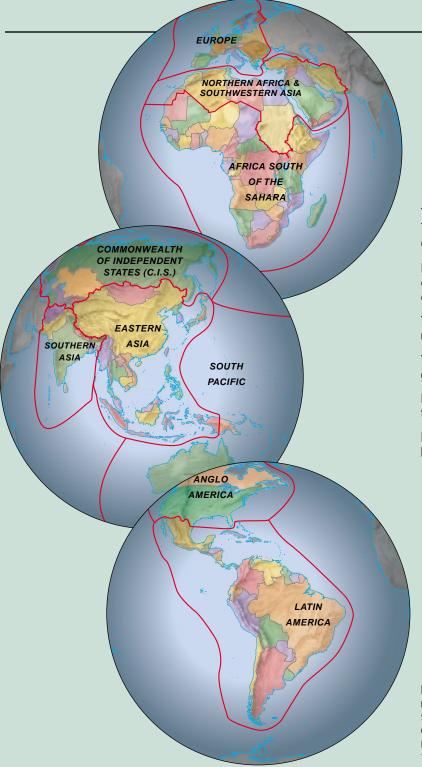
Chapter

OUR WORLD AND GEOGRAPHY



THIS CHAPTER IS ABOUT:

Global, regional, and local worlds

Events in diverse worlds: political, economic, cultural, demographic, and environmental issues

The importance of geography in understanding diverse worlds

The special nature of regional geography

How major world regions are chosen in this book

How world regions developed through history

FIGURE 1.1 Global view of Earth and the major world regions. Views of Earth from space led to a wider global consciousness and concern for the planet. The globes show the major world regions that are the subject of this book.

GLOBAL, REGIONAL, AND LOCAL WORLDS

A Variety of Worlds

The opening of the new century, and our increasing awareness of worlds and events beyond our own locality call out for everyone to develop their geographic knowledge and understanding. The media, particularly television, bring us in close contact with storm and earthquake disasters in Africa, Turkey, India, and Latin America. They alert us to the horrors of ethnic cleansing in Balkan Europe and Indonesia, aircraft hijackings, and the drug trades out of Asia and Latin America, often with background information about the lives of the people affected.

There is much talk of globalization, but other scales of geographic places remain important (Figure 1.1). Globalization, the growing interdependence of the world's peoples and the integration of economies, technologies, and even some aspects of cultures, gained significance throughout the 1900s. It includes the widespread realization that collective actions are necessary to address global political, economic, and environmental problems. It has been suggested that in the 1990s, after the end of the Cold War, we entered a "Global Age": globalization processes produced a new global order.

The opposing trend, **localization**, is the continuing differentiation of places and the increasing demands for local decision-making and the devolution of power within countries. It does not cancel out globalization but is part of the process, since global interdependence has uneven results and tends to enhance differences between places.

Diversity is a key to studying world geography. Although global effects are increasing and modifying many places, there is no possibility that we will reach a stage when geography becomes irrelevant. On the contrary, globalization makes it increasingly vital for us to know about and understand how people live in other parts of our world and how their ways interact with us in our own locality. What happens at the larger scale of place impacts the more local and vice versa. For example, top-down global economic activity results in some richer and some poorer places; bottom-up developments initiated by local groups influence country government policies; country actions have varied interactions with the global.

We recognize four levels of geographic space for analyzing these interactions (Figure 1.2)—the global (worldwide) level, the major world regions level, the countries level, and the local regions (including major cities) within countries level. Political, economic, and cultural human activities and environmental changes relate in dynamic ways to each of these levels.

EVENTS IN DIVERSE WORLDS

The Country Basis of Political Activity

Politics is about power and the ways in which countries are governed and relate to each other. During the 1990s, the divisive, although established, geopolitical order of the Cold War dissolved, but overall global government—removing borders between countries remained a distant dream that few people maintain. Although global institutions and major world regional linkages exist and sometimes override a country's wishes, countries remain the main places where political decisions are made and implemented. Countries retain powers to tax, provide for defense, and negotiate with other countries. Each has its own legal and institutional system. They continue to encourage national sentiments through educational programs and rivalries in sporting events. Within countries, devolution, federal state issues, and expanding cities provide additional political forums at the local level and occupy politicians as much as global issues.

