Australia?

4. How does Japan support its large population? What special problems does this country have that are not faced by the other developed nations?
Chapter 05 - Processes and Cycles of Population Change

CHAPTER INTRODUCTION

Population does not increase in an even manner from country to country. The differences include age, gender, life expectancy, and geographic distribution, and may be identified between countries but are more significant internally. A country that has a large percentage of its population at 15 years of age or below will have enormous needs for education, jobs, and housing in the years ahead. A country where the population is "aging," such as the United States or France, can face shortages of younger workers and problems with their retirement systems. The list goes on but you get the point: a population is far more than mere numbers. This is an extremely important chapter, and when you have studied it, you will have a much better understanding of the complex issues of world population.

Population Trends

Never before in human history have so many people filled the Earth's living space, and never has world population grown as rapidly as it has during the past 100 years. The population explosion of the past 200 years has increased the world's population from under 1 billion to approximately 6 billion. It took from the dawn of history to the year 1820 for the Earth's population to reach 1 billion. It now is taking only a decade to add each new billion. It is still possible that there will be 10 billion human inhabitants on the planet by the middle of the twenty-first century.

Population Growth Rates

Rapid population growth varies over time and space. Europe's rapid growth occurred during the nineteenth century, the result of the Second Agricultural Revolution. At this time better farming methods and improved organization resulted in increased food supplies, especially to cities and towns. This was immediately followed by the Industrial Revolution, during which sanitation facilities made the towns and cities safer from epidemics, and modern medical practices became widespread. Disease prevention through vaccination introduced a new era in public health. Death rates declined markedly—by 50 percent between 1750 and 1850—while birth rates remained high. The change is especially spectacular when viewed in the context of doubling time—the number of years it takes a population to double—which was 150 years in 1750 but only 35 years in 1850.
One effect of this increase in the rate of natural population growth was increased migration. Millions of people left Europe to emigrate to other parts of the world—North and South America, Australia, South Africa, and elsewhere. When European colonization began in earnest during the nineteenth century, Europeans brought with them their newfound methods of sanitation and medical techniques and death rates in Africa, India, and South America began to decline. Indigenous populations began to grow, and at ever-increasing rates. Today, South America's growth rates have declined, but Africa's remain high. As mentioned previously, the fastest-growing populations to-day are invariably taking place in those poorer countries that have the greatest difficulties providing the basic amenities of life for their citizens.

Disease and famine were the major controllers of population for the world as a whole until the last 100 years. Diseases still kill millions of people each year, especially infants and children, but the overall effects have been reduced, at least in many countries.

**Reduction of Growth Rates**

Reducing population growth rates is a complicated and sensitive issue. In the richer, more developed countries, general modernization and education has resulted in lower growth rates. Therefore, these countries total populations do not approach those of the poorer countries. The benefits enjoyed by the wealthier, developed nations that have led to their slower rates of population have not been shared by much of the world. A key issue to the reduction of population growth rates is to improve the status of women and to secure their rights in society. In the Muslim countries of South-west Asia and Sub-Saharan Africa, two of the regions with the highest rates of population growth, women often live in near-Medieval conditions or, at best, as second-class citizens. Tradition plays a powerful role, but the barrier to better education for women is the real key. In places where women's education levels have risen, there has been an accompanying decline in population growth rates; not to mention a general improvement in the well-being of the population.

The demographic transition model, which compares birth and death rates in a population over time, suggests that the world's population will stabilize in the twenty-first century, but the model may not be universally applicable. The sequence of stages of the demographic transition has been observed in several European countries, but what transpired economically and socially in Europe may not apply for the rest of the world. It may be unwise, therefore, to assume that the demographic cycles that have occurred in already-industrialized countries will eventually spread to the rest of the world.
CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. At the present time, about million people are added to the world's population each year.
   a. 150
   b. 100
   c. 90
   d. 80

2. Today, Russia is experiencing a population growth rate.
   a. rising
   b. declining
   c. negative
   d. stable

3. Africa’s rate of natural increase in population is still high but its population faces the grim prospects of:
   a. a decade or more of drought
   b. increasing ethnic strife in all countries
   c. the AIDS epidemic
   d. increasing military conflict

4. The continent with the lowest birth rates is:
   a. Europe
   b. North America
   c. Southeast Asia
d. Antarctica

5. The total fertility rate of a country measures the total number of:
   a. women able to have children
   b. children between 1 year old and age 10
   c. women between 13 and 45
   d. children born to women of childbearing age

6. Crude death rates are highest in:
   a. tropical Africa
   b. China
   c. South Africa
   d. South America

7. Which of the following did not have an effect on keeping population growth rates down before 1820.
   a. the Little Ice Age
   b. wars
   c. plagues
   d. advances in medicine

8. The actual demographic transition is represented by which two of the four stages of the demographic transition model.
   a. 1 and 4
   b. 2 and 3
   c. 3 and 4
   d. 2 and 4
9. It is thought by some that perhaps today's developing countries will of the demographic transition model.
   a. not go through all four stages
   b. have to go through all four stages
   c. not follow any stages
   d. only go through stages two and three

10. As a tool for development, the demographic transition model is most useful in one place.
   a. United States
   b. Europe
   c. Japan
   d. Canada

TRUE/FALSE QUESTIONS

1. Because of the world's falling population growth rate, there is no longer fear of a population explosion. (TF)

2. Population growth rates are rising in the Muslim countries of North Africa and Southwest Asia. (TF)

3. Not all of the countries with low birth rates are wealthy. (TF)

4. Thomas Malthus thought the world's population growth would be slowed by disease. (TF)

5. By 2030, people in Germany over age 65 will account for close to half the adult population. (TF)

6. Population geography is the spatial component of demography. (TF)

7. Japan’s population is projected to begin expanding rapidly in 2007. (TF)

8. Crude death rates decline more rapidly than birth rates. (TF)
9. In Between 1348 and 1350, almost half the population of England died from bubonic plague. (TF)

10. Most countries in the world are at the same stage of the demographic transition model. (TF)

STUDY QUESTIONS

1. Look at text Figure 5-1. Note where the high population growth rate countries are. Do you see a pattern?

2. Even though the world's overall population growth rate has slowed, why is there still concern about another population explosion? Explain exponential growth and why the base population is so important worldwide and by country. Use text Figure 5-2 to help you. What kinds of problems can you foresee for those countries that have a high rate of growth today?

3. Study text Figures 5-4 and 5-5. Explain what you can learn by looking at these age-sex pyramids.

4. Study the section under the heading Demographic Cycles. Write down all the terms and their definitions in this section.

5. After studying the demographic cycle, do you understand why the four stages might not apply to today's developing countries? How did European colonization affect these countries?
Chapter 06 - Where and Why People Move

CHAPTER INTRODUCTION

Humans have always been mobile. Throughout history humans have sought new frontiers and the search still continues today. For more than 90 percent of human history there were hunter-gatherers, a practice that required frequent relocation. Such movement is called migration and while the reasons for such movement are different today, human mobility has actually increased in modern times.

Human mobility is of central interest in human geography because it is an inherently spatial process. Human movement speeds the diffusion of ideas and innovations. It intensifies spatial interaction and transforms whole regions. And as you will see in this chapter, it is often closely linked to environmental conditions.

Why People Move

Many factors stimulate the migration process. They include armed conflict, economic conditions (real or perceived), political strife, cultural circumstances (such as linguistic or religious differences), environmental change (growing more common today), and technological advances (which makes information about destinations more easily obtainable and movement easier). Migration today occurs for various reasons but those listed are the principle ones.

Migrants move on the basis of their perceptions of particular destinations, taking into consideration both direction and distance. Direction, like location, can be viewed in two ways: absolute and relative. Absolute direction refers to astronomically determined direction and thus is what we think of as compass direction. Relative direction is more perceptual and often imprecise, W in the ewe of the Sunbelt. The residents of North Dakota, for example, would agree that it lies to the south and that Florida is part of the Sunbelt, but not everyone would agree that Utah is also. Different people have different perceptions.

Distance, like direction, can be measured in both absolute and relative terms. Absolute distance is the physical distance between two points usually using kilometers or miles; it can be read on maps using the scale of the map. Absolute distance does not change. Relative distance-measured not in linear terms such as miles or kilometers, but in term such as cost or time-bas different meanings for different people and cultures. It can
change due to, say, a new method of transportation or the discovery of a shorter route. Research has shown that people's perception of both distance and direction can be greatly distorted and that distance particularly affects the accuracy of migrants' perception of their destinations.

**Forms of Human Mobility**

Mobility of all kinds is one of the defining characteristics of a culture. The great majority of people have a daily routine that takes them through a regular sequence of short moves that geographers call activity (or action) space. The magnitude of activity space varies in different societies, and American society is the world’s most mobile. Technology has greatly expanded activity spaces, particularly in the wealthier, more developed countries.

There are three general types of movement recognized by geographers and others who study human mobility. (cyclic movement—movement that has a closed route—defines your activity space. When you go to daily classes or a job you are participating in cyclic movement. If your trip involves a lengthy period of residency after your arrival—such as temporary relocation for college attendance or service in the armed services—you engaged in periodic movement. Both cyclic and periodic movements occur in many forms. Finally, migratory movement describes human movement from a source to a destination without a return journey, and is the most significant form of movement discussed in this chapter. A society’s mobility is measured as the sum of cyclic, periodic, and migratory movement of its population.

**Patterns Of Migration**

Rarely does migration take place in a single step, rather it usually takes place in stages. Rural-to-urban movement occurs in steps, often to a small community and then to a larger one and perhaps eventually to an even larger one in a region of more favorable environmental conditions. Migrants also tend to relocate repeatedly after reaching the end of their destination. Early immigrants to America, for example, often first settled in regions where relatives or friends were located, moving "West" after a time seeking land of their own or better opportunity, often moving several times before settling permanently. Some, of course, found the new surroundings not to their liking and returned cast or perhaps to their original source region in a counter or return migration. Almost all migration flows have this aspect.

**Factors Of Migration**
The decision to migrate usually results from a combination of conditions and perceptions that tend to induce people to leave their abodes. Geographers who study human migration call the negative conditions and perceptions push factors. The positive conditions and perceptions that effectively attract people to new locale from other areas are called pull factors (see Focus on: Theories About Migration). Push factors are likely to be perceived more accurately than pull factors, since people are more likely to be familiar with their place of residence (source) than the locale to which they are moving. Push factors include individual considerations ranging from work or retirement conditions to weather and climate. Pull factors tend to be more vague and many migrants move on the basis of excessively positive images and expectations regarding their destinations.

Our final look at the reasons people move focuses on the luxury of choice and the fear of compulsion. These may be classed as voluntary and forced migrations. There are different cases within each of these categories and it is not always easy to make a clear determination. In the case of the millions of Europeans who came to the Americas, most were seeking opportunity and better living conditions. These same motives carried others far from Europe to the African and Asian colonies. The prevailing force was the pull of opportunity and thus for the most part, emigrants from Europe left by choice.

Several of the world’s largest migration streams have been forced migrations, which result from the imposition of power by stronger peoples over weaker ones. By far the most important of these was the Transatlantic slave trade, which carried tens of millions of Africans from their homes to the Americas, with enormous loss of life. From 12 million to over 30 million Africans were sold into slavery (see Figure 6-2) and nothing in human history compares to the Atlantic slave trade. Both source and destination regions were affected, with the African sources being socially and demographically devastated for generations. Forced counter migration continues today when governments send back migrants caught entering their countries illegally.

**Permanent Relocation**

The past five centuries have witnessed human migration on an unprecedented scale, much of it generated by events in Europe. The voluntary migration of Europeans to the New World, the migration of Europeans to their overseas colonial empires (these two migrations may have totaled 75 million between 1835 and 1935), and the forced migration of Africans to the Americas, are among migration streams that have transformed the world. The immense impact of the forced migration of Africans during the slave trade on both sides of the Atlantic sets it apart from all the other migrations.
When early humans began migrating from Africa to Eurasia, Australia, and the Americas, they faced only natural boundaries. Rivers and mountain ranges may have presented barriers, but they did not stop the inexorable march of human migration. For today’s migrants, political boundaries, not natural ones, form the most difficult obstacles. Agencies that monitor the annual stream of human migration use the world’s political framework to keep track of migrants. Those who cross international borders are external migrants and those who relocate within their national boundaries are internal migrants. In any given year, internal migrants greatly outnumber external migrants. However, it is the external migrants who change countries’ vital statistics, affect their economies, and often influence their politics.

External migrations took Europeans to America and other parts of the world; the arrival of the Europeans, in turn, caused other people to move (set text Figure 1-i). External migrations (authorized movements and organized resettlements, as well as refugee movements) usually occur after wars. Following World War II, Germans migrated westward from their homes in Eastern Europe and millions of migrants left Europe altogether to go to the United States.

Internal migration involves relocation within a country. Such movements can also produce significant population shifts, even though the migrants do not cross any international borders. Internal migrations, involving major population shifts, have occurred in the former Soviet Union, the United States, China, and other large countries. Such movements are usually easier to accomplish because no international borders are crossed. For the same reason, the numbers of people moving is more difficult to determine, at least in most countries.

We noted earlier that Americans are the world’s most mobile people. Etched on the U.S. population map are the effects of two historic internal migrations; the westward movement of the population as a whole, and the northward migration of black Americans from the rural South to the urban North. The West is still a major migration destination as can be seen in Figure 7-5. In the United States, the North-east and the Midwest have been losing population for decades, while the South and West have been gaining.

**Controlling Migration**

Migration control and its attendant problems have become hot issues around the world. Efforts to restrict migrations are nothing new; media coverage, democratic debate, and political wrangling only make it seem so. China’s Great Wall was built in part as a barrier to emigration, as was the Berlin Wall and the fences along the Rio Grande—all evidence of the desire of governments to control the movement of people
across their borders. Physical as well as legal barriers are placed in the way of migrants, but few countries have succeeded in controlling immigration effectively.

MULTIPLE-CHOICE QUESTIONS

1. Which country has the most mobile population.
   a. England
   b. United States
   c. France
   d. Ireland

2. Emigration occurs when a person:
   a. moves from their home country
   b. relocates to another part of their own country
   c. enters a new country as a migrant
   d. moves to another location in the same town

3. Which of the following is the best answer for why people migrate.
   a. armed conflict and civil war
   b. a combination of factors
   c. political circumstances
   d. economic conditions

4. One of the world’s largest forced migrations and most devastating was the slave trading. Which of the following was NOT a consequence of that event.
   a. children were orphaned
   b. communities were disrupted
   c. equal numbers of men and women were taken
d. mostly young men were taken

5. Between 1835 and 1935 perhaps as many as ? million people left Europe for the New World and other overseas’ territories..
   a.  35
   b.  50
   c.  75
   d.  90

6. In 1990, the center of the U.S. population, as shown in Figure 6-5, was located in the state of:
   a.  Iowa
   b.  Indian
   c.  Kentucky
   d.  Missouri

7. Which group of people suffered the worst as refugees after the Gulf War in 1991?
   a.  Iranians
   b.  Kurdish
   c.  Palestinians
   d.  Kuwait people

8. What former European country has had the largest number of refugees since World War II?
   a.  Bulgaria
   b.  Czechoslovakia
   c.  Albania
d. Yugoslavia

9. In the post-World War II period, millions of foreign workers migrated from North Africa to which of the following European countries.

a. Spain  
b. France  
c. Germany  
d. Hungary

10. The most difficult obstacles faced by people migrating today are ? barriers.

a. physical  
b. economic  
c. transportation  
d. political

TRUE/FALSE QUESTIONS

1. Relative direction and relative distance are both perceptual. (TF)

2. The term internal migration is how geographers describe the migration of black families that moved from the South to the North in the United States. (TF)

3. Economic conditions have not been a major reason for emigration. (TF)

4. Because of distance decay, many migrants move in what is called step migration. (TF)

5. There are many more international refugees than intranational refugees. (TF)

6. In forecasting the future, experts believe the refugee problem will lessen and probably disappear. (TF)

7. Vacations are a type of nomadism. (TF)
8. Today, the internal migration flow in the United States is one-way to the South and Southwest. (TF)

9. The Great Wall of China was built primarily to keep people from emigrating. (TF)

10. Many countries have never passed immigration laws restricting persons of different ethnic backgrounds. (TF)

**STUDY QUESTIONS**

1. Describe external and internal migration. What is the difference? How has internal migration affected the United States' great urban areas?

2. List and define the factors that make people migrate. How do push/pull factors come into play? Relate Ernst Ravenstein's five “laws” and apply them to migrations given as examples in this chapter.

3. List the differences between voluntary and forced migration.

4. List the three characteristics that distinguish refugees from migrants. Can you describe situations that might create intranational refugees? Describe the situations that have created refugee crises in Africa (look at the Sudan).

5. When we speak of refugees we use the terms intranational and international. Define each. Why is it a problem to determine exactly how many refugees are in the world today? How does the United Nations’ definition of a refugee fit into this problem?
Chapter 07 - Policy Responses to Demographic Changes

CHAPTER OVERVIEW

For practical purposes population data are reported by country. However, demographic variation within countries can be very large as, for example, in India. During the twentieth century national governments pursued three kinds of population policy: expansive, eugenic, and restrictive. International agreements on population policies are difficult to reach, in part because religious ideologies and governmental goals may be incompatible. The most dramatic population-policy reversal in recent decades was carried out by communist China. Many governments have sought to control immigration through laws limiting the number or type of people who can cross borders and become citizens, but few countries have succeeded in controlling immigration effectively.

MULTIPLE-CHOICE QUESTIONS

1. Population change is a:
   a. global issue
   b. regional issue
   c. local issue
   d. useless issue

2. Over the past century, many of the world's governments have instituted policies designed to influence:
   a. emigration or per capita income
   b. growth rate or ethnic ratios
   c. national reform or communist objectives
   d. international policies or mortality rate

3. Which is not one of the typical population policies?
   a. expansive
   b. restrictive
   c. contradictive
   e. eugenic
4. The Japanese experience with respect to population is a:
   a. failure
   b. success
   c. tragedy
   d. mediocre achievement

5. During the American occupation of Japan, medical services and public health:
   a. declined
   b. improved
   c. stayed the same
   d. only helped the Americans

6. What reasons did the Japanese Eugenic Protection Act not cite?
   a. social
   b. medical
   c. economic
   d. political

7. The growth rate needed to sustain a population is:
   a. 1.0
   b. 1.5
   c. 2.1
   d. 3.0

8. What makes India such a difficult country to carry out a coordinated population policy?
   a. It is a federation of 28 States
   b. It contains 7 Union Territories
   c. The will of the federal government is forcibly imposed in the States
   d. The individual States vary greatly both culturally and politically

9. What was not one of the ways China enforced the one-child policy.
   a. forced abortions
   b. fines
   c. deportations
   d. arrests

10. As the world's population mushrooms, the volume of migrants will:
    a. diminish
    b. stay the same
c. expand
d. disappear

TRUE/FALSE QUESTIONS

1. The Bucharest gathering was the first in a series of UN-sponsored conferences on population issues (TF)

2. The Soviet Union promoted births after World War II because it had not fully recovered from enormous losses. (TF)

3. The "Cairo Strategy" was a program that combined family planning and eugenic policies. (TF)

4. Communist societies generally used expansive population policies. (TF)

5. The ultimate example of "eugenics" was Nazi Germany. (TF)

6. Restricting the immigration of foreign workers will do more to age a population than any other policy can. (TF)

7. The Islamic realm has some of the highest growth rates in the world. (TF)

8. Demographers predict that India will overtake China as the world's most populous nation. (TF)

9. Population growth rates are very similar across the country of India. (TF)

10. Few countries have restricted immigration, or have specific requirements. (TF)

STUDY QUESTIONS

1. Compare and contrast the population policies of Japan, India, and China. Give at least one example of each of the following population policies: expansive, eugenic, and restrictive.

2. How has the role of the United Nations progressed in terms of population policy?

3. Explain what specific policies have fallen under expansive, eugenic, and restrictive population policies?
Chapter 08 - A Geography of Languages

CHAPTER INTRODUCTION

Language is one of the cornerstones of national identity, cultural unity, and community cohesion. It is the most important cultural glue—an aspect that binds a culture together—because without language, there would be no culture. People have very strong feelings about their language and identify with it (people may be persuaded to change their religion, but not their language). When a people’s language is threatened, the response is often passionate and protective.

Thousands of languages are spoken in the world today (linguists estimate between 5000 and 6000) and they serve as both unifiers and dividers of humanity. Ironically, all languages may have a common origin. Consider the following points carefully as you read this chapter.

Standard Language

Human languages even those spoken in preliterate societies—peoples who speak their languages but do not write it—are fundamentally different from those of nonhuman primates. Human languages are not static but change constantly because a vital culture requires a flexible language and the potential vocabulary of any language is infinite.

Mature and complex cultures—technologically advanced societies—attempt to maintain a standard language sustained by national institutions and official state examinations. In The modern world, where innovations diffuse rapidly, such standards are difficult to uphold one problem that arises is: who decides what the standard language will be? Not surprisingly, the answer has to do with influence and power—circumstances that often produce problems in a world where cultural identity and national self-interest are increasingly significant.

Classification and Distribution of Languages

The problem of language classification relates to the definition of language. At issue is what is a language (according to The dictionary: “human communication by voice) and what is a dialect (“language of a particular area or class”)? The issue is a complex one and it is clear that the distinction is not based on an objective measure of mutual intelligibility. Instead, it must be recognized that what we consider a language is a
function of society’s view of what constitutes a cultural community—a matter mat in mm is influenced by historical development in the political arena.

Language classification uses terms that are also employed in biology, and for the same reasons: some languages are related and some are not. Language families are Thought to have a shared, but fairly distant, origin in a language subfamily, the commonality is more definite. Subfamilies are divided into language groups, which consist of sets of individual languages.

Figure 8-2 shows the distribution of 20 major language families. On this map, only the Indo-European language family is broken down into subfamilies (greater detail is shown in Figure 8-3). Spatially, the Indo-European languages are the most widely dispersed. More people speak languages belonging to the Indo-European language family than those in any other family. There are good reasons that this pattern. When the European migration of emigrants and colonists spread over tile world in the last 500 years, one of the cultural components that spread with them was their language. Add to this the fact that indigenous populations were virtually wiped out in The Americas and Australia (and their languages with them) and the European desire to spread the Christian faith, usually in the language of the European culture invading the area, and the patterns on the map become easier to understand.

**Major World Languages**

Chinese is spoken by more people than any other language (Table 8-1), with English ranking second. The numbers in Table 8-1, however, should be viewed as approximations only. English is the primary language of 350 million people in 6 major countries and numerous smaller countries with millions of inhabitants; it is also used as a second language of hundreds of millions in India, Africa, and elsewhere. English has also become the principal language of cross-culture communications, economics, and science. In a world where rapid communication and travel is becoming more the norm than the exception, this has some benefits, since there is no such thing as a “global language,” at least not officially. Consider, for example, the possible problems on an international airline trip if the cockpit crew spoke one language and the airport control tower personnel another. Fortunately, there is supposed to be an English-speaking per-son in each location. English is also spreading with the World Wide Web, at least to countries where there is access.

The present distribution of languages, as revealed on maps, is useful in understanding cultural development and change. Figure 8-4, for example, indicates the four Dravidian languages are all spoken in a compact region in the south of the Indian Peninsula. The map thus suggests that these languages (which are older) and the
cultures they represent were ‘pushed’ southward by the advancing Indo-European speakers. Similar interesting patterns can be observed in Figure 8-3 by looking at the spatial pattern of the Germanic and Romance language subfamilies.

Chapter 09 - Diffusion of Languages

CHAPTER OUTLINE

Understanding the origin and diffusion of languages is essential to understanding the diffusion of humanity. By understanding where and how languages developed, we learn about the people who spoke them. Although there is disagreement on when language arose, there is no question that it was vital to the development of humanity. By studying the development and changes in languages we learn much about the development of humans and their cultures.

Language Origins

The search for the origins of language goes back tens of thousands of years. It has yielded information not only about how language changes but also about the environments where early languages were spoken. Linguistic reconstruction methods are still controversial, but with the help of computers, remarkable progress is being made in the reconstruction of ancient languages and their paths of diffusion.

The diversification of languages has long been charted through the analysis of sound shifts—finding similar words with the same meaning in different languages and determining their common language of origin. If it is possible to deduce a large part of the vocabulary of an extinct language, it may be possible to recreate the language that preceded it. This technique, called deep reconstruction, has yielded some important results. It takes humanity’s linguistic family tree back thousands of years.

Scientists do not yet agree on how long ago language emerged. Some believe that the use of language began with the rise of Homo sapiens 200,000 or more years ago; others argue that simple vocal communication began much earlier. The first major linguistic hypothesis proposed the existence of an ancestral Proto-Indo-European language (or closely related languages) as the predecessor of Latin, Greek, and Sanskrit, among other ancient languages. The proposed ancestral language(s) would link not only the romance language but also a number of other languages spoken from Britain to North Africa and South Asia.

The Language Tree
In the mid-nineteenth century August Schleicher, a German linguist, compared the world’s language families to the branches of a tree. He suggested that the basic process of language formation is language divergence—differentiation over time and space. Languages would branch into dialects; isolation then increased the differences between dialects. Over time, dialects would become discrete languages. Schleicher’s idea has stood the test of time and criticism, and the language-tree model remains central to language research (Figure 9-1).

A complicating factor is that with human mobility, languages did not merely diffuse through static populations; they also spread by relocation diffusion (see Chapter 2). If this caused long-isolated languages to make contact, language convergence occurred. Researchers then face special problems because the rules of reconstruction may or may not apply. Modern cultural events add a further complication. We know that the languages of traditional, numerically smaller, and technologically less advanced people have been replaced, or greatly modified, by the languages of invaders. This process of language replacement goes on today, and there is every reason to believe that it has happened ever since humans began to use language. Thus languages change through divergence, convergence, and replacement, making the spatial search for origins problematic.

**Recent Language Diffusion**

The final stages of the dispersal of the older languages—before the global diffusion of English and other Indo-European languages—occurred in the Pacific realm and in the Americas. One would thus assume that the historical geography of these events would be easier to reconstruct than the complex situation in western Eurasia, but this is not the ease. While the relatively recent spread of languages to these two realms does provide useful information for the reconstruction of language diffusion routes and processes, an examination of the debates over Pacific and American native languages reveals that the problems are not simple at all.

Much remains to be learned about the reasons behind the complexity of the Pacific language map, to say nothing about the debate over human migration to, and language development and diffusion in, the Americas. One theory holds that there were three “waves” of early human migration to the Americas from Asia producing three families of indigenous American languages. A majority of linguists still doubt the three-wave hypothesis and the three-family map of American languages. Genetic research and archaeological studies will ultimately solve the issue. In the meantime, we are reminded of the gaps still remaining in our knowledge.

**Influences on Individual Languages**
Each of the languages in the world’s language families has its own story of origin and dispersal. It is clear, however, that there are certain critical influences on the diffusion of individual tongues. First, speakers of non-written languages will not retain the same language very long if they lose contact with one another. Second, the diffusion of a single tongue over a large area occurs only when people remain in contact with one another and continue to rely on a common linguistic frame of reference. Three critical components therefore have influenced the world’s linguistic mosaic: writing, technology, and political organization.
Chapter 10 - Modern Language Mosaics

CHAPTER INTRODUCTION

Language is an expression of culture, serving to both unite and divide people. The question of which language to use in a multilingual country is an important one since intercultural Communication is essential for political stability. Sometimes an existing language will spread worldwide to serve as a means of communications between people, but in regions where several languages, and their cultures, meet and merge a whole new language may develop. The study of place names, both historical and contemporary, can also reveal much about a culture and its people. In the world of the late 1990s, when the cultural composition of many countries is changing, questions about language are of particular significance.

Choosing A Language

The United States has no official language—The language selected in multilingual countries, often by the educated and politically powerful elite, to promote internal cohesion; usually the language of the courts and government—even though we are a nation of emigrants and enormous ethnic mix. The reason for this is simply that if there were an “official” language selected for this country—no matter which language it might be—it would carry with it the implied preference for the particular culture of which it was the native tongue. It would also imply, rightly or wrongly, that other languages/cultures were not as important.

Historically, languages spread primarily by three means; commerce, religion, and conquest, within the parameters of expansion and/or relocation diffusion. The Indo-European languages spread globally in this manner and one in particular, English, diffused throughout the world during the era of colonialism. Largely because of the political and economic power of Britain and the United States, English today has become the global language of elites, commerce, and business.

Command of English undoubtedly is an advantage throughout the world and the position of some governments is that the advantages of being able to use English Outweigh cultural considerations. Some countries have made English (or another
foreign language) their official language, giving indigenous languages secondary status. This provokes charges of neocolonialism or favoring the interest of educated elites. The emotional attachment to language is not just a matter of protecting threatened tongues. It is also a practical issue.

**Multilingualism**

There is no truly monolingual—where only one language is spoken—country in the world today. Several, such as Japan, Uruguay, Iceland, and Poland, claim monolingualism but even in these countries there are small numbers of people who speak other languages. For example, more than a half-million Koreans live in Japan, and English-speaking Australia has more than 180,000 speakers of aboriginal languages.

Countries in which more than one language is in use are called multilingual states. In some of these countries linguistic fragmentation reflect strong cultural pluralism as well as divisive forces (see Figure 10-5). This is true in former colonial areas where peoples speaking different languages were thrown together, as happened in Africa and Asia. This also occurred in the Americas as Figure 10-2 shows. Multilingualism takes several forms and can be reflected in regional divisions (Canada, India, Peru, and Belgium), but in some countries (far fewer) there is less regional separation of speakers of different languages (for example South Africa). Multilingual countries sometimes solve the problem of intercultural communication by making a foreign tongue their official (“umbrella”) language, as shown in Table 10-1. For former colonies, this has often been the language of the colonists, even though they may have gained their independence in a violent revolution against those colonists. Such a policy is not without risks, however, and the long-term results of the use of a foreign language may not always be positive.

**Lingua Franca**

Traders have often succeeded in overcoming regional linguistic communication problems where language planners failed. Centuries ago people speaking different languages were forced to find ways to communicate for trade. This need resulted in the emergence of a lingua franca—any common language spoken by peoples with different native tongues, the result of linguistic convergence. The term comes from the Mediterranean region and its numerous trading posts during the period following the Crusades. In several areas of the world today, linguistic convergence has produced languages of mixed origin. Some of these have developed into major regional languages (see Figure 10-1).
Toponymy

The study of place names (toponymy) can reveal a great deal about the contents and historical geography of a cultural region. Even when time has erased other evidence, place names can reveal much about a cultural area. Welsh place names in Pennsylvania, French place names in Louisiana, or Dutch place names in Michigan reveal national origin as well as insight into language and dialect, routes of diffusion, and ways of life.

Toponyms—place names—make reading a map a fruitful and sometimes revealing experience. A careful eye will spot Roman names on the map of Britain, German names on the map of France, and Dutch names in Australia.

CHAPTERS QUIZ

MULTIPLE-CHOICE QUESTIONS

1. All languages have at least one thing in common, they:
   a. change over time
   b. remain static
   c. do not borrow from other languages
   d. do not use symbols

2. Spatially the ? language family is the most widely dispersed.
   a. Afro-Asiatic
   b. Ural-Altaic
   c. Indo-European
   d. Khoisan

3. The use of sound shifts helps trace languages back toward their origins. This technique is called:
   a. backward reconstruction
b. root tracing

c. deep reconstruction

d. language foundation tracing

4. In tracing languages backward many factors must be taken into consideration, such as:

a. language convergence

b. the replacement of language by invading forces

c. linguistic islands

d. all of the above

5. In which of the following world regions did the last diffusion of the older languages take place.

a. the Indian Ocean

b. the Pacific and Americas

c. the South Atlantic

d. Central Asia

6. The world’s linguistic mosaic has been influenced by three critical components. Which of the following is not one of these.

a. transportation

b. writing

c. technology

d. political organization

7. Which of the following languages has become the one most often used as the primary medium of international communication in business.

a. French
b. English

c. German

d. Spanish

8. Of the following countries, which has a division between the English and French speakers that may someday lead to a permanent division.

a. Belgium

b. France

c. Canada

d. Netherlands

9. Which West African country has so many languages and lesser tongues that the government adopted English as its “official” language.

a. Liberia

b. Mali

c. Ghana

d. Nigeria

10. In the Stewart system of classification of place names, Rocky Mountains is an example of a ? name.

a. manufactured

b. possessive

c. descriptive

d. commendatory

TRUE/FALSE QUESTIONS

1. Linguists estimate between 2000 and 3000 languages are being spoken in the world today. (TF)
2. In today’s world, because of migration, most developed countries do not have a standard language. (TF)

3. India has hundreds of languages, most of which are spoken by few people. (TF)

4. Languages that may seem to have the same roots but are very different, probably have words in common because of interaction between different cultures. (TF)

5. Occurring only in the past, language replacement occurred when invaders took over a small weaker group. (TF)

6. Those that believe the agriculture theory of language diffusion think the first language diffused from the Fertile Crescent. (TF)

7. When early large political systems collapsed language divergence took place. (TF)

8. During the colonial period, pidgin English developed in the Caribbean region when English was mixed with African languages, and was only spoken by the common people. (TF)

9. There are no true monolingual states left in the world today. (TF)

10. It is likely Belgium will follow Czechoslovakia’s lead and divide along linguistic lines in the near future. (TF)

**STUDY QUESTIONS**

1. How is it that we have come to speak English in the United States, and how is it that English is becoming a lingua franca of the world? Trace the diffusion of Modern English back to its origin in Europe, and even further in the past to the proposed hearth of the Proto-Indo-European language. Be sure to back up your statements with accepted theories of language diffusion, and also include current examples illustrating how the U.S. is influencing the proliferation of the English language.

2. Study Figures 10-3, 10-4, 10-5, and 10-6. Relate these figures to information about them in the text. Why do you think some of these countries have had so many problems? Why do you think Switzerland does not have any problem?

3. What are the major components that make up the definition of language as spoken by humans? What is a standard language? How does the text explain a dialect and isoglosses?
4. Look at Figure 8-3. What does this tell you about the spread of the Indo-European languages? How do you think colonialism and migration (ancient and recent) helped in spreading these languages?

5. In Figure 8-5 we can see the location of Africa’s language families. How does the text explain their location? How are different subfamilies related? Why is the Khoisan family considered the oldest?

6. Why is there debate over whether Chinese is one or several languages?

7. Describe the process of deep reconstruction and the role of sound shifts. What factors create problems for people trying to reconstruct old languages?

8. Discuss the theories of language diffusion. How does Cohn Renfrew carry one of these farther?

9. By looking at Figure 9-6, and reading the text, follow the diffusion of language in the Pacific. Discuss the problems encountered in interpreting the time frame and number of migrations.

10. Discuss the controversies surrounding the diffusion of languages in the Americas.

11. Discuss the process of creolization. How is it important in the formation and use of new languages?

12. Why do some countries choose to declare official languages? What are the risks a country faces when it makes such a decision?

13. What does the study of toponymy reveal about past and current cultures of a place? What can we learn from two-pan place names?

14. List the reasons countries have changed place names. Pay special attention to the former Soviet Union.
Chapter 11 - Origins and Distribution of Religions

CHAPTER INTRODUCTION

Religion is one of the key components of culture and, like language, can both unify or divide humans. Like language, but in a different way, religion confers identity. Religion dominates the lives and behavior of billions of people worldwide. In the world of the late 1990s, modernization, urbanization, secularism, and resurgent fundamentalism appear to be on a collision course. The question facing the world of the twenty-first century will be whether the modern-secular fundamentalist religious countries can coexist. The study of religion has many geographic dimensions today.

Like languages, religions are constantly changing. In the process, the great religions of the world have diffused across cultural barriers and language boundaries. Persuasion will not lead people to change the language they speak, but it can induce them to convert to a new faith—conversion still goes on today. Just as the map of languages continues to change, so do patterns of religious affiliation. The cultural landscape is marked by religion—churches and mosques, cemeteries and shrines, statues and symbols, modes of dress, and personal habits. In industrialized societies, such overt religious displays have declined, but they are still common in more traditional societies.

The Geography of Religion

In many parts of the world, especially in non-Western areas, religion is such a vital part of culture that it practically constitutes the culture. Thus it becomes difficult to define exactly what a religion is, because religion manifests itself in so many different ways. In some societies, religion—at least in organized form—has become less
significant in the lives of many people. In many societies in Africa and Asia, religious doctrine exerts tight control over much of the behavior of the people, through ritual and practice and even the orientation of the sleeping body at night. Even where religion is less dominant, its expression is still evident in many practices and beliefs.

Organized religion has powerful effects on human societies. It has been a major force in combating social ills, sustaining the poor, educating the deprived, and advancing medical knowledge. However, religion has also blocked scientific study, supported colonialism and exploitation, and condemned women to an inferior status in many societies. Like other bureaucracies, large-scale organized religion has all too often been unable to adjust to the times.

**Major Religions**

The distribution of the major religions among various world regions is depicted in Figure 11-1. The information on this map should be viewed as a generalization of a much more intricate set of distributions. Nevertheless, the map does reveal the dominance of the Christian religions, the several faiths of Christianity having been diffused through European colonialism and aggressive proselytism. Thus Christianity is today the world’s most widely dispersed religion (see also Table 11-1). There are more than 1.6 billion Christians in the world today, divided between Roman Catholics (the largest segment), the Protestant churches, and Eastern Orthodox. Together, Christians account for nearly 40 percent of the members of the world’s major religions.

The second true global religion (also called ‘universal faiths”) is Islam. Despite the fact that it is the newest” of the global religions—it arose in the western Arabia area in the sixth century—it is today the fastest growing of the worlds major religions, and like the other major faiths has more than one branch. Like Christianity, Islam has diffused widely, but mainly in Africa and Asia. It dominates in Southwest Asia and North Africa and extends eastward into the former Soviet Union and China, with clusters in Indonesia, Bangladesh, and the Philippines. It even has adherents in the United States (see: Focus on: Americas Black Muslims). Islam has more than 1 billion adherents, of whom more than half are outside the cultural realm often called the Islamic World. Southwest Asia and North Africa, however, remain the Islamic heartland, with about 400 million adherents. A comparison between Figures 11-1 and 7-1 shows that the largest Muslim country is Indonesia, with about 165 million believers. Christianity and Islam together hold the allegiance of nearly half the world’s population (see Table 11-1); no other faith even comes close. The third global religion, Buddhism, claims slightly less than 350 adherents. The third largest faith
numerically, Hinduism, is not a global but a cultural faith concentrated in a single geographic realm, and is regarded as the world’s oldest organized religion. The vast majority of the 750 million Hindus live in India, although Hinduism extends into Bangladesh, Myanmar, Sri Lanka, and Nepal.

In this chapter we have viewed the spatial distribution of the world’s major religions and assessed their strengths in terms of number of adherents. In the next chapter we will examine the three geographic characteristics of religions: their locational origins, routes of diffusion, and their imprints on the cultural landscape.

Chapter 12 - Religion: Location, Diffusion and Cultural Landscape

CHAPTER INTRODUCTION

Religion is the most recent major component of culture to develop. As a result, we know more about the development and dispersal of the major religions than we do of languages. In a world where cultural isolation is a thing of the past and religion is such an important part of culture, it is important to understand the different religions and their effect on the cultures of which they are a part. This chapter traces the spread of the belief systems that have contributed to the formation of modern cultural regions. It is remarkable that, after tens of thousands of years of human development and migration, the great faiths all arose within a few thousand kilometers of each other in South and Southwest Asia (Figure 12-1).

Hinduism

Hinduism is the oldest of the world’s major religions and one of the oldest extant religions in the world. It is a cultural religion, having emerged without a prophet or a book of scriptures and without evolving a bureaucratic structure comparable to that of the Christian religions. Hinduism appears to have originated in the region of the Indus Valley in what is today Pakistan (see Figure 12-1) perhaps as much as 4000 years ago. Hinduism reached its fullest development in India, and spread into Southeast Asia before the advent of Christianity. It has not been widely disseminated. Hinduism has remained essentially a cultural religion of South Asia and is more than a faith; it is a way of life. The cultural landscape of Hinduism is the cultural landscape of India. Temples and shrines, holy animals by the tens of millions, and the sights and sounds
of endless processions and rituals all contribute to a unique atmosphere. The faith is a visual as well as an emotional experience.

**Buddhism**

Buddhism, with fewer than half as many adherents as Hinduism, arose in the sixth century B.C. in India. It was a reaction to the less desirable features of Hinduism such as its strict social hierarchy that protected the privileged and kept millions mired in poverty. Buddhism was founded by Prince Siddhanha, known to his followers as Gautama. The Buddha (enlightened one) was perhaps the first prominent Indian religious leader to speak out against Hinduism’s caste system. The faith grew rather slowly following the Buddha’s death until the middle of the third century B.C. when the Emperor Asoka became a convert. During Asoka’s rule there may have been more Buddhists than Hindu adherents in India, but after that period the strength of Hinduism began to reassert itself. Today Buddhism is practically extinct in India, although it still thrives in Sri Lanka, Southeast Asia, Nepal, Tibet, Korea, and Xapan. The Buddha received enlightenment as he sat under the Bodhi (enlightenment) tree and because of its association with the Buddha, the tree is revered and protected; it has diffused as far as China and Japan and marks the cultural landscape of many villages and towns. Buddhism’s architecture includes some magnificent achievements, with the pagoda as perhaps the most familiar structure. Buddhism is experiencing a revival that started two centuries ago and has recently intensified. It has become a global religion and diffused to many areas of the world.

**China**

Confucianism was founded on the teachings of Confucius in the sixth century B.C. Taoism is believed to have been founded by an older contemporary of Confucius Lao-Tsu, who had great and lasting impacts of Chinese life. In his teachings, Lao-Tsu focused on the proper form of political rule and the oneness of humanity and nature. According to Lao-Tsu, people should learn to live in harmony with nature (see Focus on: “Feng Shui”). Taoism became a cult of the masses. Following his death, the teachings of Confucius diffused widely throughout East and Southeast Asia. From his writings and sayings emerged the Confucian Classics, a set of 13 texts that became the focus of Chinese education for 200 years and the Guide for Chinese civilization. In the more liberal atmosphere in Communist China today, both the Chinese religions of old and the Christian and Islamic faiths are reviving, and Confucianism and Taoism continue to shape Chinese society.

**Judaism**
Judaism grew out of the belief system of the Jews, one of several nomadic Semitic tribes living in Southwest Asia about 2000 B.C. It is the oldest religion to arise west of the Indus River and the history of the Jews is filled with upheavals. In the face of constant threats, the Jews have sustained their faith, the roots of which lie in the teachings of Abraham, who united his people. Table 11-1 shows the Jewish faith has about 18 million adherents, but the distribution of Jews proves that Judaism is indeed a world religion and has a global importance far greater than its numbers would indicate.

**Christianity and Islam**

Christianity’s three major branches (Roman Catholicism, Protestantism, and Orthodoxy) have diffused throughout the world by expansion combined with relocation diffusion. The cultural landscapes of Christianity’s branches reflect the changes the faith has undergone over the centuries. Certain denominations have more durable cultural landscapes in which the authority and influence of the church remain visible. Islam, the youngest of the world religions, has two major sects, the majority Sunni and the minority Shia (see Figure II -I). This division occurred almost immediately after the prophet Muhammad’s death and took on regional overtones when Shiism became the state religion of Persia (now Iran). Like Christianity, Islam has diffused globally, but is a classic example of expansion diffusion from its Arabian source, followed by relocation diffusion (Figure 124). Islam achieved its greatest artistic expression, its most distinctive visible element, in architecture.
Chapter 13 - Religion, Culture and Conflict

CHAPTER INTRODUCTION

Of the forces shaping the geography of culture, language and religion are two of the most powerful, but as a divisive force religion plays a more prominent role. People may speak the same language but have quite different beliefs either as members of different major religions or different branches of the same faith. As you read this chapter you will gain insight into the perpetuating of cultural strife by religion, a problem that adds to the difficulties of peaceful human coexistence. It is important for you to realize that religious conflicts usually involve more than differences in spiritual practices and beliefs. Religion functions as a symbol of a much wider set of cultural and political differences. The key points of this chapter are discussed below.