Cold War Rivalries

In the Cold War from 1950 to 1990, political ideological rivalries divided the world (Figure 1.3). The United States led the First World—the "free world" countries with their market economies and Western values. The Soviet Union and China led the Second World—the communist, planned economy, countries. First and Second World rivals competed for influence among countries in the Third World. Initially comprised of countries searching for an approach that avoided the pitfalls of the other two worlds, the Third World later became a general term for the world's poorest countries (Figure 1.4) that were either "aligned" to the First or Second World, or "unaligned."

The two rival groups fought each other in Korea in the early 1950s and in Vietnam from the 1950s to the 1970s. Civil wars in Third World countries such as Malaysia, Angola, and Mozambique were instigated and supported by the two sides. The nightmare of a "hot war," in which the leaders of the two groups fought each other with nuclear weapons, was, however, averted.

GEOGRAPHIC SCALE	POLITICAL	LAW & ORDER	ECONOMIC	CULTURAL	ENVIRONMENTAL
GLOBAL/ WORLDWIDE	United Nations NGOs (No united will for a global government)	International Criminal Court. Issues: drugs, nuclear testing, weapons, war criminals, terrorists	Borderless CAPITALIST MARKET SYSTEM: World Bank, IMF, OECD, G8, Multinational corporations	Westernization resisted. Olympic Games	global warming, ozone hole, ocean resources
WORLD REGION/ SUBREGION	European Union, CIS, original ASEAN	Hague Court of Human Rights	regional trading groups: EU, NAFTA, Mercosur, ASEAN, APEC, etc. Regional emphases within the capitalist system.	CULTURAL GROUPINGS: N Africa/SW Asia; Africa S of Sahara; S Asia; China; Japan; CIS; Latin America; Anglo America; etc.	acid rain, rain forest
COUNTRY (NATION/STATE)	BASIC POLITICAL UNIT: accepted borders; taxing, defense, international relations powers	distinctive legal systems	fiscal and monetary policies; rich/poor countries	"nation-state" concept	public health; air and water quality; conservation of soils, forests; national parks
LOCAL REGION/ MAJOR CITY	devolution of administration; world cities; federal states within countries	variations in application of a country's legal system	regional product specialization; economic and physical planning; rich/poor areas	long-term traditions; way of life distinctive; basis for political pressures	physical planning impacts

FIGURE 1.2 Geographic facets of globalization. The relationships of human activities to geographic scale.

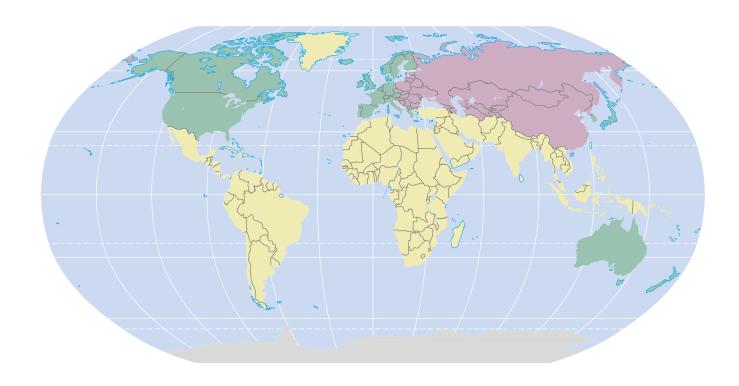




FIGURE 1.4 Third World city: midday street scene in Bangalore, southern India. Compare this view of a main shopping street in Bangalore with a shopping area or main street with which you are familiar. What ways do people use to get about in each place?

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The 1990s

The 1991 breakup of the Soviet bloc ended the Three Worlds scenario. The United States became the sole world political, military, and economic superpower and tried to extend the Western concepts of democracy and human rights. The 1990s showed, however, that no single country could impose its ideas on the rest of the world or by itself maintain a role as policeman to the world.

Although almost every country is a member of the United Nations, that body does not have the ability to control civil wars or nuclear weapon testing. It cannot police the internet or global crimes such as terrorist activities and the drug, weapons, and slave traffics. Increasingly at the global level, non-government organizations (NGOs) became responsible for government-like activities such as disaster emergencies and poverty treatment.