Interfaith Boundaries

Compare Figure 11-1 with a political map and you will see that some countries lie entirely within the realms of individual world religions, while other countries straddle interfaith boundaries, the boundaries between the world’s major faiths. Boundaries between major religions that cross countries can be powerful sources of conflict, with serious implications for political cohesion and stability.

Examine Figure 13-1 and you will see that several countries in Africa are in this situation, including Nigeria, Africa’s most populous state. Nigeria is a multilingual
country of 110 million inhabitants. Superimposed on its linguistic diversity is religious regionalism: the north is a Muslim zone, whereas Christianity prevails in the south along with local traditional religions. Ethnic groups in the north and south see religion as the focal point of differences that go much deeper than that. Will Nigeria’s location astride an interfaith boundary ultimately destroy the country? The potential for a fracture along religious lines is growing, and any such development would have enormous social and political consequences. Nigeria is a crucible of West African culture and has served as a model for other countries with two or more religious groups within their borders. The breakup of Nigeria would indeed have far-reaching consequences.

**Intrafaith Boundaries**

Boundaries between branches of a major religion are generally less divisive than boundaries between different religions. A number of Western European countries have Catholic as well as Protestant communities, and often these are reflected in the regional distribution of the population, as in the case of Switzerland (Figure 13-4). In the late 1990s the great majority of these countries were not experiencing religious or ethnic conflict. But intrafaith boundaries are still capable of producing cultural conflict that can threaten the stability of entire countries. Consider the situation in Northern Ireland, where a Protestant majority and a Catholic minority are in conflict over coexistence and their future. This issue is not strictly religious, but stems from a time when all of Ireland was a British dependency and British Protestants migrated to Ireland. Most settled in the northeastern corner of the island (see Figure 13-5) where, following partitioning, they constituted the majority of the population and held all the economic and political advantages. The conflict today is over access to opportunities, civil rights, and political influence. But religion and religious history are the banners beneath which the opposing sides march.

**Religious Fundamentalism**

In the world of the late 1990s, religious leaders and millions of their followers are seeking to return to the basics of their faith. This drive toward religious fundamentalism is often born of frustration at the perceived breakdown of society’s mores and values, loss of religious authority, failure to achieve economic goals, corruption of political systems, and loss of a sense of local control in the face of the globalization of culture and economy. People of one society often fear fundamentalism in other societies without recognizing it in their own. In the United States, fundamentalism is often associated with Islam. However, religious fundamentalism is a world-wide phenomenon that affects virtually all religions, including Islam, Christianity, and Hinduism. Fundamentalism and extremism are
closely related, and their appeal is global. Today religions are affected by modernization. Education, radio, television, and travel have diffused notions of individual liberties, sexual equality, and freedom of choice; questions about religions as well as secular authority; and other ideas that may clash with religious dogma. The drive toward fundamentalism in Christianity and Islam alike is creating a climate of mistrust that could lead to strife. The cultural cores of Christianity and Islam lie in close proximity in Europe and Southwest Asia, North Africa; the prospect of disharmony and conflict between them is growing.

MULTIPLE-CHOICE QUESTIONS

1. Which South American country, according to Figure 11-1, has the largest area of Traditional and Shamanist religions?
   a. Argentina
   b. Brazil
   c. Chile
   d. Uruguay

2. The largest number of adherents to the Christian faith are found in:
   a. Europe
   b. Sub-Saharan Africa
   c. North America
   d. South America

3. The most populous Muslim country is:
   a. Iran
   b. Saudi Arabia
   c. Indonesia
   d. Pakistan
4. Hinduism evolved in what is today the country of:
   a. Pakistan
   b. Nepal
   c. Sri Lanka
   d. India

5. Taoism was probably founded by which of the following.
   a. Confucius
   b. Lao-Tsu
   c. Chug-Lee
   d. Mao Tse-tung

6. The rise of secularism is associated with which of the following events.
   a. the Industrial Revolution
   b. the Third Agricultural Revolution
   c. the Reformation
   d. the rise of the Eastern Orthodox faith

7. When we look at a map of Africa displaying religion locations there is an obvious division where ? dominate the north.
   a. Christian religions
   b. Animistic faiths
   c. Muslims
   d. traditional religions
8. When the USSR collapsed, the Soviet Republics became independent states. In which of the following is there an interfaith boundary dividing Muslims and Christians that presents a serious problem for the future of the state.

a. Azerbaijan
b. Ukraine
c. Kazakhstan
d. Belarus

9. The most destructive war of its kind in modern times was a conflict between two Muslim countries following different branches of the Islamic faith. These two countries were:

a. Syria and Jordan
b. Iran and Kuwait
c. Turkey and Greece
d. Iraq and Iran

10. This North African country suffers from the desire of some groups to create an Islamic Republic.

a. Tunisia
b. Morocco
c. Algeria
d. Mali

TRUE/FALSE QUESTIONS

1. Religion has condemned women to an inferior status in many societies. (TF)

2. In today’s world, the Christian religions are the most widely dispersed. (TF)

3. The Hindu religion has a bureaucracy similar to that of Christianity and Islam. (TF)
4. Animistic religions are centered on the belief that animals possess spirits. (TF)

5. Traditional religions still prevail where people resist outside influence. (TF)

6. The caste system is part of the Hindu religion. (TF)

7. Hinduism is a very low key religion, and leaves very little visual evidence on the cultural landscape. (TF)

8. Because of the take-over of China by the communists, Confucianism no longer has much influence on the people. (TF)

9. Even today, cathedrals built in Medieval European towns are still a dominating feature. (TF)

10. In Iran, after the Shah was deposed, women suffered a set-back in freedoms they had gained. (TF)

**STUDY QUESTIONS**

1. Although it can not be defined exactly, list the different rituals that are commonly found in various religions - discuss two universalizing religions and two ethnic religions. Be sure your answer is complete.

2. Identify the hearths of the four major world religions and discuss their diffusion routes. Be sure to identify time periods and means of diffusion (contagious, hierarchical).

3. Using information from previous chapters explain how Christianity spread across the globe?

4. Where is the heartland of Islam? Where in this region are the two divisions located?

5. List the ways Hinduism is different from Christianity and Islam.

6. List the factors that have led to the rise of secularism. Can you think of other factors in your culture that might play a role (hint: materialism)? List them.

7. What are the true global religions? What are regional religions? Name them and their locations. Where are most traditional religions located?
8. List the major world religions and their source areas. List their differences and similarities. How have some of these changed over the centuries?

9. Which religions are cultural or regional? Define the difference between cultural and secular. What are some of the traits that make a religion cultural?

10. Which of the major religions was spread by migrant diffusion? What religion replaced it in its source region?


12. Going region by region and country by country, describe the problems of interfaith boundaries. Be sure to study the appropriate maps.

13. Why do many intrafaith boundaries cause less trouble? (Hint: what commonalities do people have?)

14. Where is the most contested religious site in the world located? Why are there so many conflicts over this particular site?

15. Discuss the rise of religious fundamentalism. Is it confined to one religion or many? What are some of the reasons given for this resurgence?
Chapter 14 - Political Culture and the Evolving State

CHAPTER INTRODUCTION

Political activity is very much a part of human culture and could probably be traced to competition for space or leadership in groups of early humans. Thus emerged history’s first politicians. Political activity possesses spatial expression that can be mapped, a fact that interests geographers (political geography is the study of political activity in spatial context). The most common line on a map is a political boundary and such boundaries represent a long evolutionary process, but the world political map is relatively new to human history. Perhaps no political map will ever be permanent, as events in the 1990s have shown us, but there is hope that political activity may yet lead to a lessening of tensions and conflict between the Earths inhabitants.

The present-day layout of the world’s political map is a product of humanites endless politico-geographic accommodations and adjustments. A mosaic of more than 200 states and territories separated by boundaries, makes the world looks like a jigsaw puzzle. The map depicting that jigsaw puzzle is the most familiar and widely used map of the world—so widely used that we often fail to think about the pattern it
contains. Valuable insights can be obtained from even a brief examination of the nature and significance of the patterns on the political map. It shows, for example, that in terms of territory there are vast inequalities ranging from subcontinental giants to microstates. What the map cannot show is that only a minority of the world states are nation-states, the ideal form to which most nations and states aspire—a political unit wherein the territorial state coincides with the area settled by a certain national group of people. The population of such a country would thus possess a substantial degree of cultural homogeneity and unity—and, hopefully, political stability.

Rise of the Modern State

The concept of statehood spread into Europe from Greece and Rome, where it lay dormant until feudalism began to break down. The Norman invasion of 1066 was perhaps the most significant event in this process. The Normans destroyed the Anglo-Saxon nobility; created a whole new political order, and achieved great national strength under William the Conqueror. On the European mainland, the continuity of dynastic rule and the strength of certain rulers led to greater national cohesiveness. At the same time, Europe experienced something of an economic revival, and internal as well as foreign trade increased. The lifestyles of many disadvantaged people improved and crucial technological innovations occurred. The so called Dark Ages were over and a new Europe was emerging.

From a political-geographic perspective, the Peace of Westphalia can be seen as the first major step in the emergence of the European state. The treaties signed at the end of the Thirty Years War (1648) contained language that recognized statehood and nationhood, clearly defined boundaries, and guarantees of security. Europe’s politico-geographical evolution was to have enormous significance, because the European state model was exported through migration and colonialism, but it has not always worked well in the non-Western world.

Territory

No state can exist without territory, although the United Nations does recognize the Palestinians as a stateless nation. Within the states territory lie the resources that make up the state. The territorial character of states has long interested geographers, who have focused on territorial morphology—territorial size, shape, and relative location. There is no question that the nature of a states territory can have social and political significance, but focusing just on territory without considering other aspects of a states geographical context can be misleading. Being small and compact can mean very different things for a state in the economic core than for one in the periphery.
Different territorial characteristics can present opportunities and challenges, depending on the historical and political-economic context. For the United States, large size, large population, and abundant resources meant emergence as a global power. For the former Soviet Union, the vast distances over which people and resources were distributed presented a serious obstacle and contributed to its collapse. Similar problems can result because of a state’s shape—as in the case of the fragmented Philippines; the elongated Chile or Thailand with its southern protruded area. These and other states shapes can often cause problems of political control, defense, transportation, or access.

**Boundaries**

The territories of individual states are separated by international boundaries that mark the limits of national jurisdiction. Boundaries may appear on maps as straight lines or twist and turn to conform to physical or hydrologic features. A boundary between states is actually a vertical plane that cuts through the rocks below (called the subsoil in legal papers) and the airspace above—defined by the atmosphere above a state’s land area as marked by its boundaries, as well as what lies at higher altitude. Only where this vertical plane intersects the Earth’s surface (on land or at sea) does it form the line we see on a map.

When boundaries were established, things were much different and the resources below the surface were much less well-known than they are today. Many mineral deposits extend from one country to another, provoking arguments about ownership and use. This includes everything from coal deposits and petroleum reserves to groundwater supplies (aquifers). Since aircraft had not yet been invented, little attention was paid to the control of the air above—an issue that is of considerably greater importance today. The control of airline traffic over states’ territory may someday be extended to satellite orbits and air circulates from one airspace to another carrying pollutants of one state across the vertical plane to another state.

**CHAPTER QUIZ**

**MULTIPLE-CHOICE QUESTIONS**

1. A country that is landlocked is a country that:
   a. has developed only land transportation
   b. has far more land than people to populate it
   c. has no coast on the open sea
d. has only one coast on the open sea

2. In the Middle East, the Golan Heights were captured in the 1967 war from:
   a. Syria
   b. Lebanon
   c. Jordan
   d. Egypt

3. Which of the following is not a connotation of the term nation’.
   a. ethnic
   b. linguistic
   c. religious
   d. political

4. The Kurds, a stateless nation, form the largest minority in:
   a. Iraq
   b. Turkey
   c. Iran
   d. Pakistan

5. Which of the following is not currently a parliamentary democracy in Europe.
   a. the United Kingdom
   b. the Netherlands
   c. Germany
   d. Sweden

6. Which of the following cannot presently be designated as a nation-state
a. Belgium
b. France
c. Denmark
d. the Czech Republic

7. Which of the following is currently the world’s largest state territorially.
   a. India
   b. China
   c. Canada
   d. Russia

8. Which of the following is a good example of an elongated or attenuated state.
   a. Thailand
   b. Chile
   c. France
   d. Mexico

9. The international boundary between the United States and Canada west of the Great Lakes is classified as a ? boundary.
   a. superimposed
   b. natural-political
   c. geometric
   d. antecedent

10. Which of the following is not an example of a generic political boundary type.
    a. cultural-political
b. superimposed

c. antecedent

d. relict

TRUE/FALSE QUESTIONS

1. The terms country and state are not interchangeable. (TF)

2. States tend to jealously guard their territory. (TF)

3. The Kurds are a stateless nation. (TF)

4. Europe in the mid-seventeenth century was a patchwork of ill-defined political entities. (TF)

5. The European nation-state model was adopted around the world. (TF)

6. Elongated and protruded states have basically the same shape. (TF)

7. All landlocked states are surrounded by other states but have access to the sea by rivers. (TF)

8. When state boundaries are established, demarcation is the third stages and all states demarcate their boundaries. (TF)

9. The boundary between the United States and Canada west of the Great Lakes, is a geometric boundary. (TF)

10. Boundary disputes generally take five principal forms. (TF)

STUDY QUESTIONS

1. Define state and nation. List the main historic events that led to development of the modern European state and nation-state. Why have most other states followed this model?

2. List the different territorial shapes of states and give examples of each. What problems have been attributed to a state’s shape?
3. Why are political boundaries considered to be on a vertical plane? How do boundaries evolve? List the different types of boundaries and what they represent. List and explain the genetic boundary classification pioneered by Hartshorne.

4. What are the functions of boundaries, and how have they changed over time?

5. What are the major reasons for boundary disputes?

Chapter 15 - State Organization and National Power

CHAPTER INTRODUCTION

A state cannot exist without territory and this component can be expressed spatially on a map in several ways. Careful study of such a map tells us much about world political units even at the scale of a world map, and raises intriguing questions. Organizational ability and preference are intrinsic cultural attributes of humans and the political map of the world states expresses this quite clearly. The forces at work in the shaping of a state provoke both unity and division and some states may fracture, but cooperation and tolerance can produce success under almost any circumstances. That fact offers the best hope for solving the problems of humanity as we approach the twenty-first century.
Most political geographers believe that in the near future the total number of independent states will surpass the some 200 existing today. These 200 plus countries will occupy the surface of a small planet of which over two-thirds is covered by water or ice. With such a large number of entities, some large and others very small, some well-endowed and some poor, it is inevitable that equality will remain a mirage. We turn now to a consideration of the human and organizational dimensions of the state.

**Cores and Capitals**

A well-developed primary core area and a mature capital city are essential components of a well-integrated state. Core refers to the center, heart, or focus. The core of a nation-state is constituted by the national heartland—the largest population cluster, the most productive region, the area with the greatest centrality and accessibility, probably containing the capital city as well. Countries without recognizable cores (Chad, Mongolia, Bangladesh) may have notable capitals, but these alone do not produce a well-integrated state. Some states possess more than one core area, and such multi core states confront particular problems. If the primary core is dominant, as in the United States, such problems may be slight but in a country like Nigeria, where three core areas—none truly dominant—mark ethnically and culturally diverse parts of the state, serious problems arise.

The core area is the heart of the state; the capital city is the brain. This is the political nerve center of the country, its national headquarters and seat of government, and the center of national life. This special status is often recognized by using the name of a country’s capital interchangeably with that of the state itself. The primacy of the capital is yet another manifestation of the European state model, one that has diffused worldwide. In general, the capital city is the pride of the state, and its layout, prominent architectural landmarks, public art, and often its religious structures reflect the society’s values and priorities. It is the focus of the state as a political region.

**Unitary and Federal Systems**

All states confront divisive forces—some strong enough to threaten their very survival. The question is how best to adjust the workings of the state to ensure its continuity. When the nation-state evolved in Europe, this was not a problem. Democracy as we know it today had not yet matured; governments controlled the use of force and could suppress dissent by forceful means. There seemed to be no need to accommodate minorities or outlying regions where the sense of national identity was weaker. The European state model was a unitary state and its administrative framework was designed to ensure the central government’s authority over all parts of the state.
European notions of the state diffused to much of the rest of the world, but in the New World and former colonies elsewhere these notions did not always work well. When colonies freed themselves of European dominance, many found that conditions in their newly independent countries did not lend themselves to unitary government, and such situations led to the emergence of the federal state. Federalism accommodated regional interests by vesting primary power in provinces, States, or other regional units over all matters except those explicitly given to the national governments. The Australian geographer K.W. Robinson described federation as “the most geographically expressive of all political systems... federation enables unity and diversity to coexist.” Canada, Australia, Brazil, Nigeria, and India are examples of federal governments existing today.

**Opposing Forces**

All states suffer in some measure from disruptive forces, and all states possess unifying bonds. Strengthening these bonds to overcome divisions is a principal task of government. States are held together by centripetal forces such as nationalism, education, circulation (the system of integration of and movement through language, education, transportation, and transportation), and the institutions of government. By manipulating the system, many countries have managed to enhance the centripetal forces that shape unity.

States must also deal with divisive or centrifugal forces in the form of ethnic disunity, cultural differences, or regional disparities. When these centrifugal forces outweigh the centripetal ones described above, the state will collapse. In recent times we have witnessed the disintegration of the world’s largest colonial empires, including, in the late 1980s, the Soviet Union. Yugoslavia collapsed when a quasi-federal system failed to withstand the forces of division. In the late twentieth century, centrifugal forces seem to be on the rampage.

**Power Relationships**

Just as some states are large and others are small, some are rich and others poor, so there are powerful states and weak ones. Measuring the power of states is a complex and imprecise business. There can be no doubt, however, that a state’s power is directly related to its capacity for organization. Geopolitics, a century-old part of political geography, studies the power relationships among states. Current developments in the states of the Pacific Rim fuel an old debate on Eurasian power relationships.
CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. In the late 1990s, the third largest global economy belonged to:
   a. India
   b. Japan
   c. Germany
   d. China

2. Over half the world’s states have populations below:
   a. 5 million
   b. 4 million
   c. 3 million
   d. 2 million

3. The state of Nigeria has how many core areas.
   a. four
   b. two
   c. three
   d. five

4. In the late 1990s, which of the following countries was building a new, multi-billion dollar capital city to symbolize its rapid economic growth and modernization.
   a. Brazil
   b. Malaysia
   c. the Philippines
5. Which of the following is not a federal state.
   a. Nigeria
   b. Germany
   c. Brazil
   d. Ghana

6. In newly independent countries throughout Africa the divisive force that has threatened national unity is:
   a. tribalism
   b. language
   c. religion
   d. economic development differences

7. Outside the European realm two countries built colonial empires. These were:
   a. India and Pakistan
   b. Japan and Russia
   c. China and Japan
   d. Russia and China

8. The continent which had the greatest number of different colonial powers represented was:
   a. South America
   b. Africa
   c. Asia
d. North America

9. The originator of the heartland theory was:
   a. Karl Haushofer
   b. Friedrich Ratzel
   c. Nicholas Spykman
   d. Halford Mackinder

10. In the United States, the capital city was built on federal territory originally taken from which two states.
   a. Maryland and Virginia
   b. Virginia and North Carolina
   c. Maryland and Delaware
   d. Delaware and Virginia

**TRUE/FALSE QUESTIONS**

1. The ideal population for a state is one in which all the people can have jobs. (TF)

2. The term forward capital, refers to a capital city that is moving ahead economically. (TF)

3. A federal state creates unity by accommodating regional differences. (TF)

4. Education is a centrifugal force because educated people begin to think for themselves. (TF)

5. Alaska was originally part of Russia’s colonial empire. (TF)

6. Mackinder’s heartland theory proposed land-based power, not ocean dominance, would rule the world. (TF)

7. At the end of World War II, the world was bipolar. (TF)
8. Multicore states are more stable than those states having only one core. (TF)

9. There are signs a multipolar world is again forming. (TF)

10. Some governments create artificial crises to bring the people together and lessen internal conflict. (TF)

**STUDY QUESTIONS**

1. Explain why economic success and political power are closely linked. What role did colonialization play in the establishment of today’s states?

2. How do core areas influence a state’s success? What are the functions of capital cities within a core area and those outside the core area?

3. What is the difference between unitary and federal systems? List the unifying and divisive forces of each. What role does nationalism play in unifying a state, and how do governments manipulate this feeling? Why is the Nigerian government having problems keeping the country unified?

4. List the events that led the world to become multipolar during the nineteenth and early twentieth centuries. How did World War II change this? List the main reasons we will be living in a multipolar world again.

**Chapter 16 – Multi nationalism on the Map**

**CHAPTER INTRODUCTION**

The world today presents a complex map of political entities outlined by lines representing political boundaries. Such lines show the geographic limits of the political unit but actually represent much more. Originally serving primarily as trespass lines to indicate the limits of claim to a portion of the Earth by a group or culture, time and technology have combined to demand that they be quite precise, a condition fairly new in human history. Most boundaries were established before much was known about the interior of the earth and the resources that lay hidden there. Add to this the increasing activity of many states in controlling adjacent areas and you begin to appreciate the enormity of the problems. Like other components of human culture, boundaries represent a history of adjustment, evolution, and experience which must adjust to new conditions and circumstances if they are to be beneficial to humanity.
Ours is a world of contradictions. At every turn we are reminded of the interconnections of nations, states, and regions, yet separatism and calls for autonomy are rampant. In the 1990s, we appear to be caught between the forces of division and unification. Despite these conflicts and contradictions there is today hardly a country in existence that is not involved in some multinational association. There is ample proof that such association is advantageous to the partners and that being left out can have serious negative effects on state and nation.

**Supranationalism**

The phenomenon of interstate cooperation is quite old. In ancient Greece, city-states formed leagues to protect and promote mutual benefits. This practice was imitated many centuries later by the cities of Europe’s Hanseatic League. But the degree to which this idea has taken root in the modern world is unprecedented. The twentieth century has witnessed the establishment of numerous international associations in political, economic, cultural, and military spheres, giving rise to the term supranationalism (technically, the efforts by three or more states to forge associations for mutual benefit and in pursuit of shared goals).

Supranational unions range from global organizations such as the United Nations and its predecessor, the League of Nations, to regional associations such as the European Union. All signify the inadequacy of the state system as a framework for dealing with important issues and problems in the world as it approaches the twenty-first century. In the late 1990s, there are more than 100 supranational organizations, counting subsidiaries. The more states participate in such multilateral associations, the less likely they are to act alone in pursuit of a self-interest that might put them at odds with neighbors.

**League of Nations to United Nations**

The modern beginnings of the supranational movement came with the conferences that followed the end of World War 1. The concept of an international organization that would include all the states of the world led to the creation of the League of Nations in 1919. The league was born of a worldwide desire to prevent future aggression, but the failure of the United States to join dealt the organization a severe blow. It collapsed in the chaos of the beginning of World War II, but it had spawned other organizations such as the Permanent Court of International Justice which would become the International Court of Justice after World War II. It also initiated the first international negotiations on maritime boundaries and related aspects of the law of the sea.
The United Nations was formed at the end of World War II to foster international security and cooperation. Representation of countries in the United Nations has been more universal than it was in the League (text Figure 27-1). In 1998, there were 185 member states with only a handful of states still not members. It is important to remember that the United Nations is not a world government; member states participate voluntarily but may agree to abide by specific UN decisions.

Among the functions of the United Nations the imposition of international sanctions and mobilization of peacekeeping operations are the most high-profile. Peacekeeping has become a costly and controversial responsibility, with the UN active militarily in more than a dozen countries in 1998. The organization’s peacekeeping function provides major benefits to the international community. Another arena in which the United Nations has accomplished much is the law of the sea through which are channeled the extension of national claims over the oceans.

**Regional Multinational Unions**

The global manifestation of international cooperation is most strongly expressed at the regional level. States have begun to join together to further their political ideologies, economic objectives, and strategic goals. Among many regional multinational associations, the European Union is the most complex and far reaching. Originally known as Benelux it was formed by Belgium, the Netherlands, and Luxembourg before the end of World War II. Today, the 15 member states are likely to be joined by others within a decade.

Economic, military, cultural, and political forces are today affecting the activities of more than 60 major international organizations. The main motives for supranational cooperation are economic, but they are not the only ones. Along with economic prosperity, a shared military threat (the North Atlantic Treaty Organization [NATO] for example), appears to be equally strong in promoting international cooperation.

**CHAPTER QUIZ**

**MULTIPLE-CHOICE QUESTIONS**

1. The beginnings of the supranational movement came with the conferences that followed the end of:

   a. WW I
   
   b. WW II
c. the Korean War  
d. the Gulf War

2. Which of the following functions of the United Nations has become the most costly and controversial.
   
a. maintaining its own armed force  
b. boundary demarcation  
c. peacekeeping  
d. refugee control

3. By 1998, how many members were there in the Unrepresented Nations and Peoples Organization (UNPO).
   
a. 65  
b. 49  
c. 15  
d. 39

4. Which of the following countries was the first to announce that it claimed not only the continental shelf adjacent to its coast but also the waters lying above it.
   
a. Chile  
b. Peru  
c. the United states  
d. Argentina

5. The Territorial Sea designation allows countries to claim state sovereignty for a distance of ? nautical miles from their shorelines.
   
a. 12  
b. 18
6. In 1998 there were more than ? multinational unions in the world.
   a. 40
   b. 50
   c. 60
   d. 70

7. The original name of the group that would ultimately become the European Union was:
   a. the Common Market
   b. Benelux
   c. the European Community
   d. the European Free Trade Union

8. Which member of the European Union is a concern for other members because of a possible dominance of the organization.
   a. England
   b. France
   c. Sweden
   d. Germany

9. Which member of the European Union joined as a result of legislative action rather than a referendum of the people of the country.
   a. England
   b. Denmark
c. France

d. Germany

10. Progress toward European unification depends on:

a. military alliances

b. agreements on refugee questions

c. economics

d. a common currency decision

TRUE/FALSE QUESTIONS

1. Supranationalism is a twentieth century phenomenon. (TF)

2. International sanctions are designed to praise a country for its good behavior. (TF)

3. The WHO is a part of the United Nations. (TF)

4. The Truman Proclamation territorially claimed the continental shelves of the United States, and the sea above them. (TF)

5. Benelux was the first interstate economic union. (TF)

6. Today, interstate cooperation is widespread all around the world. (TF)

7. Germany dominates the current EU. (TF)

8. Any European country can join the EU. (TF)

9. Political motives lie behind the forming of most all interstate unions. (TF)

10. NATO is a military alliance between states, and membership is now spreading eastward in Europe. (TF)

STUDY QUESTIONS

1. Define supranationalism. Why is it important?
2. Why did the League of Nations fail? Did it accomplish anything?

3. What was the primary reason for the formation of the United Nations? List and describe its subsidiaries and their purposes.

4. List the main points in the process that led to ratification of the law of the sea, include the history. How does this law affect an ocean fronting country’s boundaries?

5. Discuss the history leading to the formation of the EU. What problems does this organization face? In what other parts of the world are international associations being formed to reduce economic barriers?

6. Beside economic concerns, what other kinds of alliances are being formed around the world today? Where are these located?

Chapter 17 - The Changing Global Political Landscape

CHAPTER INTRODUCTION

The world at the end of the twentieth century is a world of contradictions. Hopes for peace and cooperation are often countered by the reality of division resulting from national self-interest, economic factors, human rights issues, and many other concerns. The hopes for a so-called New World Order shaped by forces that interconnect nations and states by supranational blocks capable of balancing the force of the major powers, and multinational action should any state violate rules of communal conduct, are already clouded by doubts and uncertainties. The world today is burdened by a weakening state system and devolution, which afflicts a growing number of countries.

In this final chapter the focus is on the forces that are changing the global political landscape. These are forces with which government, businesses, and individuals must
contend. To be aware of these forces is to be better prepared to cope with them. When we study the changes taking place in the world’s political framework, we enter the field of geopolitics. This field combines geography with some aspects of political science but geography brings cultural, environmental, and spatial perspectives to the field. As such, geopolitics is a wide arena that helps us understand the forces that are transforming the world map.

**Forces of Devolution**

Devolution, the disintegration of a state along regional lines, is occurring in a growing number of countries, old and young, large and small, wealthy and poor. States are the result of political-geographical evolution that may have spanned millennia (China) or centuries (many European states). Still others have evolved from colonial empires only a few decades ago, as in much of Africa. Revolution, civil war, and international conflict accompany the evolution of states. Even the oldest and apparently most stable states are vulnerable to a process that is the reverse of evolution, propelled by forces that divide and destabilize. That process is called devolution.

Devolution results from many factors, and rarely is the process propelled by a single one, but the primary ones are cultural, economic, and spatial. In Europe, devolutionary threes threaten a large number of older as well as younger states (Figure 35-1). Several of these have cultural bases, as in Spain, Belgium, and the former Yugoslavia. Economic and cultural devolutionary forces are present in Catalonia, but purely economic forces are at work in Italy and France (which is often cited as the model nation-state). In this case the problem is the island of Corsica where the activists want power and money. Europe is not alone in confronting economic forces leading to devolution. During the 1990s a devolutionary movement arose in Brazil that was rooted in economics. It seems that no country is immune from devolutionary pressures.

If devolutionary events have one feature in common, it is that they occur on the margins of states. Note that every one of the devolutionary-infected areas shown in Figure 35-1 lies on a coast or a boundary. Distance, remoteness, and peripheral location are allies of devolution. In many cases the regions adjoin neighbors that may support separatist objectives. As stated previously, the basic reason for almost all devolutionary forces is territory under one guise or another.

In most instances of devolution, the problem remains domestic; that is, it has little or no impact on the world at large. One notable exception is the devolution of the former Soviet Union by a powerful combination of political, cultural, and economic forces (Figure 35-3). When this occurred, the world was transformed. The former Soviet
empire is left with a political-geographic legacy that will remain problematic for generations to come. Visions of local or regional autonomy, notions of democracy and participation, concepts of religious fundamentalism, and economic globalization are changing the map of the modern world.

The State In The New World Order

The state is the crucial building block in the global international framework, yet the world today is burdened by a weakening state system and an antiquated boundary framework. The state’s weaknesses are underscored by the growing power of regions, provinces, States, and other internal entities to act independently of the national government. The European state system, born more than 350 years ago and exported globally with Europeanization in autocratic form, later modified in many instances to a federal system, was at best tenuous in non-European areas. Many boundaries in existence today are the result of colonial control and decision with little regard for the impact on indigenous populations. With the end of colonialism, the legacy of such decisions has produced devolution and conflict. Supranationalism may be a solution to at least some of these problems but the state system did not evolve quickly or painlessly and it is doubtful its successor, whatever that may be, will proceed more smoothly.

A New World Order is said to be in the making following the end of the Cold War, but its geographic outlines cannot yet be discerned. It is likely to involve a multipolar rather than a bipolar configuration (as existed before the devolution of the Former Soviet Union) and it is unclear how orderly it will be or who the key players will be.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. The common currency of the European Union is the:
   a. lira
   b. euro
   c. dollar
   d. mark
2. In 1997, which of the following European countries is not facing serious devolutionary pressures.

   a. Scotland
   b. Belgium
   c. Italy
   d. Germany

3. The region of province of Catalonia is a part of which country.

   a. Spain
   b. France
   c. Italy
   d. Portugal

4. In the past decade, which two East European countries have succumbed to devolutionary pressures.

   a. Bulgaria and Yugoslavia
   b. Poland and Hungary
   c. Czechoslovakia and Yugoslavia
   d. Poland and Czechoslovakia

5. In this South Asian country the Sinhalese majority has been unable to suppress the demands of the Tamil minority for an independent state.

   a. India
   b. Sri Lanka
   c. Indonesia
   d. Bangladesh
6. In the United States the first real brush with devolution may come in which state.
   a. Alaska
   b. Florida
   c. Washington
   d. Hawaii

7. Before the Soviet Union devolved, it was composed of how many Soviet republics.
   a. 10
   b. 15
   c. 20
   d. 25

8. Which of the following Muslim countries is actually a secular state.
   a. Syria
   b. Bulgaria
   c. Turkey
   d. Romania

9. Which of the following is not one of the likely candidates to be included as dominating state in a New World order.
   a. Canada
   b. China
   c. India
   d. Europe

10. The so-called domino theory first arose during which armed conflict.
a. Indochina
b. World War II

c. Gulf War
d. Korean War

TRUE-FALSE QUESTIONS

1. State devolution is the reverse of state evolution. (TF)

2. In Italy devolution is caused by economic problems between the north and south. (TF)

3. Devolutionary processes tend to occur in the middle of states. (TF)

4. The removal of the Berlin Wall was a result of the devolution of the former Soviet Union. (TF)

5. The 15 new independent former Soviet republics suffer from centrifugal forces. (TF)

6. The new Russia is a unitary state. (TF)

7. Today, polities are being conducted on a global scale making state boundaries less important. (TF)

8. In some countries, religious fundamentalism appeals to people where prospects for democracy are dim or oppression seems inescapable. (TF)

9. The ability of small countries to acquire nuclear weapons poses a serious danger to the whole world. (TF)

10. A New World Order will probably be established very early in the twenty-first century. (TF)

STUDY QUESTIONS

1. Explain the devolution process. Does culture always play a role in this process? How have devolutionary factors affected particular European countries? Name the countries and list the factors involved.
2. List the factors involved in the break-up of Yugoslavia. Why was this such a tragic and complicated situation? Has it been resolved?

3. Spatially, where does devolution usually occur? Why? Where does the United States have devolution forces at work today?

4. Explain the devolution of the former Soviet Union. What devolutionary factors are now being faced in the newly independent republics?

5. How is the position of the state changing in today’s world? Are we heading for a New World Order? What are the options this new world order might take?

**Chapter 18 - Livelihoods of Rural People**

**CHAPTER INTRODUCTION**

All humans engage in some form of activity to provide food, clothing, shelter and the other amenities of life, but the varied activities of today owe their success to decisions of the past. The development of agriculture may well be the single most important development in human history. Its success supported both rural and urban populations. With the combination of agriculture and technology lies the ability to provide food and security for all humanity. How, and if, this challenge is met will determine the future of our species.

**Economic Activity**
Economic activities range from simple to complex, from ancient to modern. One way to classic, these activities is to distinguish among different types of activities. For many years three basic types of economic activities were recognized: primary, the extractive sector, secondary, the production or manufacturing sector, and tertiary, the service sector. Rural life has long been dominated by primary economic activities, hunting and gathering (ancient means of survival), farming of all kinds, livestock herding, fishing, forestry and lumbering. Here workers and the natural environment come into direct contact and the environment sometimes suffers.

**Agriculture**

The deliberate tending of crops and livestock in order to produce food and fiber is properly called agriculture, an activity that may be less than 12,000 years old and emerged sequentially in several regions of the world. When humans embraced agriculture they changed the world and human culture forever. Food supplies became more dependable and quantities increased. This in turn led to population increases and, eventually, permanent settlements. Agriculture changes more of the Earth’s surface than any other human activity and thus a cultural landscape that is reflective of the numbers, cultivation practices, settlement patterns, and other cultural characteristics of the population. It is the reason why huge numbers of humans can successfully occupy Earth today.

**Revolutions**

Agriculture actually developed in several stages, referred to as revolutions because of the changes in the way it was practiced. The First Agricultural Revolution achieved plant domestication, a gradual process that was global, often including duplicate domestication of certain plants in different parts of the world, and extending over a period of several thousand years. Humans learned about such things as plant selection, primitive methods of cultivation, and irrigation. Early agriculture was undoubtedly combined with gathering and some hunting as well as animal domestication.

The Second Agricultural Revolution, beginning in the latter part of the so-called Middle Ages, involved improved methods of cultivation, production, and storage. Exact points of origin are unknown but it seems certain that the process was gradual and centered in Europe. The hallmark of this revolution was improved production and organization. Without these changes, the Industrial Revolution would not have been possible and it in turn sustained the changes that were taking place in agriculture.

The Third Agriculture Revolution (still in progress and sometimes called the Green Revolution) is based on research and technology in plant genetics. It occurred at a
time when the population explosion seemed to threaten the global food supply in the
manner that Malthus had predicted two centuries earlier. The laboratory-developed
new, higher yielding strains of grains and other crops seemed to suggest that the threat
of global famine was a thing of the past. However, the race between population
growth and food production is not over, and it remains to be seen whether or not the
Third Agricultural Revolution can continue to overcome the challenge.

Survival

Subsistence agriculture, which produces little or no surplus and involves hundreds of
millions of people in a struggle for survival, still prevails in large regions of tropical
Africa, Asia, and the Americas. Here farmers grow food only to survive. Very likely
they do not even own the soil that they till. Some subsistence farmers may, in fact,
practice shifting cultivation, a method of tillage where plots are farmed until the soil is
depleted and then the farmers move on and clear a new field. As many as 200 million
people still subsist in this manner in tropical regions of Africa, Middle America, and
South America, using methods that have not changed in thousands of years.

Sedentary or shifting, subsistence farming is not only a way of life but a state of mind
for those who practice it. Experience has taught these farmers and their families that
times of comparative plenty will be followed by times of scarcity. It should also serve
to remind us that the security of plentiful food supplies in the technically advanced,
wealthier countries is not shared by many of the Earth’s population.

CHAPTER QUIZ

MULTIPLE CHOICE QUESTIONS

1. In which of the following economic sectors do we find the activity of farming:
   a. production
   b. marketing
   c. extractive
   d. service

2. Farming started about ? years ago.
   a. 8,000
b. 10,000

c. 12,000

d. 14,000

3. The first tools used by humans in hunting were:
   a. made of stone
   b. simple clubs
   c. beaten into shape using copper
   d. more complex than we first realized

4. Fishing probably started:
   a. before hunting
   b. 200,000 years ago
   c. during the last ice age when men could fish through the ice
   d. when the water warmed and covered the continental shelves at the end of the last ice age

5. The first agricultural methods probably involved the:
   a. the sowing of seeds
   b. planting of roots and cuttings
   c. transplanting whole plants
   d. importing of food plants from other regions

6. Wild cattle may have first been domesticated for:
   a. use as draft animals
   b. their milk
c. religious purposes
d. their hides to build shelters

7. The earliest animals to be domesticated in Africa were:
a. guinea fowl
b. cattle
c. chickens
d. goats

8. Which of the following plays a big part in shifting cultivation.
a. nomadic existence
b. very fertile soil
c. high population density
d. control of fire

9. The colonial powers introduce forced farming in their colonies to:
a. improved the lifestyle and wealth of the farmers
b. make profits for themselves
c. help farmers diversify their crops
d. help farmers hold their communities together

10. Which of the following statements is true about the Second Agricultural Revolution.
a. it allowed people to live in larger urban clusters
b. it started quickly and spread rapidly
c. tools and equipment were modified and improved
d. more efficient food storage and distribution was created

TRUE/FALSE QUESTIONS

1. The United States has more farmers than most countries. (TF)
2. Worldwide, people tend to eat more meat than vegetable products. (TF)
3. Drought is the worst enemy of present-day hunting and gathering societies. (TF)
4. Agriculture allowed people to have permanent settlements for the first time. (TF)
5. The development of stone tools never became very important in helping early humankind progress. (TF)
6. By using just fishing, hunting, and some gathering, various groups were able to establish some permanence in settlement. (TF)
7. Agriculture first started in the Americas. (TF)
8. It is now believed the Chinese may have been among the world’s first farmers. (TF)
9. It is not possible to identify in which region any animal was first domesticated. (TF)
10. In the strictest use of the word, subsistence farming means farmers who only grow enough food to supply themselves and their family. (TF)

STUDY QUESTIONS

1. Discuss how hunting and gathering societies existed before agriculture. How did they live? What kind of tools did they devise and use? Why was the use of fire so important?
2. How did fishing change the lives of our early ancestors? Was their life any better? What means did they use to catch fish?
3. Using the text, identify the sources of the many domesticated plants. Does the source of food plants you recognize surprise you? How many can you recognize as being something you have seen in your local grocery store?

4. Read the section on animal domestication and diffusion. Why was this such an important development in human history? Why do you think chickens are kept by so many societies worldwide? Why do you think Africa is trying to domesticate more animals today?

5. Discuss the ways colonial powers permanently changed farming practices when they colonized the different areas of the world.

Chapter 19 - Rural Settlement Forms

CHAPTER INTRODUCTION

The basic human needs are food, clothing, and shelter. Of these, buildings reveal the most about a culture and those who build them, as a visible expression of the culture. When large permanent settlements evolved buildings became more substantial,
specialized, and permanent. As culture became more complex the simple practicality of adaptation to, and protection from, the elements was expanded to include functional differentiation, reflecting the changing needs of people and culture.

**Where People Live**

Early humans all lived in “rural” areas. They were few in numbers and generally mobile. It was not until the development of agriculture that “permanent” settlements became the norm. As recently as several hundred years ago the vast majority of humans still resided in rural areas, generally in agricultural villages raising crops or livestock to support themselves. Towns and cities were few and the exception rather than the norm. It was a very different world than residents of modern, technically advanced cultures experience today.

In the late 1990s, about half the world’s population still resides in rural areas. This is because the vast majority of humanity still farms the land, often in ways that have not changed significantly. In portions of East and South Asia as many as three out of four residents may live in a rural area. By contrast, in the United States, Canada, Western European countries, Japan, and Australia there are far more urban than rural dwellers, reflecting changes in industrialization, transportation, and urbanization over the last 100 years.

**Rural Dwellings**

The cultural landscape is the human imprint on the Earth’s surface, and no human activity produces a more visible cultural landscape than agriculture. Much can be learned about a culture by observing rural settlement patterns. The forms, functions, building materials, and the spacing of rural dwellings reveal much about a region and its culture. The compact, crowded agricultural villages of India, for example, designed to conserve land for actual farming, stand in sharp contrast to the widely scattered individual farmsteads of the American Great Plains where more land may be actually occupied by buildings on each farm than the Indian farmer has for cultivation.

Social and economic opportunities and needs, natural environments, and traditions are also cultural characteristics that are revealed in the rural settlement scene. Large, elaborate dwellings reflect prosperity or social standing while a church, temple or other place of worship reveals something about the priorities of the culture. Dwellings may be concentrated along and near a road or waterway, suggesting available transportation, on high ground suggesting concern about frequent flooding, or on, say, southern slopes reflecting concerns about the winter months (this could also indicate a location in the Northern Hemisphere).
Building Materials

Except in the wealthier societies, most humans construct their dwellings of whatever local material is available commensurate with their experience and the natural environment. Wattle, wood, brick, and stone are among the building materials used in domestic architecture. The selection of the building material is also an indication of the climate of the region. Traditional rural societies are not wealthy and therefore cannot afford, for example, to import wood from great distances if it is not immediately available locally.

Log houses require considerable labor, to say nothing of available timber and transportation needs. They usually indicate a period of severe winter. Cut wood (lumber) is not immediately available in many areas and is expensive. The appearance of elaborate wood or brick dwellings in a region such as the North American Great Plains indicates wealth and an elaborate transportation system. Stone is a common building material if available locally and has great durability. Like wood, its appearance in the dwellings of a region considerably removed from local supplies indicates something about the affluence and social standing of the culture and its inhabitants.

Settlement Patterns

The form or layout of rural villages reflect historical circumstances, the nature of the land, and economic conditions. They range from linear and clustered to circular and grid pattern. Each has something to say about the culture that built them.