The world remains politically divided into countries and groups of countries. It is a dangerous place of multiple rivalries. In the 1990s, some commentators suggested that the term "New Global *Disorder*" would be appropriate for world politics since no system of global governance exists to control growing economic inequalities or criminal activities. In

the new century, challenges to the political leadership of the United States may come from a revived Russia that retains pretensions to world power, from the growth of Chinese aspirations, or from a grouping of Muslim countries. The difficulties experienced in assembling such a Muslim pressure group illustrate the continuing significance of individual countries.

The Global Basis of Economic Activities

The end of the Cold War, the breakup of the Soviet bloc and the rejection of communist political-economic ideology, not only left the United States as the single world political superpower, but also enabled the capitalist economic system—of which the United States and multinational corporations are the most powerful exponents—to dominate the world. All the other geographic levels of economic activity began to relate to the global.

Capitalism v. Communism in the Cold War

An **economic system** is a way in which goods and services are produced, distributed, and consumed. **Capitalism** is the economic system that marks Western countries and empha-

sizes the private or corporate organization of business and investment. The "capital" is finances that are invested to make profits. Market forces determine the prices, production, and distribution of goods. Capitalism is essentially competitive among corporations and countries based on sales in the market. A political world order could end such competition; the continued existence of countries maintains capitalism.

In theory, governments intervene in capitalist economies mainly to regulate terms of trade. In practice, many countries support corporations in their country by providing social welfare services and building infrastructure (such as roads, bridges, airports, water supplies, waste disposal facilities). This economic system is linked to the growth of urbanindustrial activities that are central to the "modernization" that most countries aspire to.

For much of the 1900s, the opposing centrally controlled, communist-country economies, exemplified by the former Soviet bloc and China, gave priority to government provision of universal medical care, comprehensive educational systems, and strong military defense. Competition to be more productive and profitable was replaced by production of "essential goods," whatever the cost. Despite an outward aim to prevent disparities of wealth, they failed to generate the high levels of consumer goods and tourism options that became a mark of most Western countries, and did little to reduce the numbers of poor.

Global Economic System

Following the breakup of the Soviet Union in 1991, the capitalist system became the global economic system. Few countries, apart from the People's Republic of China, attempt to maintain the central government control of a planned economy. Even they are being drawn increasingly into the capitalist system. Russia and the other countries that were part of the former Soviet bloc are in traumatic transition from their centrally planned economies to market-related systems that contradict so many of their past assumptions.

From the 1990s, the United States and other Western countries not only encouraged democratic governments but also promoted the geographic expansion of capitalist activities, thus strengthening their own economies and those of their multinational corporations. They encouraged former Soviet bloc countries, and those that had been aligned to them, to become part of the world economic system. The process of reorienting to the global economy often brought hardships to the countries in transition, because of the impacts of removing protective trade barriers, the unfettered expansion of multinational corporations, and the almost free reign given to international criminal activities.

Other variants of capitalism and responses to it result in world regional differences. The "Asian Way" emphasizes family linkages rather than the importance of independently verified banking and legal systems. The "European Way" makes much of providing social welfare to support those who do not make the most of the capitalist system.

A few exceptions to the expansion of economic globalization occur in the remotest parts of the world, including isolated areas of the Amazon rain forest and Papua New Guinea. Peoples there still live outside the world economy. In parts of Africa, many people in countries failing to become part of the world economy are returning to hunting and gathering or subsistence farming modes of livelihood.

As more of the world becomes involved in the global economic order, the rich countries get richer—especially the rich people within those countries—while poor countries (and poor people) get relatively poorer. This increases geographic diversity around the world. Even though the world's poorest countries as a whole experienced relative economic growth in the 1990s, those in Africa did not and neither did large groups of people in Asian and Latin American countries. The World Bank and the International Monetary Fund—both headquartered in the United States—often base loans on agreements requiring the opening of a country's internal economy to external investment and foreign goods and the reduction of its bureaucracies. Aid agencies follow such policies in assigning priorities to funding projects in poorer countries.

The World Trade Organization (WTO), which was established to make world trade easier, appears to favor the richer countries and multinational corporations at the expense of the poor in both richer and poorer countries. For example, richer countries tend to discriminate against poor countries' agricultural products and textile manufactures. At the same time, the richer countries squabble among themselves over such issues as banana or beef "wars" and trade in genetically modified foods.

Core, Periphery, and Semiperiphery

The capitalist world economic system has a geographic dimension (Figure 1.5) that reflects the relative success of countries in the system. The richer core countries have a wide range of products and services, use advanced technology, and enjoy relatively high wages. They import raw materials and cheap manufactured goods from poorer countries and export expensive manufactured goods and services back to them. The core countries invest mainly in each other's economies, and their most valuable trade is with each other. The levels of such intracore investment and trade multiplied several times in the 1980s and 1990s.

The poorer countries belong to the **periphery** of the world economic system. Peripheral countries have narrow ranges of products, use less advanced technology, and pay lower wages. Peripheral countries commonly depend on core countries for purchasing their exports, supplying their imports, and providing capital. Many areas of peripheral countries have economies producing mainly for local needs.

Transition in either direction between periphery and core is possible. Some countries move from dominant to dependent status, or vice versa. Countries in the process of moving between the two extremes are grouped as the **semiperiphery**.

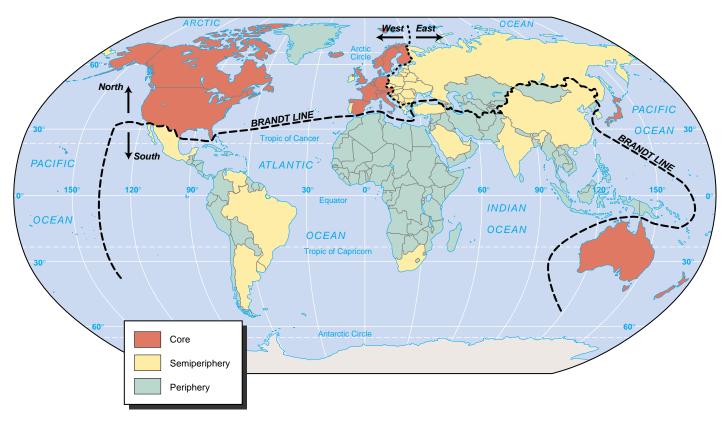


FIGURE 1.5 New global economic order: core and periphery. The core countries are the rich countries of the world that dominate world trade: they have a wider range of products, use advanced technology, pay high wages, and consume massive amounts of resources. The countries of the periphery are poor, have a limited range of products, and often depend on trade with the richer countries. Countries in the semiperiphery are moving up or down in this order. Discuss changes you might make to the country placings shown on this map.

They retain dependent relationships with core countries, but have peripheral countries dependent on them. At present newly industrializing countries (NICs), such as South Korea, Mexico, and Argentina, are parts of the semiperiphery, moving toward the core. Former Soviet bloc countries, including Russia and its neighbors, are either in the periphery or the semiperiphery.

Major World Regions and Cultural Activities

Cultural characteristics modulate the influences of wider political and global economic pressures. The **culture** of a group of people living in a particular part of the world results from the ideas, beliefs, and practices they hold in common and pass on from one generation to the next. It is demonstrated especially in religion, but also in language and the ways in which the people do things socially, the design of the items they make, and the level of technology involved (Figure 1.6). Different cultures have distinctive approaches to family life, the roles of women, the structure and decoration of houses, and the values placed on communal and individual actions. Cultural factors may also be important in defining country boundaries and creating nation-state values. They often provide a basis for devolution at the local level within countries.

Cultural groupings are important in defining the major world regions that provide a basic level of diversity in world geography. These regions retain a distinctiveness despite efforts to broaden Western culture to a global basis. The expansion of Westernization sets off reactions that strengthen cultures at the world regional and local levels. One such reaction is the resurgence of identity with Islamic ways.

One World?

The One World idea is the assumption that Western culture, with its emphasis on democracy, individualism, and human rights, can (or should) be extended to the rest of the world in the wake of the capitalist world economic system. This process is often referred to as "Westernization," or "Europeanization." It generated the modernization that has urbanindustrialization at its heart and includes the so-called "Cocacola-ization" of eating and drinking habits, the worldwide extension of Western TV programs and popular music, and the global presence of the same personal computers, cars, and other consumer goods.