Early villages had to be near a reliable water supply, be defensible, and have sufficient land nearby for cultivation to name but a few concerns. They also had to adapt to local physical and environmental conditions, conditions which can be identified with a practiced eye. In Nepal in the Himalayan Mountains, villages cling to the slopes above the river bottoms, indicating awareness of spring floods with the melting of winter snows. Villages in the Netherlands are linear, crowded on the dikes surrounding land reclaimed from the sea. Grid-patterned villages in much of Latin America reflect the influence of their Spanish founders while circular villages in parts of Africa indicate a need for a safe haven for livestock at night. A careful examination of the rural settlement of a region reveals much about the culture, its history and traditions.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS
1. In hamlets or villages where houses and other buildings are grouped in clusters, they are said to have a:
   a. nucleated settlement pattern
   b. dispersed settlement pattern
   c. linear settlement pattern
   d. elongated settlement pattern

2. Which of the following probably did ~ affect how our ancestors of 100,000 years ago built their shelters.
   a. flood prone areas
   b. hot weather
   c. ideas from neighboring villages
   d. available building materials

3. In which direction did the New England house style diffuse the farthest.
   a. north
   b. south
   c. southwest
   d. west

4. Which of the following was not a characteristic of the early Southern style house in the United States.
   a. a characteristic porch
   b. often built on a raised platform
   c. often built on a stone foundation
   d. usually had two stories
5. In China today, why are the farm and village houses being built of baked-mud walls and thatch roofs, when in past times they were made of brick and had tile roofs.

   a. scarcity of building materials
   b. people don’t plan on living in the same place so long
   c. styles have changed
   d. the government will not provide the materials

6. The modern house type is most common in:

   a. Western Europe
   b. Japan
   c. the United States
   d. Canada

7. The log house probably originated in:

   a. Eastern Asia
   b. northern Europe
   c. Central Africa
   d. Mexico

8. Wood is generally the preferred building material for houses. If it is not available, the next most likely material is:

   a. wattle
   b. stone
   c. brick
   d. grass and brush
9. Which of the following house types, now found virtually everywhere in the United States, is considered a good example of maladaptive diffusion.

a. Ranch
b. New England
c. Folk
d. Lower Chesapeake

10. The smallest cluster of houses and nonresidential buildings, is known as a:

a. village
b. hamlet
c. town
d. rundling

TRUE/FALSE QUESTIONS

1. In the United States Midwest, rural houses tend to be laid out in a nucleated settlement pattern. (TF)

2. Our distant ancestors made their first homes in caves. (TF)

3. Communal living developed as human society developed and became more specialized. (TF)

4. Environment was a large determining factor in how early humans built their first shelters. (TF)

5. Some societies still build houses on stilts even though they no longer live in areas prone to floods. (TF)

6. In Africa today, even though they may have the same floor plan, many houses have corrugated metal instead of thatch roofs. This is an example of a modified traditional house. (TF)
7. Today, modernized traditional dwellings are the most common type found in the United States. (TF)

8. Oven baked bricks have replaced sun-dried brick as a building material throughout the world. (TF)

9. The definition of a village varies from country to country depending on the number of inhabitants. (TF)

10. The round village developed in East Africa and had a central cattle corral. (TF)

**STUDY QUESTIONS**

1. List the five things a house can reveal about a region and its culture. What can be learned from the layout and function of houses?

2. Discuss the reasons for different settlement patterns. List in chronological order changes that probably occurred in housing structure since humans built their first shelters, and the probable reasons for these changes. Why is it so difficult to trace diffused building patterns?

3. Discuss the different types of building materials, where they might be found, and how they are used in relation to the environment. In today’s world why are some building materials found far from their source areas? Why are they used so far from their sources?

4. How does the function of village and farm buildings differ between the prosperous Western countries and those poorer countries where subsistence farming is widely practiced?

**Chapter 20 - Commercial Agriculture**

**CHAPTER INTRODUCTION**
Agriculture is practiced in some form by virtually all of humanity but the range and types of practices are quite different. Commercial agriculture is largely a European invention and spread with colonization and the Industrial Revolution. The development of a global transportation network to support industrialization facilitated the flow of foodstuffs to the colonial powers who also introduced plantation agriculture in their colonies to produce luxury-crops. These systems still persist today and affect the well-being of many poorer countries. The following points should be noted when reading this chapter.

A Global Network

Modern commercial agriculture developed out of a global system of commodity exchange established by European colonial powers. As the era of global exploration and colonization by European countries unfolded, new products both agricultural and nonagricultural from the colonial countries became available to a European population that was both growing and becoming more affluent as a result of the Second Agricultural Revolution and the Industrial Revolution. Products from an industrializing Europe made their way to colonies around the world, transportation between source and market was handled by the shipping fleets of the major colonial powers, producing a global pattern of raw materials, manufactured products, and foodstuffs moving between colonies and colonial powers.

Plantations

Plantations—large land holdings devoted to the efficient production of a single tropical or subtropical crop for market—were first established in the 1400s by the Portuguese on islands off the west coast of Africa. Suitable natural environments and plentiful labor led colonial powers to establish plantation- and luxury-crop agriculture throughout the tropical regions. Such enterprises disrupted traditional practices of subsistence agriculture, displaced farmers appropriated land, and generally created poverty and hardship for the indigenous population. This pattern remains today even though many plantations are owned not by colonial powers but by the governments of the countries where they are located. Their persistence is largely because poorer countries need the cash generated by these crops. In the late 1990s, the greatest concentration of plantations was in the American tropics.

Rice and Wheat

Most of humanity depends upon the cereal grains for their survival with rice and wheat feeding well over half of the world’s population. In general, these two key grain crops represent different societies. Rice, originally domesticated in tropical Asia, and
still the dominant crop in the south and east realms of that continent, is grown labor-
intensively on small plots in poorer countries. Rice production by modern commercial
methods is limited to a few countries and the cost of such production often makes it
too expensive for many of the poorer countries who need it most.

Wheat, the second most important of the world’s grain crops, was domesticated in
several locations (see Table 14-I) and lends itself well to commercial production
methods. It has come to be associated with Western cultures where it is grown on
large landholdings by mechanized means in the richer countries. The principal grain
moving in international trade, it is also grown at a subsistence level by millions of
farmers as a first or second crop where environment4 conditions are favorable.

**Specialized Farming**

The single most important factor in successful agricultural production is climate. Only
one form of agriculture mentioned in the legend of figure 16-1 refers to a particular
climate; Mediterranean agriculture. This is a specialized form of farming in a dry-
summer climate (most climatic regions have wet summers). In the five world regions
where this climate prevails a special combination of crops is grown, including grapes,
olives, certain vegetables, and others. Many wines come from these areas and, along
with other commodities, are exported to distant markets because Mediterranean
products tend to be popular and command high prices.

**CHAPTER QUIZ**

**MULTIPLE-CHOICE QUESTIONS**

1. In which region do whole national economies depend on sugar exports.
   a. South Pacific
   b. Caribbean
   c. Pacific Rim
   d. East Africa

2. The colonial powers established cotton plantations in many different countries.
   Today these same countries:
   a. still export all their cotton production
b. no longer grow any cotton
c. have established factories to produce goods for the domestic market
d. sell their cotton to each other instead of the developed countries

3. The beef industry of Argentina secured a global market when the invention of ____ made possible the transporting of a highly perishable commodity over long distances.
   a. commercial canning
   b. refrigerated ships
   c. irradiation of food
   d. the steam engine

4. Today, 75 percent of the rubber produced comes from:
   a. South America
   b. Netherlands
   c. Southeast Asia
   d. lowlands of Florida

5. When the United States imposed an embargo on imports from Cuba in the 1960s, the principal Cuban export affected was:
   a. coffee
   b. cigars
   c. tea
   d. sugar

6. Coffee was first produced and is indigenous to:
   a. Columbia, South America
   b. Costa Rica in Central America
c. Ethiopia  
d. South Africa  

7. The world’s tea plantations are concentrated in:  
a. Africa  
b. South America  
c. Asia  
d. the Caribbean  

8. The world’s largest exporter of rice is:  
a. China  
b. the United States  
c. Thailand  
d. Vietnam.  

9. The Third Agricultural Revolution came about because of:  
a. crop diversification in developing countries  
b. governments in developing countries giving farmers more money to grow more crops  
c. biotechnology  
d. global warming  

10. The largest areas of commercial agriculture lie:  
a. within the tropics  
b. in Western Europe  
c. outside the tropics  

d. in the United States

TRUE/FALSE QUESTIONS

1. Refrigerated ships made it possible for Argentina to transport beef long distances. (TF)

2. Sugar producing and exporting countries set their own prices. (TF)

3. Cartels formed by countries producing the same produce are very successful. (TF)

4. More cotton is exported from developing countries than the United States. (TF)

5. Lately efforts have been made to establish rubber plantations in northern Brazil. (TF)

6. In contrast to coffee most tea is consumed in the countries where it is grown. (TF)

7. Much of interior China has turned into commercial-crop production zones. (TF)

8. Sub-Saharan Africa has increased their commercialized agriculture to the point that they are now exporting more than ever before. (TF)

9. From the southern prairie provinces of Canada south through the United States lies an extensive wheat growing region. (TF)

10. Grapes, olives, figs, dates, and some vegetables are grown in what is called the diversified tropical agriculture zone. (TF)

STUDY QUESTIONS

1. What are cartels and what is their purpose? Are they usually successful? Can they be used for both food and nonfood commodities?

2. Explain how and why rubber production shifted from its source region. Is the rubber industry as important as it once was? Why or why not?
3. Study Figure 20-1. Can you find climatic relationships in similar crop-growing areas around the world? If so, what does this tell you about the cultures in these regions?

4. Describe the Third Agricultural Revolution and how it has affected crop production. Where has this revolution has its greatest impact?
Chapter 21 - Civilization and Urbanization

CHAPTER INTRODUCTION

The process of urbanization intensified the concentration of humanity that had already begun with agriculture. Cities are a relatively recent development of human culture made possible by a stable food supply. The need for central authority, organization, and coordination of effort produced the foundations for city formation. Social stratification was followed by the emergence of government, law, and the refinement of culture. The next challenge facing humanity is the success of cities with the opportunities and problems they present as we enter the twenty-first century.

Virtually everywhere in the world, people are moving from the countryside to towns and cities. This migration is happening so fast that the various agencies that monitor such movements cannot agree on the pace. The problem of undependable census data and inconsistent definitions make agreement all but impossible. There is, however, agreement on one point: in the twenty-first century, the world will be predominantly urban.

Early Development

The first agricultural settlements were true villages and remained so for several thousand years. They were small and did not vary much in size and there was apparently no governmental authority beyond the village. There were no public buildings and no workshops. These egalitarian societies—a society that is unstratified socially and all members have equal status—persisted long after agriculture was introduced. Urbanization and the formation of states transformed egalitarian societies into stratified, functionally specialized ones. This process occurred independently in several regions, probably first in the Fertile Crescent of Southwest Asia (see text Figures 3-3 and 17-3).

The period between about 7000 B.C. and 5000 B.C. is called the formative era for both the development of states and urbanization. The two obviously went hand in hand—in Southwest Asia. The egalitarian society had become a stratified society. Now there were priests, merchants, administrators soldiers, farmers, and craftspeople. The city had become the focus of civilization.

Diffusion in the Mediterranean Region

Urbanization spread from Mesopotamia in several directions. On the Mediterranean island of Crete, more than 3500 years ago, Knossos was the cornerstone of a system
of towns of the Minoan civilization. Ideas about city life may have reached Greece from several directions but whatever the case, during the third millennium B.P., Greece became one of the most highly urbanized areas on Earth. The ancient Greeks thus assimilated concepts of urban life from Mesopotamia as well as Minoan, and the urbanization of ancient Greece ushered in a new stage in the evolution of cities. Some 2500 years ago they had produced the most highly urbanized society of their time with a network more than 500 cities and towns, not only on the mainland but also on the many Greek islands.

**The Roman Urban System**

The great majority of Greece’s cities and towns were located near the Mediterranean Sea, linking peninsulas and islands. When the Romans succeeded the Greeks as riders of the region, their empire incorporated not only the Mediterranean shores but also a large part of interior Europe and North Africa.

The ancient Romans combined local traditions with Greek customs in building an urban system that extended from Britain to Mesopotamia. The Roman urban system was the largest yet. The capital, Rome, was the apex of a hierarchy of settlements from small villages to large cities. A transportation network linked all of the urban centers of the Roman Empire together by a network of land and water routes. Efficiency was a Roman hallmark: urban places were positioned a modest distance from each other so that they could be reached in a reasonable amount of time. Some of their surface routes still serve European motorists today. The Roman road builders created a grid of communications to link the empire together.

**Preindustrial Europe**

Greek and Roman concepts of urbanization diffused into Western Europe, but Europe’s preindustrial cities were poorly organized, unsanitary, overcrowded, and uncomfortable places to live for the majority of their inhabitants. The adage of the good old days hardly applies. More efficient weapons and the invention of gunpowder forced cities to develop more extensive fortifications; fortifications that could not simply be moved outward. The greater numbers of people could only be housed by building upward, and four-and-five-storied tenements began to appear. For the ordinary people, the overcrowded cities were no place to be. When the chaise came, many decided to leave for America, Australia, and other parts of the world.

**Urban Stages**
Cities evolve in stages. The traders’ mercantile city gave way to the factory-dominated manufacturing center, and the automobile enabled the evolution of the suburbanized modern city. Today’s post-modern cities reflect the age of high technology.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. As early towns in a region started to grow and become interdependent a new development took place. This was the rise of the first:

a. states

b. identifiable specialization

c. egalitarian societies

d. counties

2. Stratification of society brought into being an urban elite. From them came the concept of writing and record keeping because they:

a. were the smartest people in the cities

b. had free time while others had to work

c. could demand slaves write everything down

d. owned so much they needed a method of record keeping

3. The early cities were not large by today’s standards. The largest probably had populations of about:

a. 20,000 to 25,000

b. 30,000 to 35,000

c. 40,000 to 45,000

d. 10,000 to 15,000
4. By the middle of the third millennium B.P., Greece had the largest urban complex in the world. Its two largest cities were Athens and:

a. Troy
b. Sparta
c. Volos
d. Piraeus

5. The hallmark of the Roman culture was:

a. their architecture
b. their language
c. their efficiency
d. their clothing

6. The urban tradition on the Italian peninsula prior to the Romans came from the:

a. Etruscans
b. Trojans
c. Minoans
d. Carthaginians

7. In the early decades of the Industrial Revolution, which of the following countries had a region called the “black towns’ because of soot.

a. Holland
b. Germany
c. France
d. England

8. The modernization of the American manufacturing city occurred in the late:
a. seventeenth century
b. nineteenth century
c. eighteenth century
d. sixteenth century

9. In the late nineteenth century, the introduction of which of the following transformed the geographical pattern of American cities.
   a. the electric trolley
   b. the affordable automobile
   c. coast-to-coast highways
   d. the diesel locomotive

10. The northern boundary of the Roman Empire in Britain was marked by:
   a. Caesar’s Wall
   b. the Great Wall
   c. Hadrian’s Wall
   d. the Thames River

TRUE/FALSE QUESTIONS

1. In the twenty-first century the world will still not be predominantly urban. (TF)
2. One of the world’s earliest states developed in Mesopotamia. (TF)
3. Urbanization diffused directly from Mesopotamia to Greece. (TF)
4. To link their empire together, the Romans built roads. (TF)
5. The Roman forum was used only by the elite. (TF)
6. The Chinese city of Xian was known as the Rome of East Asia. (TF)
7. Late preindustrial cities around the world looked much the same. (TF)

8. Primate cities were usually the largest city in a state or urbanized region. (TF)

9. Developed during colonial times, the mercantile city is given credit for starting a downtown area, which had not existed in towns or cities before. (TF)

10. The early manufacturing cities offered good living conditions for their citizens. (TF)

**STUDY QUESTIONS**

1. Discuss how small early settlements went from egalitarian societies to being stratified cities. How did this transition lead to the development of the first states?

2. What role did function and location play in the development of the early cities? What basic factors were needed?

3. Why was the urbanization of ancient Greece different from past urbanizations? How were the cities laid out? How was the quality of life in these Greek cities? How did the Romans change the Greek city and its focus?

4. Discuss the development of cities in preindustrial Europe. How did they change with the development of new weapons? What was life like in these cities?

5. What are the characteristics of the primate city?

6. Describe the differences between mercantile cities, manufacturing cities, and the modern city.
Chapter 22 - Urbanization and Location

CHAPTER INTRODUCTION

The site of a city is essential to early success and long-term survival. Many early cities would find themselves losing their early site advantage as civilizations, and technology evolved and changed. Colonization and industrialization would transform Western Europe and the world from rural to urban with varying results. People migrate to cities, now and in the past, in response to factors that are often more perceptual than real. Lifestyle may in fact be worse, not better, for those participating in rural-to-urban movement in many countries today. The birth of the world urban map of the late 1990s can be traced to the impact of the Industrial Revolution on the medieval ‘and mercantile cities of Europe. In less than two centuries, Western Europe’s population went from overwhelmingly rural to 85 percent urban. This astonishing transformation was the beginning of a worldwide process set in motion by colonialism and the diffusion of industrial know-how. Important key points you will encounter in this chapter are discussed below.

Urban Geography

The study of how cities function, their internal systems and structures and the external influences on them is the field of urban geography. Urban geographers want to know how cities are arranged, what they look like, how their circulation systems function, how commuting patterns develop and change, how and why people move from one part of the city to another. In short, how and why a city and its residents look, act, and change as they do. To do these studies, of course, you need to have urban places.

All cities’ are not equally successful, An urban centers location strongly influences its fortunes, its position in a large and productive hinterland—surrounding service area—can ensure its well-being. The hinterland reveals the economic reach of each settlement, the maximum distance at which people are still attracted for business purposes.

Locational Factors

The answer to the question of why some urban centers are more successful than others is geography. When it comes to explaining the growth and success of certain cities, situation—the external locational attributes of an urban center; its relative location or
regional position with reference to other non-local places—is often the key. A city’s situation can change, and the world’s largest and most enduring cities have seen their situation improve with the times. Conversely, a city’s situation can also deteriorate over time. Exhaustion of resources, repeated crop failures, climatic change, and political developments all can change a city’s situation.

A second locational factor affecting the development of cities and towns is their site—the actual physical qualities of the place a city occupies. An urban centers site may have played a key role in its original and early survival, for example, as a defensive locale; but in modern times that same site may limit its growth and expansion. Air stagnation, depleted water supplies, or changes in transportation routes and means can reduce a previously advantageous site to a liability.

Urbanization in the 1990s

As a percentage of total population, urban dwellers are most numerous in the core areas of Western Europe, North America, Japan, and Australia. There are also remarkably high percentages of urbanization in several countries in the periphery (Figure 18-6). In addition, urbanization is currently occurring rapidly in many peripheral countries, especially Sub-Saharan Africa. Currently this region has both the lowest percentage of its population classed as urban and the fastest growing urban population in the world. Taking 70 percent and higher as the highest category, Mexico and Cuba are on a par with France, and Mexico’s level of urbanization is higher than that of several Eastern European countries.

The culturally and economically diverse realm of Southwest Asia and North Africa displays remarkable variation in levels of urbanization. This variation is related to differences in national economics and cultures. Much of the realm, the Middle East and the Arabian Peninsula, is quite highly urbanized. Nucleation resulting from the oil industry has much to do with this situation.

Urbanization in South Asia remains low. For the realm as a whole, urbanization remains well below 30 percent. Southeast Asia, as a realm, is markedly low levels of urbanization (the city-state of Singapore is 100 percent urban; the only such country in the world). As a whole, East Asia is only about 36 percent urban, despite the rapid economic growth on the western Pacific Rim.

The Great Cities

More than 300 cities in the world have populations exceeding 1 million. If you compare this map with text Figure 18-6, you will find that the former map shows the
concentration of large cities in eastern North America, Western Europe, and Japan. Several of the great urban complexes in these regions are the products of megalopolitan coalescence. The fastest-growing megacities, however, are in South and East Asia.

Many of the world's most populous cities are found in the poorer countries, and it also indicates how fast individual cities in poorer countries are growing compared to conurbations in richer countries. Despite wretched living conditions for many of their inhabitants, cities continue to attract new residents by the millions.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. This term describes the spatial process of clustering by commercial enterprises for mutual advantage and benefit
   a. specialization
   b. industrialization
   c. agglomeration
   d. urbanization

2. In ranking urban places, which of the following is at the bottom of the urban hierarchy?
   a. town
   b. hamlet
   c. village
   d. suburb

3. In some parts of the world, large metropolises are coalescing to create megacities called megalopolises. One such is the so-called Bosnywash in the United States. It is located:
   a. in southern Texas
b. around Puget Sound in the Pacific Northwest

c. on the Eastern Slope of the Rocky Mountains

d. along the U.S. Northeast Coast

4. In the late 1990s, the world’s fastest-growing urban area is:

a. Shenzhen

b. Hong Kong

e. Mexico City

d. Tokyo

5. The city of Paris is located on which of the following rivers.

a. Rhine

b. Thames

c. Seine

d. Marne

6. The capital city of Thailand has some of the most polluted air in the world. This city is:

a. Singapore

b. (Jung How

c. Djakarta

4. Bangkok

7. Which of the following continents has the lowest level of urbanization.

a. Africa

b. Australia
c. South America  
d. Asia  

8. Outside North America and Western Europe, major megalopolitan development is occurring only in which of the following.
   a. China  
   b. Japan  
   c. Australia  
   d. India  

9. United Nations studies suggest that by 2025 there may be as many as ____ cities with populations over 20 million.
   a. 15  
   b. 20  
   c. 25  
   d. 30  

10. Cities in poorer parts of the world generally lack enforceable laws to ensure the orderly use of space. Such laws are called ____ laws.
   a. planning  
   b. economic  
   c. zoning  
   d. population control  

TRUE/FALSE QUESTIONS  

1. Relative location played a big part in which cities grew during the industrialization of Europe. (TF)  

2. While some hamlets may have no urban functions, all villages do. (TF)
3. The megalopolis of Bosnywash in the United States has a global economic reach. (TF)

4. All the fastest growing cities in today’s world have benefited from being located at a site which permits easy expansion. (TF)

5. South Africa’s 57 percent urban level is representative of most other African countries. (TF)

6. Outside North American and Western Europe, only Japan has megalopolitan development. (TF)

7. Most of the world’s largest, and still growing cities, are found in developed countries. (TF)

8. By careful planning, the fastest growing cities are meeting the needs of their fast growing population. (TF)

9. Cities in developing countries lack zoning laws. (TF)

10. Cities the world over are culturally regionalized. (TF)

**STUDY QUESTIONS**

1. List and define the ranking system the urban places. What is a hinterland and why is it important?

2. List the positive and negative factors found in and around a city’s site. Do the same for a city’s relative location (situation). Give two example cities and explain how these factors have affected them. Have their relative locations (situations) changed over time?