Cultural Differences

In the 1990s, cultural forces often replaced politicaleconomic ideologies as causes of differences among and within countries. While many countries try to adopt and adapt to both Westernization and modernization, some especially the Muslim and Eastern Asian countries—try to modernize while rejecting Western culture. Major cultural



FIGURE 1.6 City center, Bangalore, southern India. What aspects of transportation types might help to define an Indian technological culture, as compared with your own? Remember that India has the technology to launch satellites, produce computer software, and explode nuclear bombs.

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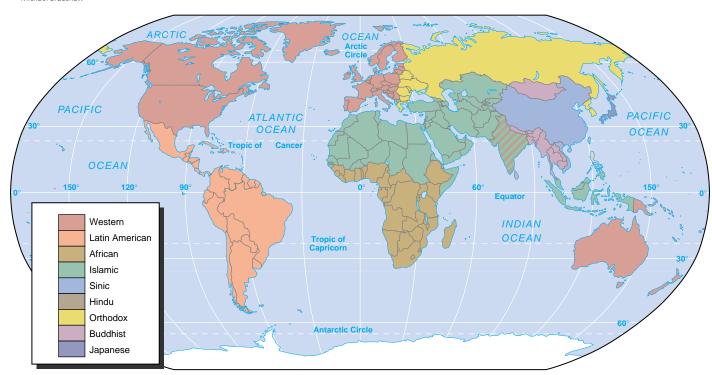


FIGURE 1.7 World cultures, or civilizations. The nine world divisions of Samuel Huntington (1996) that became of great significance in the 1990s after the end of the Cold War.

S. P. Huntington, The Clash of Civilizations. Copyright 1996 Simon & Schuster.

differences make it possible to divide the world into nine distinctive groupings, or civilizations (Figure 1.7): African, Buddhist, Hindu, Islamic, Japanese, Latin American, Orthodox, Sinic (Chinese), and Western. These approximately coincide with the common divisions of major world regions.

As cultural factors replaced political ideologies in generating regional differences, after a period when they were sup-

pressed, the border zones between cultural regions became "fault lines" of tension and conflict. The fault lines between Muslim and non-Muslim countries and ethnic groups resulted in most conflicts as the Muslim Resurgence encouraged militant groups. Conflicts in Bosnia, Kosovo, Chechnya, Kashmir, Sudan, Chad, Cyprus, westernmost China, Israel, Thailand, Indonesia, and the Philippines all lie in zones





(a)

FIGURE 1.8 Contrasting natural environments. (a) Tropical island in the Caribbean with tree-covered hills and vigorous plant growth resulting from high temperatures and plenty of rain. (b) Desert in northern Africa, covered by sand dunes except where water is available at a palm-fringed oasis. What other contrasts in natural environments have you experienced?

(a) © Gregory Ochocki/Photo Researchers, Inc.; (b) © Fred Maroon/Photo Researchers, Inc.

between Muslim and non-Muslim groups. The Internet has become important in these conflicts with groups on either side informing the world of their views.

Other cultural issues, which separate groups of people and give character to places at the country and local levels, include those of race, class, and gender. Although they have political and economic connotations, such issues are mainly motivated by cultural conditions.

Issues in the Natural Environment

Strictly, the world's **natural environment** is planet Earth as it might be without human modifications. It includes the mountains and rivers, atmosphere and oceans, plants, animals, and soils. The variations from tropical forest to desert (Figure 1.8), mountain peak, flat plain, and polar ice cap are determined by atmospheric and interior Earth activities.

Varied climates, landforms, and ecologies have often affected human decisions to settle a place and add to the human geography contrasts at the regional and local levels. Many natural events, from earthquakes and hurricanes to volcanic eruptions form hazards to human occupation that cannot be tamed. The varied features of Earth's physical and biological environments help to identify distinctive major world regions of approximately continent size, while resources of water, soil, or minerals influence events at the local scale.

People Modify Nature

People modify all landscapes in which they live and leave their (anthropogenic) impacts on the "natural" world. Some modifications improve the productivity, landscape quality, and liveability of a place, but others lower a place's attractions and future prospects. The effect is greatest where human activities are more intense or the environment is more fragile, as where farming or urban activities occur on the edge of a desert.