3. Discuss urbanization by continent and region using the material in your text. Find the countries with the largest cities. Relating back to the text, which cities are growing the fastest? Which regions have the slowest growing cities? Why is this pattern emerging?
Chapter 23 - Urban Pattern and Structure

CHAPTER INTRODUCTION

From rather humble beginnings, the development of cities has produced a complex settlement pattern that is changing the face of the Earth and the way humans use and occupy it. A city’s spatial organization reflects the culture that built it whether that culture is traditional or advanced. The common denominators of all cities are growth and change. While it is doubtful that the urbanization experiences of the industrialized Western countries can, or even should be duplicated, in much of the world there is no doubt that urbanization is the next step in human cultural evolution.

Geographers have recognized that the relationships between cities and the surrounding countryside can be measured and mapped. Every city and town has an adjacent region within which its influence is dominant. Farmers in that region sell many of their products on the city’s markets, and customers from smaller towns and villages come to the city to shop and to conduct other business. The city’s dominance can be seen in many other areas of life as well, such as the surrounding trade zone or hinterland, the surrounding region from which people travel into the city for work, business, or pleasure. In general, large cities tend to lie farther apart than smaller ones; towns lie still closer together, and villages are separated by even shorter distances. Investigating the above patterns ultimately leads to the study of the anatomy of the city itself; its internal structure and functions.

Interurban Spatial Organization

The Industrial Revolution occurred almost a century later in the United States than in Europe. When it finally did cross the Atlantic in the 1870s, it progressed so robustly that only 50 years later America surpassed Europe as the world's mightiest industrial power.

The impact of industrial urbanization was felt at two levels. At the national level, there quickly emerged a network of cities specialized in the collection, processing, and distribution of raw materials and manufactured goods, and linked together by an even more efficient web of transport routes. The whole process unfolded so quickly
that planning was impossible. Almost literally, near the turn of the twentieth century America awoke to discover that it had built a number of large cities.

In the United States, the urban system evolved through five stages of development determined by prevailing modes of transport and industry. Today’s period of high technology, still in the process of transforming the modern city, dates from the 1970s.

**Urban Functions**

Every urban center has an economic base, with some workers employed in basic (that is, goods-producing) sectors that satisfy demand in the hinterland or markets even farther away. These activities produce goods for export and generate an inflow of money. On the other hand, workers who maintain city streets, clerks who work in offices, and teachers who teach in city schools are responsible for the functions of the city itself. This is the nonbasic (also called the service) sector. Some people who work in a city, of course, do some of each. A mechanic may serve customers from a village in the city’s hinterland, where there are no repair facilities, while also serving city residents.

This employment structure—the number of people employed in various basic and nonbasic jobs—reveals the primary functions a city performs. You should note that all cities have multiple functions, and the larger the city, the larger the number of functions. Some cities, however, are dominated by one particular activity. This functional specialization was a characteristic of European cities even before the Industrial Revolution, but the Industrial Revolution gave it new meaning. This was once true in America as well, as Figure 23-1 reveals, but the situation revealed in these three maps no longer exists, at least to the extent shown on the maps. As urban centers grow, they tend to lose their specialization.

**Central Places**

The notion of a hierarchy of urban places, discussed earlier, identifies urban settlements ranging from hamlets to metropolises and is based not only on population but also on functions and services. These functions and services attract customers from both the urban areas and areas beyond the urban limits. Thus every urban center has a certain economic reach that can be used as a measure of its centrality—the strength of an urban center in its capacity to attract producers and consumers to its facilities.

In 1933, Walter Christaller laid the groundwork for central place theory. Christaller attempted to develop a model that would show how and where central places in the
urban hierarchy (hamlets, villages, towns, and cities) would be functionally distributed, based on their respective provision of central goods and services—goods and services that a central place makes available to its consumers in a surrounding region—as opposed to those universally available. While not totally applicable in the real world, central place theory helps to explain why, under ideal circumstances, small urban places such as villages lie closer together while larger cities lie far apart (see text Figure 23-3).

Urban Structure

Cities are not simply random collections of buildings and people. They exhibit functional structure: they are spatially organized to perform their functions as places of commerce, production, education, and much more. Throughout the past century urban geographers have attempted to construct models that would account for the geographic layout of cities (see Focus on: Three Classic Models of Urban Structure). The task grew more complicated as manufacturing cities became modern cities and modern cities became postmodern. Today urban geographers identify superregions that they call urban realms, and they create models that show cities within cities (text Figure 23-5).

Models of urban structure reveal how the forces that shape the internal layout of cities have changed, transforming the single-center city with one dominant downtown into the polycentric metropolis with several commercial nodes.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. The area surrounding a village or town that depends on that urban place for services is called the:
   a. boondocks
   b. hinterland
   c. support region
   d. rural area

2. The Industrial Revolution crossed the Atlantic to America during the:
   a. 1850s

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b. 1860s

c. 1870s

d. 1880s

3. The iron Horse Epoch of the evolution of the American urban system was dominated by the diffusion of the:

   a. steel industry
   b. automobile
   c. steam boat
   d. steam-powered railroad

4. The rank-size rule of urban places does not apply in countries with;

   a. dominant primate cities
   b. very long coast lines
   c. mainly urban populations
   d. Interstate Highway Systems

5. The central place theory of the urban hierarchy was developed by:

   a. Carl Sauer
   b. Walter Christaller
   c. Homer Hoyt
   d. Alfred Weber

6. In North America, the core of the city is called the:

   a. central city
b. suburb

c. CBD

d. functional structure

7. In metropolitan Los Angeles how many discrete urban realms have emerged around the central city.

a. eight

b. seven

c. six

d. five

8. A number of large cities had been built in America by the turn of which century.

a. twentieth

b. nineteenth

c. eighteenth

d. seventeenth

9. New York became the primate city of America by:

a. 1750

b. 1850

c. 1900

d. 1950

10. In the 1940s, retail centers in America were concentrated in which of the following regions.
a. the Northeast  
b. the South  
c. the Great Plains  
d. the West Coast  

TRUE/FALSE QUESTIONS

1. One factor in the United States’ ability to surge ahead of Britain in the Industrial Revolution was the immigration of millions of European workers. (TF)

2. City planning was started early in the United States because of rapid growth. (TF)

3. Workers in manufacturing plants work in the nonbasic sector. (TF)

4. In a city, the number of nonbasic workers is never greater than the number of basic workers. (TF)

5. Today, functional specialization is no longer a major factor in American cities. (TF)

6. Christaller’s central place theory was never proven to fit any place in the world. (TF)

7. The three classic models of urban structure, although quite different from each other, are used to explain the layout of post modern cities in different parts of the world. (TF)

8. In American cities most people live and work in the suburban city. (TF)

9. Studying cityscapes is useful in finding clues to how societies develop. (TF)

10. To study the urban morphology is to study the urban environment as a living organism because the city changes all the time. (TF)

STUDY QUESTIONS
I. Identify and define each stage of John Borchert’s four-stage model of urban development. What stage has been proposed for the present? How is this stage affecting the United States?

2. Explain the rank-size rule. Where doesn’t this rule apply?

3. Explain the difference between basic and nonbasic sectors. Give examples of jobs in each and their role in the urban environment.

4. When we talk about the primary functions of an urban place today, why is functional specialization no longer so important? Look at Figure 23-1 and compare it with what the text says about changes that have occurred since specialization was important.

5. What was Christaller’s main contribution to geography?

Chapter 24 - Industrial Activity and Geographic Location

CHAPTER OUTLINE

The Industrial Revolution was essentially a revolution in power and transportation. Goods, ideas, and humanity were transported across the Earth in a manner that would forever change our planet and its human occupants. Modern industry increased and intensified regional inequality while mushrooming demand for resources created new global patterns of movement. In the industrial-oriented world of the late 1990s success depended on the possession or control of resources. At a time when cultural differences should be reduced with benefits and technical capabilities shared for the good of all, our own innovations and abilities may work to hinder this end.

Location

Economic activities can be categorized according to their purpose, their relationship to the natural resources on which they are based, and their complexity. Economic geographers investigate the reasons behind the location of economic activity. Today, the world is a vast panorama of primary activity within which there are clusters of secondary industries symbolized by the great manufacturing belts of Japan, the United States, Europe, and Russia. What geographic factors created this arrangement and what will happen next? Answers to such questions come from the field of location theory, which attempts to explain the locational pattern of an economic activity in
terms of the factors that influence this pattern. Location theory helps explain the spatial positioning of industries and their success or failure. The Industrial Revolution transformed the world's economic map, dramatically impacting certain areas while totally bypassing others. Understanding the forces and factors that shaped the world's industrial layout is a prime objective of economic geographers.

**Location Decision**

Industrial activity takes place in certain locations and not others. For primary industries, the location of resources is the determining factor. Secondary industries are less dependent on resource location because raw materials can be transported to distant locations if the resulting profits outweigh the costs. Any attempt to establish a model for the location of secondary industry, however, runs into complications because the location of secondary industries depends to a large extent on human behavior and decision making—cultural and political as well as economic factors, even on intuition or whim. In 1909, the German economist Alfred Weber developed a model for the location of manufacturing establishments, Weber’s least cost theory accounted for the location of a manufacturing plant in terms of transportation (the most important), labor, and agglomeration (shared talents, services, and facilities). Despite numerous criticisms of the model, Alfred Weber set in motion a debate over the spatial aspects of economic activity that continues today.

**Transportation**

As Weber noted, transportation facilities and costs are crucial in industrial location. A huge market may exist for a given product, but if that market is not served by an effective transportation system, much of the advantage is lost. The maps in chapter 26 underscore the fact that highly developed industrial areas are also the places that are served most efficiently by transportation facilities. Industrialization and the development of modern transport systems go hand-in-hand.

In a sense, the Industrial Revolution was a transportation revolution—a revolution that is still going on. Transport costs played a key role in the location of heavy industries but raw-material acquisition and finished-product distribution determined the options. One of the first decisions faced by the capitalists who built the great iron works of Europe, for example, was whether to move either coal to iron ores sites or, iron ore to the coal fields. The iron smelters were built near the coal fields (it generally takes more coal than iron ore to make a ton of finished product). The same decision was made when the American iron industry located near Appalachian coal and hauled iron ore from the Great Lakes Mesabi Range.
Additional Factors of Location

Other factors influencing the location of industries also include labor costs, energy availability, and infrastructure. The availability of cheap semiskilled labor has had an immense impact on regional industrial development. Even in an era of automated assembly lines and computerized processing, the prospect of a large, low-wage, trainable labor force continues to attract manufacturers. Japan’s postwar success was based in large measure on the skills and the low wages of its labor force. Taiwan and South Korea have successfully competed with Japan for the same reason. In the 1980s, China entered the Pacific Rim picture with its huge labor force and will, in turn, feel the impact of cheap labor when Vietnam enters the picture. The cost of labor still looms large in the location of industry.

The availability of an energy supply is another factor in the location of industry, but the factor used to be much more important than it is today. The early British textile mills were “site-tied” because they depended on falling water to drive the looms. Today, power comes from different sources and can be transmitted or transported over long distances. Exceptions occur when an industry needs very large amounts of energy, for example, certain metallurgical and chemical industries.

When Weber considered the role of agglomeration in location decisions, he could not foresee the dimensions of urban areas or industrial complexes a century hence. One of the most difficult problems that today’s industrializing countries or regions face is providing adequate infrastructure—transportation and communication networks, banks, postal service, administrative assistance, energy distribution systems, social services, roads and highways. China has tried to slow industrialization in some regions because of inadequate infrastructure. Thus many factors of industrial location are not accounted for by models. Even the growth of secondary industries is influenced by factors that are not accounted for in the models, such as political changes and even environmental fluctuations.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. In 1721, British textile makers rioted to protest the importation of foreign-made textiles from:
   a. India
   b. Egypt
c. Japan  
d. Hong Kong  

2. Before the Industrial Revolution, European industrial products suffered from:  
a. a lack of raw material  
b. depressed prices  
c. tariffs  
d. poor quality  

3. The first steps in the Industrial Revolution involved:  
a. improved food supplies  
b. the use of electricity  
c. better machines  
d. importing foreign laborers  

4. Weber’s least cost theory to account for the location of a manufacturing plant considered which of the following to be the most important.  
a. power  
b. transportation  
c. raw material  
d. labor  

5. The current economic boom on the Pacific Rim is based largely on:  
a. transportation advantages  
b. power supplies
c. market proximity
d. labor costs

6. The term Black Towns was applied to early industrial towns in the:
   a. British Midlands
   b. Ruhr in Germany
   c. Po Valley in Italy
   d. San region

7. The location of steel plants in which part of the United States was influenced by the need to import iron ore from overseas sources.
   a. the Ohio River Valley
   b. the Southern Appalchians
   c. the northeastern seaboard
   d. the Pacific Northwest

8. Which of the following Asian counties, by using the example of Britain’s control of the sources of industrial raw material through colonization, followed a similar path of colonial expansion.
   a. China
   b. Japan
   c. India
   d. Thailand

9. In a sense, the Industrial Revolution was a revolution in:
   a. power sources
b. technological application

c. labor utilization

d. transportation

10. For most industrial goods, which method of transport is cheapest over short distances.

a. truck

b. railroad

c. barge

d. ships

**TRUE/FALSE QUESTIONS**

1. Hong Kong could have developed a superior economy based on primary industry. (TF)

2. No industries of any kind existed before the Industrial Revolution. (TF)

3. Transportation, not location, is the determining factor for primary industries. (TF)

4. In Weber’s least cost theory, transportation and labor availability play a large role. (TF)

5. In the United States, steel mills are located along the northeastern seaboard because they use imported iron ore. (TF)

6. Colonization did not give the controlling countries access to many raw materials. (TF)

7. When labor in Japan began to cost more, Taiwan and South Korea surged ahead in the production and export of low cost products. (TF)

8. Certain industries will generally shift from country to country as long as low cost labor is available. (TF)
9. China has tried to slow the rate of industrialization on the Pacific Rim because of a lack of available raw materials. (TF)

10. A close source of energy is necessary for industrial development. (TF)

**STUDY QUESTIONS**

1. Why are secondary industries less dependent on resource location? What factors are taken into account in site location?

2. Why is it accurate to describe the world today as being in the modern age of industrial intensification? Did the Industrial Revolution affect all regions in Europe? Why or why not?

3. Describe Weber’s least cost theory.

4. List and describe the factors that are considered in industrial site location. Why is Japan a prime example of the role of transportation with relationship to industrialization?
Chapter 25 - Resources and Regions: The Global Distribution of Industry

CHAPTER INTRODUCTION

The future of the world is today being shaped by industrialization. The remarkable achievements that began in a single nation have not yet been shared equally by all humanity but this may be about to change. Modern industry is largely a phenomenon of countries in the mid-latitudes of the Northern Hemisphere with few peripheral countries as yet members of this rather exclusive club. As the world approaches the twenty-first century much has changed concerning industrialization and the resources that support it. Industry is presently undergoing a global shift which portends a new era for the world as we have come to know it.

When the Bolsheviks took control of the Russian Empire, they found themselves in charge of a vast realm with a mainly agricultural economy. There was nothing in the Soviet Union of the 1920s to rival what was happening in Europe or North America. Soviet communist rulers were determined to change this. They wanted to transform the Soviet economy into an industrial one. The human cost of this gigantic scheme was dreadful, but the desired transformation was accomplished. The Soviet Union became a major industrial power with vast manufacturing complexes.

Outside the Soviet Union, industrial development took a very different course. Market forces, not state planning propelled the Industrial Revolution in Europe and North
America, and industrial economies on both sides of the Atlantic Ocean rose to global prominence. Because of the imposition of Soviet ideology and economic planning on Eastern Europe’s industrial development, for more than four decades after World War II, East Europe’s economic geography was constrained. Western Europe’s industrial growth proceeded more freely, and in the postwar period Japan, Taiwan, and South Korea industrialized under free-enterprise rules as well. China, on the other hand, collectivized its agriculture and put its industries under state control.

**Major Industrial Regions**

Whatever the ideological basis (market-commercial, communist-state, or some combination), the world map of major regional-industrial development reveals that only a small minority of countries have become major industrial economies. Four major industrial regions have developed, all in the Northern Hemisphere:

Western and Central Europe (Figure 25-1), Eastern North America (Figure 25-3), Russia-Ukraine (figure 25-4), and Eastern Asia (Figure 25-5). Each consists of core areas with subsidiary clusters some distance away.

While the older manufacturing regions are quite entrenched, notable shifts are occurring. This dispersal is especially evident in East Asia, where Japan’s dominance is being challenged by the “Four Tigers” of East Asia (see Focus on: ‘The Four Tigers” in Chapter 24). In addition, the entrance of China into the global manufacturing economy in the 1980s is certain to gain in significance in the twenty-first century.

**Europe**

The location of Europe’s primary industrial regions still reflects the spatial diffusion of the Industrial Revolution. An axis of manufacturing extends from Britain to Poland and the Czech Republic, and onward to Ukraine. The explanation of this pattern lies in the location of coal fields in Britain and the European continent. Britain’s coal fired industries produced a pattern of functional specialization that, for a time, had no equal in the world, for it was coal that fired the Industrial Revolution.

Europe’s coal deposits lie in a belt across northern France, Belgium, north-central Germany, the northwestern Czech Republic, and southern Poland—and when the Industrial Revolution diffused from Britain onto the mainland it was along this zone that Europe’s major concentrations of heavy industry developed. Europe’s industrial success also depended on the skills of its labor force and the high degree of specialization achieved in various industrial zones.
North America

In North America, industrialization occurred first in the East. Served by a wide array of natural resources and supported by networks of natural as well as artificial transportation systems, remote from the destruction caused by wars in other industrial regions, and on the doorstep of the world’s richest market, North American manufacturing developed rapidly. Today, this complex, anchored by the American Manufacturing Belt—from the northeastern seaboard to Iowa, and from the St. Lawrence Valley to the confluence of the Ohio and Mississippi Rivers—is the largest in the world (Figure 23-3).

Ukraine and Russia

The most important country detached from the Soviet Empire (after Russia itself) was Ukraine. In the new Europe, Ukraine would be the largest territorial state and one of the most populous. It was a major manufacturing center before the end of the nineteenth century, having been strongly affected by the Industrial Revolution. Coal from its Donetsk Easin (Donbas) and iron ore from the Krivoy Rog reserve and later from Russia’s Kursk Magnetic Anomaly allowed Ukraine to grow into one of the world’s largest manufacturing complexes. Today, despite Ukraine’s political separation from the former Soviet Union (and hence from Russia), Ukrainian and Russian industries are interdependent: Ukraine needs Russian fuels and Russia needs Ukrainian raw materials.

Eastern Asia

Two centuries after the onset of the Industrial Revolution, East Asia is the cauldron of industrialization. From Japan to Guangdong and from South Korea to Singapore, the islands, countries, provinces, and cities fronting the Pacific Ocean are caught up in a frenzy of industrialization that has made the term Pacific Rim synonymous with economic opportunity. Industrial regions in East Asia are the fastest growing in the world. The Asian Pacific Rim, from Japan to Indonesia, includes several of the most rapidly expanding economies, recent setbacks notwithstanding.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. Which of the following is a major industrial region

a. Eastern Asia
b. South Asia  
c. West Europe  
d. Russia  

2. One reason London is now considered a key industrial district is:  
a. nearby new coal deposits were discovered  
b. the government shut down older plants in the Midlands because of pollution  
c. the supply of coal ran out in the Midlands  
d. coal has decreased in importance  

3. Europe’s greatest industrial region is called:  
a. the Paris Triangle  
b. Saxony  
c. Silesia  
d. the Rühr  

4. The United States is one of the worlds largest ? producers.  
a. coal  
b. petroleum  
c. oil shale  
d. hydroelectric  

5. Industrial growth in the Upstate New York district started with the:  
a. discovery iron ore deposits  
b. building of the Erie Canal
c. large ships using Lake Erie

d. invention of electrical appliances

6. The Northwest district from Portland, Oregon to Vancouver. Canada is noted for its:

a. agricultural products

b. timber industry

c. aerospace industry

d. optical industry

7. After 1900 Ukraine produced as much as ? percent of all coal mined in the then Soviet Union.

a. 55

b. 70

c. 80

d. 90

8. One of Russia’s oldest and still thriving manufacturing areas is:

a. the Volga

b. Urals

c. St. Petersburg

d. Vladivostok

9. With its Pacific Rim development, China now ranks as the world’s ? largest economy.

a. third

b. second
c. fourth
d. first

10. Japan’s dominant industrial district is the:
   a. Kansai
   b. Kanto Plain
   c. Kitakyushu
   d. Toyama

**TRUE/FALSE QUESTIONS**

1. Manufacturing cities in Britain’s Midlands are modernizing and are still the dominate industrial region in Britain. (TF)

2. Paris’s relative location was one factor that helped it to become a major industrial center. (TF)

3. New York is one of the world’s major break-of-bulk locations. (TF)

4. The manufacturing region known as the Erie Horseshoe encompasses both the United States and Canada. The international border keeps the countries from being interdependent. (TF)

5. Because of hurricanes, little industrial activity takes place along the Gulf Coast. (TF)

6. Ukraine is divided between a large very productive agrarian region and a Russianized industrial region located in the east. (TF)

7. Russia’s Volga industrial region was originally started when the Russians felt threatened by the Germans before and during World War II. This region has not progressed much since that time because of a lack of available power. (TF)

8. The Pacific Rim of East Asia is a region of varying industrialization depending on the country involved. (TF)

9. Japan has three major industrial areas. (TF)
10. China ’s northeast industrial district is suffering some of the same effects that plague older United States ’ industrial areas. (TF)

STUDY QUESTIONS

1. Referring to figures 25-2 and 25-3 can you find a correlation between the location of fossil fuel and manufacturing regions? Is energy readily availability in the major manufacturing belt? Identify the other manufacturing areas and what they produce. What are maquiladora plants, where are they located, and what do they produce?

2. When you look at Figure 25-1, what do almost all of Europe ’s industrial and urban areas have in common? Read the text. Which regions tie on coal fields? Besides resources, what other factors help to create the industrial regions?

3. Looking at Figure 25-4, what connects all of Russia ’s manufacturing regions? List the regions and their products.

4. Identify manufacturing regions in East Asia and their products using Figure 25-5. Where is the Pacific Rim? What do these regions produce? How are they changing?

Chapter 26 - Concepts of Development

CHAPTER INTRODUCTION

In the last 200 years the benefits and influences of industrialization have spread, in varying degrees, to all parts of the Earth. In many countries this process has produced intra-regional contrasts that tend to intensify the contrasts between urban and rural populations. This development is, unfortunately, often more symbolic than real for many countries and actually helps these societies very little. Industrialization is not the solution for many countries seeking to improve conditions for their citizens. Success is measured in many ways but should be judged based upon criteria and achievement applicable to the society involved. In the late I990s poorer less industrialized countries must balance goals and ambitions with the needs of their populations.

Patterns of Development

The global economic picture is characterized by enormous gaps between rich and poor countries, but the geography of economic well-being also reveals regional disparities within countries at all levels of development. There are even areas within the industrialized countries themselves where change is slow in coming. Parts of the rural
South in the United States still experience significant poverty and remain comparatively remote from the effects of national economic growth. Life has changed little in remote areas of western and northern Japan, and areas of isolation and stagnation persist in Europe.

In poorer less industrialized countries, there are places where clusters of industries have emerged and rapid urban growth is taking place, producing local conditions that differ sharply from those prevailing in surrounding areas. Recent economic growth on the Pacific Rim of East Asia has created huge regional disparities in economic conditions between some coastal provinces of China and distant interior provinces. Such regional contrasts have significant as well as political consequences. Regional economic disparities are increasing throughout the world.

**Concepts and Approaches**

Economists and geographers use a variety of approaches to describe the wide disparities in the global economy. Countries with high levels of urbanization and industrialization and high standards of living have long been referred to as developed countries (DCs), in contrast to underdeveloped countries (UDCs). This approach divides the world into two major categories, but also assumes that all countries are at some stage of development. But, the concept of development is a complicated one. How, for example, should development be measured? The GNP index provides one approach, but it has many shortcomings. There are a number of things it does not measure, such as the informal economy and contrasts within countries. Other approaches provide a richer basis for thinking about development, but none of these approaches produces a clear dividing line between developed and underdeveloped countries. Since some countries that were classed as underdeveloped began to change, the term developing country came into use in the 1960s and 1970s, but problems still existed, not the least of which was no country wanted to be classed as “underdeveloped,” and with good reason. The definition came from developed countries. Thus the developed-underdeveloped distinction was largely replaced by a developed-developing distinction. What all this showed is that while economic disparities are usually thought to be due to different levels of development, in reality development is much more complex and cannot be reduced to simple categories.

**The Core-Periphery Model**

Because of many criticisms and shortcomings in the “traditional” divisions of developed, developing, and underdeveloped system, a new approach to describing global economic disparities has been proposed. The new one is more sensitive to geographical differences and the relationships among development processes.
occurring in different places. The proposed core-periphery model, which is also used in discussions of political power, views the world as characterized by a core, semi-periphery, and periphery. Since the model focuses attention on the economic relationships among places, it is a key component of many theories that treat the global economy as a large system, and is actually quite different than the developed-developing-underdeveloped approach. The most important difference is the explicit identification of the power relationships among places, and it does not assume that socioeconomic change will occur in the same way in all places. This is important, because underlying economic disparities is a core-periphery relationship among different regions of the world. This affects how economies develop in both the core and the periphery.

A Changing World

As the twenty-first century approaches, some states are still subsistence-based and poor (traditional), whereas others are in the takeoff stage. These terms are part of a theory proposed by economist Walt Rostow in the 1960s, referred to as the modernization model. Rostow’s model suggests that all countries follow a similar path through five stages of development. The model provides a useful view of how certain parts of the world have changed over time, but it has been criticized because it does not take into account the different constraints that regions face because it suggests a single development path that is not influenced by cultural differences, In the world of the late 1990s, rapid development is taking place under widely different political systems. It is often associated with democratization, but it is also occurring under authoritarian regimes. We should remember that there are many routes to development.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. The world’s fourth most populous country is:

   a. India
   b. Canada
   c. Indonesia
   d. the Philippines
2. The core-periphery model focuses attention on the relationships among places.
   a. social
   b. economic
   c. military
   d. political

3. The World Bank groups states into four categories based on income. Which of the following is NOT one of the regions where low-income countries are concentrated.
   a. Africa
   b. South Asia
   c. East Asia
   d. South America

4. According to World Bank statistics, there are how many middle-income countries.
   a. 45
   b. 55
   c. 65
   d. 75

5. Europe had laid the foundation for its colonial expansion and global economic domination by the middle of which century.
   a. eighteenth
   b. sixteenth
   c. seventeenth
d. nineteenth

6. Which of the following statements is correct concerning the world economic system.
   a. it works to the advantage of the periphery countries
   b. it works to the disadvantage of periphery countries
   c. it works to the advantage of both the core and periphery countries
   d. it works to the disadvantage of the core countries

7. Geographically peripheral countries tend to be marked by:
   a. good regional developmental balance
   b. good site locations
   c. severe regional disparities
   d. good situation locations

8. In the modernization model of economic development as formulated by Walt Rostow, when a country reaches the drive to maturity stage, a majority of workers enter what sector of the economy.
   a. extractive
   b. service
   c. industrial
   d. managerial

9. In the world of the late 1990s, communism remained in control in three countries. Which of the following is NOT one of them
   a. Cuba
   b. China
   c. Panama
d. North Korea

10. In the late 1990s, which of the following was NOT a low-income Western Hemisphere country.
   
a. Ecuador
b. Haiti
c. Guyana
d. Nicaragua

TRUE/FALSE QUESTIONS

1. In all the rich developed nations pockets of extreme poverty still exist. (TF)

2. Because of development On the Pacific Rim, all the Chinese people are now wealthier. (TF)

3. Gross national product figures for countries are not completely accurate because they leave out some sources of income. (TF)

4. The core-periphery model focuses on the economic relationships among places. (TF)

5. Middle-income states outnumber the poorer states. (TF)

6. The periphery countries cannot legitimately accuse developed countries of neocolonialism. (TF)

7. Tourism has been very beneficial to periphery countries by helping the poor. (TF)

8. The modernization model proposes that countries in the drive to maturity stage have sustained growth taking hold. (TF)

9. When many developing countries tried to adopt the communist state control method of economics the results were most often disastrous. (TF)
10. Politics and economics go hand-in-hand. (TF)

STUDY QUESTIONS

1. List and explain the different models of development. Give some of the strong and weak points of each, if given. Do you think any one covers all the problems in deciding the development stage of a country? List some of the factors that help or hinder a country in its economic development.

2. Why do you think there are such regional economic differences within a country?

3. Why are the seven measures of development in the Focus on box hard to apply in some countries?

4. Describe the core-periphery model. How is it different from other models?

5. Study Figure 26-1. List the conditions that put countries in the periphery. How do their industries differ in kind and dimension from core countries?

6. How does tourism affect the poorer countries? What contrasts are found?

Chapter 27 - From Deindustrialization to Globalization

CHAPTER INTRODUCTION

Ever since the Industrial Revolution, the growing demand for resources, the expansion of manufacturing and trade, and the technological innovation have worked to produce an increasingly interconnected global economy. Almost all places are in some way part of the web of production, exchange, and consumption that make up that economy—and their position in that web has significant social consequences. Those in the developed core tend to be in the drivers seat, whereas those in the periphery have far less control. Tracing the historical geography of industrialization can tell us much about why some areas are in a more advantageous position than others, but that is not the entire story.

Changing Patterns

The declining cost of transportation and communication along with changes in the production process, have led to an enormous expansion of the service sector (activities
such as transportation banking retailing, administration and decision making are some examples). Activities do not generate an actual tangible product. This transition has primarily occurred in the industrialized core. The service sector is sometimes broken down into three categories: tertiary, quaternary, and quinary industries. Over the past 30 years this growth in service-related activities has been accompanied by significant deindustrialization in the core industrial economies. This shift had its roots in dramatic decreases in the cost of transporting goods, the increasing mechanization of production the growth of the public sector, and the rise of new information and communication technologies.

The changes of the past three decades have not fundamentally altered global patterns of economic well-being, but they have produced significant new spatial orders. They have caused shifts in the locus of production, altered patterns of regional specialization and fostered new centers of economic growth. Deindustrialization in the core has also led to the growth of labor-intensive manufacturing in the periphery where labor costs are dramatically lower and profits thus higher. Such manufacturing ranges from shoes and apparel to computers, automobiles, and television sets. The next time you purchase such items, check and see where they were manufactured or assembled.

**Global Dimensions of Economic Activity**

To understand the economic shifts that have occurred over the past few decades we must look beyond individual places to the global scale, for both the core and periphery have been significantly changed. The phrase new international division of labor refers to the set of relationships that define the contemporary world economy. Whereas earlier in the twentieth century economic relationships were defined by an industrialized core and a resource-exporting periphery, today the geography of the global economy is far more complex. The countries and regions outside the core that have increased their manufacturing output most rapidly in recent decades are shown in text Figure 27-1. Lying behind the patterns shown is a set of developments that give meaning to the phrase “new international division of labor.” In the traditional core, the shift away from heavy industry and toward the service sector has been accompanied by the rise of labor-intensive manufacturing in new locations. More labor-intensive manufacturing particularly assembly activities, is likely to be located in peripheral countries where labor is not only cheap, but regulations (including environmental controls) are few, and tax rates low. Elaborate trading networks and financial relations support the economic web at the heart of the new international division of labor. This new pattern has linked the world’s economies more closely together, but it carries with it patterns of interaction that favors some areas over others.
Specialized Patterns

Developments discussed so far—the growing connections between the developed core and the newly industrialized countries, the decline of the older industrial areas, and the emergence of assembly-style manufacturing in the periphery—are not the only significant changes that have shaped the new global economic picture. One change that is altering the economic landscape of the contemporary world is the development of a set of links between world cities—major urban centers of multinational business and finance; the control centers of the world economy. These cities are not necessarily the largest in terms of population, nor are they the greatest centers of manufacturing. Instead, they are the places where the world’s most important financial and corporate institutions are located and where decisions are made that divide the world economy. The basic pattern is shown in text Figure 24-3, which shows that most of the major world cities are located in the developed core. Thus a global economic geography dominated by nation-states is giving way to one in which world cities and multinational corporations play an increasingly significant role.

Time-Space Compression

A key theme of the last few decades is captured by the phrase time-space compression—a set of developments that have dramatically changed the way we think about time and space in the global economic arena. The rise of the World Wide Web plays into the time-space compression. It is too early to know what the full impact of the Web might be, but its role in reducing the importance of distance is self evident. It also clearly plays a role in the decentralization of economic activity.

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. The mass-production assembly line was pioneered by:
   a. J.P. Morgan
   b. Henry Ford
   c. Andrew Carnegie
   d. Henry Kaiser

2. Service industries are commonly referred to as:
a. secondary industries  
b. tangible industries  
c. primary industries  
d. tertiary industries  

3. One of the fastest-growing segments of the tourist industry is:
   a. golfing  
   b. fishing  
   c. cruising  
   d. birding  

4. In the late 1990s, five regions accounted for well over 75 percent of the world's total output of manufactured goods. Which of the following is one of these?
   a. western Russia and Ukraine  
   b. southeastern Australia  
   c. Eastern Europe  
   d. South Asia  

5. A number of so-called newly industrialized countries now have emerged as contributors to the global manufacturing base. Two are in the Americas and these are:
   a. Chile and Brazil  
   b. Brazil and Mexico  
   c. Argentina and Chile  
   d. Mexico and Venezuela  

6. Commercial production of television sets began after:
   a. the Korean War
b. World War I

c. World War II

d. the Vietnam War

7. The American ideal of the university town originated in:

a. Italy

b. England

c. France

d. Germany

8. Maquiladora plants are an example of special economic zone development; these particular ones are located along the border between:

a. the United States and Canada

b. Mexico and the United States

c. Spain and Portugal

d. Italy and France

9. For many decades the Rühr Valley was associated with what kind of industry.

a. iron and steel

b. textiles

c. footwear

d. computers

10. Which continent has none of the World Cities that are becoming dominant in the global economy.

a. South America
b. Asia

c. Africa

d. Australia

TRUE/FALSE QUESTIONS

1. The mass-production assembly line, pioneered by Henry Ford, did not affect any other industries except the making of cars. (TF)

2. Service industries belong in the tertiary industry category. (TF)

3. One factor causing older industrial districts to decline is newer factories building elsewhere. (TF)

4. The rise of new core industrial regions has not shifted the relative importance of older regions. (TF)

5. Research and development activities tend to be concentrated in the periphery. (TF)

6. Singapore’s industrial growth can largely be traced to its geographical location. (TF)

7. Many service industries do not need raw materials nor use large amounts of energy. (TF)

8. World cities are the largest in terms of population, and are the places where decisions are made that drive the world economy. (TF)

9. California’s Silicon Valley” is an example of a high-technology corridor. (TF)

10. The World Wide Web is playing a role in the decentralization of economic activity. (TF)

STUDY QUESTIONS

1. Discuss the global shift in industrial production including the tertiary sector—where and why. How and why has location changed in these industries? Discuss foreign investment and its role in location.
2. What event of the 1970s changed the role of core industrial regions? Discuss the service sector and its three categories, also discuss the largest service industry and its impact on countries.

3. How do world cities fit into the picture of today’s global economy? Where are they located (Figure 27-3)?

4. List and define the different kinds of specialized economic zones. Where are they located? Why have they been created?

5. What is meant by time-space compression? How has it affected the world? What is the World Wide Web and how has it already affected the world?

Chapter 28 - The Changing Nature of the Civic Experience

CHAPTER INTRODUCTION

The urban influences affecting the cultural geography of the modern world represent the end of a long evolutionary process resulting from the influences of different cultures with their goals and capabilities. A city, regardless of the culture where it develops, represents society, culture, opportunity, success, and failure. Europe and America are urbanized societies whose cities and cultures are changing within an urban environment, a condition not true in the developing world. The cities and urban places of the developing world represent the greatest challenge to traditional cultures as we approach the twenty-first century. Developing societies face the formidable task of retaining their cultural identities and traditional values in a rapidly changing world. On their success or failure rests the successful existence of much of humanity.
Two centuries ago demographers estimate less than 5 percent of the world’s population was urbanized. Today the figure approaches 50 percent and some regional differences and changes are striking, as in such countries as Germany and Belgium where 90 percent of the population lives in cities and towns. In some parts of the world, megalopolises are evolving from formerly separate cities. In others, megacities are emerging with populations that exceed those of many countries. In this chapter we will discuss these regional changes and focus on several of the critical problems rapid urbanization has produced. As you will see, the problems of large cities are cross-cultural; they differ in degree, not in kind.

**Urban America**

The problems of urban America are especially severe in the inner cities and in the older central business districts (CBDs). While urban sprawl continues and cities are coalescing (text Figure 28-1), people have left the inner cities by the millions and moved to the suburbs. The CBD is being reduced to serving the inner-most portion of the metropolis. As manufacturing employment in the core are has declined, many large cities have adapted by promoting a shift toward service industries. Beyond the CBDs of many large cities however, the vast inner cities remain problem-ridden domains of low- and moderate-income people, most of whom live there because they have nowhere else to go.

In older industrial cities, the inner city has become a landscape of inadequate housing, substandard living, and widespread decay. Many of the buildings are now worn out, unsanitary, and many are infested by rats and cockroaches. These apartments are overfilled with people who cannot escape the vicious cycle that forces them to live there.

**The Suburban City**

For many decades the attraction of country life with city amenities, reinforced by the discomforts of living in the heart of many central cities, has propelled people to move to the suburbs and more distant urban fringes. Mass commuting from suburban residents to downtown workplaces was made possible in postwar times by the automobile. As a result, the kind of suburbanization that is familiar to North Americans and other Westerners became a characteristic of urbanization in mobile, highly developed societies.

Suburban cities are not just self-sufficient, but compete with the central city for leading urban economic activities such as telecommunications, high-technology industries, and corporate headquarters. In the current era of globalization, America’s
suburban cities are proving their power to attract such activities, thereby sustaining the suburbanizing process. Suburbanization has expanded the American city far into the surrounding countryside, contributing to the impoverishment of the central cities, and is having a major impact on community life.

**The European City**

European cities are older than North American cities, but they too were transformed by the Industrial Revolution. Indeed, industrialization struck many of Europe’s dormant medieval towns and vibrant mercantile cities like a landslide. But there are differences between the European experience and that of North America.

In terms of population numbers, the great European cities are in the same class as major North American cities. London, Paris, Madrid, and Berlin are megacities by world standards. These are among Europe’s historic urban centers, which have been affected but not engulfed by the industrial tide. The cities of the British Midlands and the megacities of Germany’s Ruhr are more representative of the manufacturing era.

The industrial cities have lost much of their historical heritage, but in Europe’s largest cities the legacy of the past is better preserved. Many European cities have a Greenbelt—a zone of open country averaging up to 20 miles wide that contains scattered small towns but is otherwise open country. This has the effect of containing the built-up area and preserving near-urban open space. For this reason, European cities have not yet experienced the dispersal of their U.S. counterparts, and remain more compact and clustered. Modern CBDs have emerged near the historic cores of these cities.

**Colonial Legacies**

South America, Southeast Asia, and Sub-Saharan Africa share a common imprint in their colonial heritage. Everywhere that urbanization is occurring, there is the imprint of the colonial era alongside the traditional culture. In these three realms, cities reflect their colonial beginnings as well as more recent domestic developments. In South and Middle America the fastest growth is where Iberian cultures dominate. Southeast Asian urban centers are growing rapidly, with foreign influences and investments continuing to play a dominant role. In Africa, the diversity caused by European influence in some, and decided lack of in others, makes it difficult to formulate a model African city that would account for all or even most of what is there.

**CHAPTER QUIZ**

**MULTIPLE-CHOICE QUESTIONS**
I. The urban core of big cities has changed mainly because:
   a. manufacturing plants have moved elsewhere -
   b. middle-income people are taking over the area
   c. too many service sector businesses have moved in
   d. skilled laborers have moved to other part of the country

2. One of the big problems in trying to draw people and businesses to the central city is:
   a. lack of space
   b. fear of crime
   c. high cost of land and building space
   d. smog

3. In the city of Los Angeles, over 7 manufacturing jobs were lost between the years 1978 and 1982.
   a. 60,000
   b. 70,000
   c. 80,000
   d. 96,000

4. In the 1980s the suburban population grew by 7 percent while population of central cities grew by only 6.6 percent.
   a. 10.5
   b. 12.3
   c. 15.2
d. 17.2

5. Large Canadian cities:
   a. suffer from a lack of good planning
   b. are spread out
   c. have a better tax base and offer better services
   d. have slums larger than American cities

6. In many of Europe’s largest dominant cities:
   a. wars have wiped out the manufacturing areas
   b. the past is better preserved
   c. suburban areas compete with the central city
   d. government planning has had 300 years to develop

7. Which of the following is NOT a characteristic of communist planned cities.
   a. wide streets with little traffic
   b. microdistrict
   c. ugly apartment blocks
   d. a vital Central business district

8. In Middle and South America, the urban population had grown toil percent by 1997.
   a. 41
   b. 55
   c. 74
   d. 80
9. The outer ring in both Latin American cities and Southeast Asian cities are usually the place where:
   a. slums and squatter settlements are located
   b. the rich live
   c. markets are found
   d. the industrial area is located

10. In African cities vertical growth occurs mainly in the ? part of the city.
   a. outer
   b. old colonial CBD
   c. transitional business center
   d. native CBD

TRUE/FALSE QUESTIONS

1. In the United States, many inner cities no longer have the financing to keep up adequate schools, housing, and many other city services. (TF)

2. Deglomeration is affecting many older downtowns, even in small cities. (TF)

3. Gentrification is the term used to describe areas outside the city where people move to enjoy a more relaxed lifestyle. (TF)

4. The new high-rise business buildings now found in many city downtowns are bringing many people back to the old central business districts (CBDs). (TF)

5. Many areas once called suburbs have become cities in their own right. (TF)

6. Canada’s large cities are more compact and still have large numbers of high- and middle-income people living in the central city. (TF)

7. Many European cities have greenbelts surrounding the central city. (TF)

8. Communist planners attempted to create microdistricts in cities. This led to many cities not having a central downtown district. (TF)
9. The great Central and South American cities contain beautiful plazas usually surrounded by cathedrals, churches, and government buildings. (TF)

10. The African city quite often contains three central business districts. (TF)

STUDY QUESTIONS

1. List the problems in America’s central (CBD) cities. Why do these problems exist? What efforts are being made to reverse this trend? How have the original suburbs evolved?

2. How do European cities differ from American cities? What are some of the factors that have made European cities different?

3. List the factors that make cities in Latin America, Southeast Asia, and Africa different from American and European cities. What is the prime reason these cities developed differently?

Chapter 30 - Global Disparities in Nutrition and Health

CHAPTER INTRODUCTION

Humans must have food to survive. Hunting and gathering provided a precarious existence, but with the development of agriculture, surpluses of food could be produced. Concerns about food supplies and population appear periodically but predicted global shortages have not materialized. Yet there is hunger, even in an affluent country like the United States. This chapter examines the geography of nutrition, and should cause you to consider not the success of the past, but the question of a hungry world of the future.

Just twenty years ago, predictions of regional famines in countries with large populations and high growth rates regularly made headlines, and the warnings seemed to have a Sound basis: population growth was outpacing the Earth’s capacity to provide enough food, let alone distribute it where it was most needed. Today, daily caloric consumption still varies from high levels in the richer countries such as the United States, Canada, European states, Japan, and Australia to very low levels in
poorer countries of Africa. Yet the overall situation has improved markedly over conditions two decades ago. How was this accomplished in light of the rapid growth of population?

**The Green Revolution**

The “miracle that was seen as the only solution for a hungry world, with rapidly increasing population numbers, in the 1970s came in the form of miracle rice and other high-yielding grains developed by technicians working in agricultural research stations. Crop yields rose dramatically, especially in Asia’s paddies, but also on wheat fields throughout the world. As fast as the world’s population grew, food production grew faster, and the gap between demand and supply narrowed. In countries such as India and China the threat of famine receded. The threat of global food shortages seemed gone. Or is it?

The “miracle” of increased food production was the result of the so-called Green Revolution (the introduction of new, more productive strains of grains and the resulting harvest increases), also called the Third Agricultural Revolution. Actually underway since at least the 1950s, the biogenetic advances in the 1970s appeared to have permanently solved the world’s food shortages. But this may no longer be true.

Some researchers believe that the Green Revolution has run its course. Lack of commercial fertilizers, water for irrigation, and additional farm land may revive the threat of widespread malnutrition or worse. In addition, the Green Revolution primarily increased the yields of wheat, rice, and some other cereals but not all grains or food production. It also had far greater affect in Asia and the Americas than in Africa—currently the continent with the fastest rate of population growth. Finally, there is more to the issue of adequate food supplies than supply alone. Food availability is also a matter of geography. Even with adequate supplies, people are deprived of food because of inadequate transportation systems. In today’s world, starvation results from human shortcomings, not nature’s shortfalls.

**Distribution of Dietary Patterns**

The map of average daily calorie consumption is based on data that are not always reliable, so it gives only a general impression of the global situation. Statistical information about caloric intake, especially for countries in the periphery, is often based on rough estimates rather than on accurate counts. Nevertheless, the map reveals rather clearly the world distribution of hunger and malnutrition—conditions of ill health resulting from the deficiency or improper balance of essential foodstuffs in the diet. It is apparent that malnutrition still afflicts and shortens the lives of hundreds
of millions of people, especially children, who are often the first victims in villages when food supplies dwindle. Pockets of malnutrition occur even within many of the better-nourished countries where pockets of poverty still exist.

A Future Global Food Emergency?

Although global food production is sufficient to feed the world’s people (if it were evenly distributed), concerns are rising that a food emergency may develop. Among the factors and circumstances that may contribute to future food emergencies, the most serious are population growth, climatic change, and rising energy costs.

Population growth is a major factor in any consideration of future food supplies, particularly in Africa where the Green Revolution has had a minimum impact and some of the highest population growth rates are found. Add to this the political turmoil, widespread poverty, the poor stains of women, and threat of drought and the concerns become very real. For the world as a whole, some 90 million people are added to the population each year, creating the need to produce even more food just to keep pace.

Climatic change is also a risk factor. If some predictions are true, the primary environmental problem of the first quarter of the twenty-first century may be wide fluctuations in weather conditions producing extremes capable of destroying crops and farmland. If this were to be the case, sustaining food production, let alone increasing it, may be difficult.

There is a good chance that the cost of energy may rise again, as it did during the 1970s. If it does so will the cost of fertilizers and fuel for equipment. For farmers in many countries, this would be disastrous.

A More Secure Future

The mitigation of a future food crisis depends on policies and practices ranging from family planning and women’s rights to improvement of distribution systems and expansion of farm lands. These and other issues would require cooperation on a global scale that may be difficult, if not impossible, to achieve. Yet the food crisis of the 1970s was a harbinger of the future. In time, a rising tide of world hunger may again threaten world order. All humanity has a stake in the war on malnutrition.

Spatial Patterns of Health and Disease

Americans take good health for granted. It may be expensive, but the capacity for good health is present in our society, as it is in all developed countries. For much of
the world’s population, especially those residing in tropical areas and other poorer countries, the situation is quite different. Good health, like adequate food is unevenly distributed. Patterns of health show even greater regional differences than those for the distribution of food. When people are inadequately fed they are susceptible to many debilitating diseases. Similarly, women who are healthy tend to bear healthy babies, but women who suffer from malnutrition and related maladies are less fortunate. In many poorer countries people, especially children, are visibly malnourished. The resulting disadvantages will be with them for life—if they survive childhood.

The study of health in geographic context is called medical geography. Many diseases have their origin in the environment. They have source (core) areas, spread (diffuse) through populations along identifiable routes, and affect clusters of population (regions) when at their widest distribution. Mapping disease patterns can provide insights into relationships between diseases and environment and sometimes give clues to source regions.

**Malnutrition and Child Mortality**

It is difficult to identify the specific effects of malnutrition on people’s susceptibility to disease, because so many other factors are present. However, there is little doubt about the effects of malnutrition on growth and development. The impact on children is especially important, who are often the first to be affected when food supplies become inadequate.

Infant and child mortality reflect the overall health of a society. Infant mortality is recorded as a baby’s death during the first year following its birth; child mortality records death between ages 1 and 5. The map showing the world distribution of infant mortality reveals the high rates in many poorer countries. The map also clearly shows the relationship between social disorder and high IMRs. Conflict, dislocation, and refugee movements produce high IMRs, and the map reflects this.

Even if there is general adequacy of available calories, protein deficiencies still have a devastating affect on children, as they do for entire populations. In tropical areas especially, dietary deficiencies inhibit the development of young bodies and the resultant problems follow children through their entire lives.

**Life Expectancy**

Figure 30-3 maps average life expectancies as of the late 1990s. The map is important in understanding the world population because life expectancy is another key measure
of the well-being of a population. Life expectancies have increased significantly over the past half-century, as the map suggests and it does underscore the aging of many populations, but the map does not show a number of other important aspects about a population.

For example women have far greater life expectancies than men virtually everywhere. In the late 1990s, the world average life expectancy was 68 for women and 64 for men, and the map reveals huge regional contrasts Most African countries fell well short of these averages. The figures represented on the map are actually averages that take into account the children who die young and the people who survive well beyond the average. Thus the dramatically lower figures for the world’s poorer countries primarily reflect high infant mortality. These figures should change as improvements in medical facilities, hygiene, and drug availability suppress death rates.

**Types and Patterns of Disease**

The incidence and types of diseases that affect a population, like life expectancy, also reveal the conditions in which people live. Certain kinds of environments harbor dangerous disease carriers, and diseases have ways of spreading from one population to another. Medical geographers are interested in both the regional distribution of diseases and the processes and paths whereby diseases spread of disease.

Tropical areas, wherein are located many of the worlds people (see text Figures 3-7 and 4-1), are zones of intense biological activity and hence are the sources of many disease-transmitting viruses and parasites. Certain major diseases remain contained within tropical or near-tropical latitudes (much of this is due to limited environment tolerance by these diseases), but others have spread into all parts of the world. Before European exploration and colonization, many diseases were limited to region outbreaks (called epidemics) and only took on global significance when they were carried to all parts of the globe (termed pandemics). As transportation improved and human movement on a global scale increased, so did the spread of many diseases. AIDS, for example, originated in tropical Africa and is now a global pandemic.

In the rapidly expanding urban areas of periphery countries today, densely populated shantytowns with inadequate sanitation and contaminated water supplies are highly susceptible to outbreaks of disease. In December 1990; a cholera outbreak began in the slums of Lima , Peru and by early 1995 had killed more than 10,000 people with more than a million cases reported in every country in the Western Hemisphere . And cholera is a disease who’s causes are known and prevention and treatment possible.
Dramatic as are the global pandemics of AIDS, influenza, or cholera, the number of cases of heart disease, cancer, stroke, and lung ailments are far greater. These chronic diseases (also known as degenerative diseases and generally associated with old age) have always been the leading causes of death and remain so today in the United States and throughout the Western world. Problems of chronic diseases areas heavily concentrated in the urban, industrial core as some of the major infectious diseases prevail in the periphery.

CHAPTER QUIZ

MULTIPLE CHOICE QUESTIONS

1. Today marine food webs are being disrupted by:
   a. changing ocean currents
   b. rising water temperatures
   c. pollution
   d. overfishing

2. Which of the following is not one of the factors that determine people’s diets.
   a. personal preference
   b. economic circumstances
   c. traditions
   d. what the soil and climate can produce

3. The food chain is a sequence of consumption that starts with:
   a. herbivores
   b. humans
   c. green plants
   d. carnivores

4. Which of the following is most vital to a child in the first three years of life.
a. carbohydrates
b. proteins
c. fats
d. minerals

5. It takes \( ? \) times as much soil, water, and fertilizer to sustain a person in the United States as it does to feed someone in India.
   a. 5
   b. 10
   c. 15
   d. 20

6. Which of the following is not one of the leading causes of death in the Western world.
   a. AIDS
   b. cancer
   c. heart diseases
   d. strokes

7. The continent with the highest infant mortality rate is:
   a. Asia
   b. Australia
   c. North America
   d. Africa

8. In the late 1990s, which region had one-fifth of its population age 60 and over.
   a. North America
b. Western Europe  
c. Eastern Europe  
d. East Asia  

9. Chronic diseases are the diseases of:  
   a. longevity  
   b. youth  
   c. males only  
   d. males only  

10. Influenza originally came from:  
   a. China  
   b. India  
   c. Brazil  
   d. South Africa  

**TRUE/FALSE QUESTIONS**

1. One of the main reasons people do not have adequate food in poorer countries is the lack of good transportation (TF)  

2. In poorer countries, even if enough food is available malnutrition is common. (TF)  

3. Africa received less benefit from the Green Revolution than Asia . (TF)  

4. Fish harvests from oceans are growing and feed people in poorer countries with access to them. (TF)  

5. Cash-crop plantations in former colonial countries continue to make money that allows people to buy needed food. (TF)  

6. Poor sanitation is the key factor in high infant mortality rates. (TF)
7. Average life expectancy may vary from rich to poor countries, but in all cases women outlive men. (TF)

8. Malaria, yellow fever, sleeping sickness, and bilbarzia are vectored diseases caused by mosquitos, or flies. (TF)

9. Influenza is a virus transmitted from birds, to pigs, to humans and originates in China. (TF)

10. Chronic diseases tend to be associated with an older aging population found mostly in the richer developed countries. (TF)

**STUDY QUESTIONS**

1. What constitutes a balanced diet? Why are some people suffering from malnutrition when their diet is over 2000 calories a day? How does a dietary deficiency affect children?

2. Looking at Figure 30-1, which continent has the worst fed countries? List the problems encountered by these countries that contribute to their food shortages.

3. A) What areas of the world have improved their caloric intake and why? Discuss the regional variations found within many countries. List the conditions that cause such regional variations. B) What are the three major types of disease? Discuss the major vectored diseases: what is the vector, how do they spread, are they worldwide, how do they affect people? Use your text to help you find the core area of these different diseases.

4. List and explain the possible causes for a future global food emergency.

5. List and discuss ten areas that need to be addressed in possibly preventing another world food crisis.

6. How are infant and child mortality defined in the text? What are the causes of kwashiorkor and marasmus?

7. What are the main factors that contribute to infant mortality? Which countries are shown in the highest category of infant mortality? Discuss infant mortality in the different world regions and variations within each region.
8. How are nonvectored infectious diseases spread? Which of these has reached the pandemic stage many times? Explain how the cause of this disease was discovered. Discuss the spread of AIDS. Where are infection rates the highest?

9. Briefly discuss chronic and genetic diseases. In what sector of the population are most chronic diseases found? What causes genetic diseases?

Chapter 33 - The Planet and Humanity

CHAPTER QUIZ

MULTIPLE-CHOICE QUESTIONS

1. The ocean-girdling zone of crustal instability, volcanism, and earthquakes is known as:

   a. Hot Zone
   
   b. Plate Tectonics
   
   c. Continental Drift
d. The Pacific Ring of Fire

2. The ? was a time of great extinctions and occurred during the Permian Period.
   a. Dwyka Ice Age
   b. Gondwana Ice Age
   c. Cambrian Explosion
   d. Snowball Earth Period

3. About 65 million years ago the Earth was impacted by a carbonaceous meteorite that hit what is today the northwestern edge of:
   a. Utah
   b. Mexico’s Yucatan Peninsula
   c. Arizona
   d. the Gulf of Mexico

4. The most recent glaciation of the Pleistocene, the ? left its mark on much of the Northern Hemisphere.
   a. Wisconsinan Glaciation
   b. KT Boundary
   c. Dwyka Ice Age
   d. Medieval Optimum

5. The greatest threat to human existence ever to come from any source occurred about 73,500 years ago when a volcano erupted on the Indonesian island of:
   a. Bali
   b. Jakarta
   c. Sumatera (Sumatra)
6. Global warming began about 18,000 years ago during the:
   a. Precambrian Period
   b. Jurassic Period
   c. Eocene Epoch
   d. Holocene Epoch

7. The ? was a brief cold period that occurred about 12,000 years ago, when a large ice sheet slid into the North Atlantic and caused disastrous waves along coasts and chilled the ocean back into glaciation-like temperatures.
   a. Cambrian Explosion
   b. KT Boundary
   c. Younger Dryas
   d. Wisconsinan Glaciation

8. The ? was a good time for the Roman Empire, and the Han in eastern Eurasia due to favorable climatic periods:
   a. Younger Dryas
   b. Wisconsinan Glaciation
   c. Medieval Optimum
   d. Postglacial Optimum

9. The Little Ice Age marked a period of increasing cold in Europe beginning in the:
   a. thirteenth century
   b. fourteenth century
   c. fifteenth century
d. sixteenth century

10. Which of the following did NOT occur as a result of the “Little Ice Age” in China?
   
a. The Black Death swept over an already weakened population in waves killing half the population or more

   b. Rains failed, rivers dried up, wheat crops shrank

   c. Famines broke out and social disorder and epidemics raged

   d. Maritime expeditions ended with burning of oceangoing fleet

TRUE/FALSE QUESTIONS

1. The Second Agricultural Revolution was necessitated by the Little Ice Age (TF)

2. The fifteenth century closed with one of the most extreme decades in Europe’s known environmental history (TF)

3. During the seventeenth century, conditions were worsened by a series of volcanic eruptions in Southeast Asia (TF)

4. The initial failure of the Jamestown colony in America may be explained by the Little Ice Age (TF)

5. In 1783, a volcanic eruption in Iceland (Mount Laki) lasted eight months and lowered temperature in North America by 7 degrees Fahrenheit (TF)

6. Violent weather in South America in 1788 included hailstorms that felled forests. (TF)

7. 1816 in Europe was “the year without a summer”. (TF)

8. The United States’ farmers were affected by the Tambora explosions in that corn wouldn’t ripen, for instance. (TF)

9. By 2115 the Earth will carry four times as many people as it did when Tambora erupted (TF)
10. The Earth may very likely have a “year without a summer” again. (TF)

STUDY QUESTIONS

1. We live today during an interglacial period. The Earth is experiencing a warm phase: sea levels are already high, coastal plains lie partially submerged, climates are comparably mild. Write a brief report for a real estate office describing how your (or your family's) place of residence would be affected by (a) a further and significant warming of the atmosphere, or (b) a sudden return to glacial conditions. (Be sure to use your AP Human Geography vocabulary!)

2. Discuss how the "Little Ice Age" affected Europe and China.

3. Give a brief summary of the changes that occurred on Earth during the following periods: Younger Dryas, Medieval Optimum, and the Industrial Optimum.

Chapter 34 - Patterns and Processes of Environmental Change

CHAPTER QUIZ

MULTIPLE CHOICE QUESTIONS

1. Some biogeographers suggest the next great extinction may be caused by:
   a. animals
   b. meteors
c. humans

d. insects

2. Traditional as well as modern societies have had devastating impacts on their:

a. cultural landscape

b. ecosystems

c. economies

d. history

3. Over the last 500 years both the rate and scale of human modification of the physical environment has increased dramatically is every way except:

a. The cutting of trees

b. Emission of pollutants into the atmosphere, and spilling oil into the oceans

c. Dumping vast amounts of garbage into the oceans and use of pesticides in farming

d. slash and burn agriculture

4. Nearly ? of all freshwater used annually by all humanity is used in farming

a. one-quarter

b. one-third

c. one-half

d. three-quarters

5. Industry worldwide uses ? percent of available water?

a. 10

b. 20

c. 30
6. One of the great ecological disasters of the twentieth century has occurred in Kazakhstan and Uzbekistan in which water has been diverted from streams feeding the ? for irrigation.

   a. Red Sea
   b. Crimean Sea
   c. Black Sea
   d. Aral Sea

7. The atmosphere does all of the following except:

   a. Provide oxygen and moderates temperatures
   b. Shield us from the destructive rays of the sun
   c. Carries moisture from the land over the oceans
   d. Posses an amazing self-cleaning capacity

8. ? pollution enhances the Earth's heat retention causing global warming

   a. Tropospheric
   b. Greenhouse gas
   c. Fossil fuel
   d. all of the above

9. Which of the following does NOT occur when sulfur dioxide and nitrogen oxides are released from burning fossil fuel forming acid rain?

   a. Acidified lakes and streams causing fish kills
   b. Forests become stunted in their growth
   c. People are burned severely due to catastrophic climatic patterns
d. Corrosion of buildings and monuments is worsened and accelerated

10. People have affected their environment adversely in all of the following ways except:
   a. deforestation
   b. conservation
   c. desertification
   d. soil erosion

TRUE/FALSE QUESTIONS

1. Natural expansion and contraction has effected the world’s deserts for a long time (TF)

2. Middle and lower latitude forests play a critical role in the oxygen cycle (TF)

3. One cause for soil erosion is due to farmers cultivating steep slopes without terraces, and plowing dry lands (TF)

4. China is the most prolific producer of solid waste (TF)

5. A common problem in poorer countries is that waste dumps allow vermin to multiply and decomposition sends methane gas into the air, and rain and waste liquids carry contaminants into the groundwater (TF)

6. The United States, the European Union, and Japan export solid wastes to Africa, Middle and South America, and East Asia (TF)

7. High level radioactive wastes are produced solely by nuclear power plants and nuclear weapons factories, and will remain radioactive for thousand of years and must be stored in remote locales (TF)

8. The actual total number of species on Earth is around 1.75 million. (TF)

9. We know over 650 species of plants and over 480 animals have become extinct in the last 400 years (TF)
10. One of the main problems with the introduction of new species to a different region by humans is that the new species may cause extinctions by preying upon native species or competing with them (TF)

**STUDY QUESTIONS**

1. Discuss water’s place in terms of ecological problems and international politics.

2. Discuss two ways in which the atmosphere may be polluted.

3. Discuss three ways in which the land itself may be polluted.

4. Discuss the danger in loss of biodiversity with respect to food, raw materials, and medicines.

**Chapter 35 - Confronting Human-Induced Environmental Change**

**CHAPTER QUIZ**

**MULTIPLE CHOICE QUESTIONS**

1. ? is one of the few academic disciplines which studies the relationship between humans and the environment as a primary concern

   a. Biology

   b. Psychology
c. Physiology

d. Geography

2. A greater number of people translates into greater capacity for ? change

   a. elemental

   b. environmental

   c. physiologic

   d. biological

3. A hunter-gatherer could subsist on the resources found within an area of about ? square kilometers

   a. 15

   b. 26

   c. 36

   d. 50

4. It is estimated that a baby born in the United States during the first decade of the twenty-first century will, at current rates, consume about ? times as much energy as a baby born in Bangladesh over the same lifetime

   a. 100

   b. 150

   c. 200

   d. 250

5. Innovations in transportation have caused all of the following except:

   a. Offering access to remote areas of the planet

   b. Facilitating the introduction of new species to areas where they had not been previously found
c. A general slowing down of species endangerment
d. Facilitating global transport of goods and foods

6. Today much of our energy comes from
   a. solar energy in the form of plants and animals
   b. nonrenewable fossil fuels
c. tertiary, quaternary, and quinary economic
d. nuclear energy

7. Which of the following is NOT true with respect to policy responses to environmental change?
   a. Many problems do not lie within a single jurisdiction
   b. The European Union has limited authority over member states
c. Within democracies, politicians eye the next election and hesitate to tackle long-term problems that require short-term sacrifices
d. Leaders in peripheral countries find it easier to take action in already marginal standard of living countries

8. Some nongovernmental organizations are trying to gain agreements among countries, which:
   a. operate outside the formal political arena
   b. tend to focus on specific issues and problems
c. has included a joint project of the United Nations and the World Bank
d. all the above are true

9. An agreement to protect species was submitted to UNCED in the early 1990s. This agreement dealt with:
   a. environmental protection
b. biological diversity

c. the ozone layer

d. the disestablishment of a system of protected areas

10. Our world is one of:

a. decreasing global change

b. increasing population growth

c. increasing population pressure on the environment

d. decreasing population growth and global impact of humans

TRUE/FALSE QUESTIONS

1. The biodiversity convention affirms the vital significance of preserving biological diversity and provides a framework for cooperation (TF)

2. There is no struggle to find balance between need of poorer countries to promote local economic development and need to protect biodiversity TF)

3. A natural ozone layer exists in the upper levels of the troposphere (TF)

4. The ozone layer protects Earth's surface from sun's harmful ultraviolet rays (TF)

5. CFCs (chlorofluorocarbons) are blamed for the thinning of the ozone layer (TF)

6. An international agreement known as the Montreal Protocol was signed in 1987, which called for a reduction of production and consumption of CFCs of 50 percent by 1999 (TF)

7. In the 1950s conferences started on human impact on climate (TF)

8. Global environmental changes illustrate the limits of our knowledge about Earth (TF)

9. Most environmental changes were anticipated and planned for (TF)

10. Many global changes are nonlinear, and some are “chaotic” (TF)
STUDY QUESTIONS

1. While the populations of countries in the industrialized economic core are often smaller than those in the periphery, per capita consumption of resources in the rich countries is far greater. Explain this phenomenon using two separate categories, and citing specific examples and statistics to back up your claims.

2. Modern transportation devices contribute to environmental change not just by consuming energy and producing pollution, but by facilitating global trade networks that fuel consumption in the wealthiest parts of the world. Explain this phenomenon citing specific examples and statistics to back up your claims.

3. Environmental problems frequently cross political boundaries, complicating regulation and management efforts. Nonetheless, a number of international environmental accords have been adopted on issues ranging from biodiversity to protection of the ozone layer. Choose two international accords or organizations, and discuss their beginnings and primary accomplishments.

4. Efforts to reduce global emissions of carbon dioxide in response to concerns over global climate change have been complicated by strong policy differences over feasible target levels and the extent to which the burden of emissions reduction should fall on the wealthiest, most industrialized countries. In your opinion, has the global community done enough to effectively reduce pollution? Explain your answer fully.