For thousands of years the human modification of landscapes resulted from the removal of forest to expand food production. The increasing population pressures and technologic abilities of the later 1900s had growing impacts on natural environments. Pollution and soil erosion became political issues in the wealthier countries and generated legislation to preserve soil, air, and water quality. In poorer countries, such steps were seldom seen as affordable or significant in the face of competing forces to attract more jobs. Corporations in the core countries, faced with higher costs from environmental legislation there, exported some of the polluting industries to countries in the periphery. The dangers of this process were highlighted by the chemical industry disaster at Bhopal, India, in 1984, when a poorly maintained pipeline broke, releasing toxic gases into a heavily populated district.

Global Environmental Issues

The El Niño effect, global warming, the ozone hole over Antarctica, the destruction of tropical rain forest, and destructive events resulting from hurricanes, typhoons, earthquakes and volcanoes are increasingly reported by global media. People around the world are more aware of the global and regional linkages among different aspects of the natural environment, the human dependence on natural resources, our impacts on the natural environment, and the need to initiate policies that will sustain significant environmental resources into the future.

While global warming is an issue involving the whole world, issues such as the ozone hole, acid rain, and major destructive weather systems, river floods, and volcanic eruptions act at major world regional, country, or local scales. In

RECAP 1A: A New Global Order

Globalization is changing world geography, but the diversity of local, country, and major world regions remains. Interdependent political, economic, cultural, and environmental dimensions interact to produce a mosaic of places at these varied geographic scales. Global economic and technologic changes brought places closer over time through the 1900s, but the differentiating roles of culture and environment assumed greater significance in the 1990s.

1A.1 What do you think are the main elements of globalization and localization? Support your answer with examples of recent events.

Key Terms. Make sure you understand the meaning of the following (see definitions in the text and *Glossary* in the *Reference Section*):

globalization Third World periphery
localization economic system semiperiphery
First World capitalism culture
Second World core natural environment

the 1990s, world environment conferences at Rio de Janeiro, Brazil (1992) and Kyoto, Japan (1997) adopted policies to avert environmental crises, but it is left to individual countries to implement (or not) those policies. Environmental and natural resource issues are likely to increase global and local political and economic tensions in the 2000s.

Population-Resource Issues

Rapid population growth was a feature of the 1900s, with world population rising from 1.6 billion in 1900 to 6 billion by 2000. The rise is likely to continue, with a slight slowing, so that the world population reaches around 9 billion by 2050. This 50 percent increase on the present population will be almost entirely concentrated in the world's poorer countries, making it more difficult for them to improve the quality of life for their people. There will be major increases in demand for natural resources, more degradation of natural environments, and more people living in areas subject to natural hazard disasters.

In the 1990s, such global concerns resulted in world population conferences. They concluded that population growth should be reduced through political, economic, and cultural means. Better family incomes and education were linked to improving women's place in society. This required new government policies by countries, but cultural factors often limited the prospects. In particular, Muslim countries resisted imposing restrictions on family size and lagged in female education provision.

A feature of all human history, population migrations increased in scale as transportation and knowledge of other places improved. People migrate from places where life is made difficult by poverty and harsh regimes; they migrate to places of greater opportunity where incomes are higher, jobs are more plentiful, and social service provisions are more

supportive. In the 1800s and early 1900s, huge migrations from Europe expanded the populations of the Americas. Migration rates around the world increased again in the later 1900s. In the mid-1990s, 150 million people worldwide lived outside their countries of birth, a number that increased by 2 to 4 million people a year. Refugees, migrating for political reasons, are an increasing group.

GEOGRAPHY OF A DIVERSE WORLD

Geography is the study of how human beings live in varied ways on the different parts of Earth's surface. Defining where places are on the globe and how they differ from other places is a start, but geographers are particularly interested in explaining the diversity in the distributions of people, economic activities, cultural distinctions, and environmental conditions around the world. Geographers compare places to link the political, economic, and cultural phenomena at different scales from the global to world region, country and local areas within countries. The physical and biological environments provide significant contexts.

The features and products of each region complement others. For example, people living in small towns in coastal China work in new factories built since the 1980s to make goods that will be sold in America, often financed by money from Japan or Taiwan. Yet they still depend on local farms for their food and are subject to both communist governmental controls and a cultural heritage from the more distant past. The global, world regional, country, and local linkages, together with inputs from past and present give character to each part of Earth's surface.

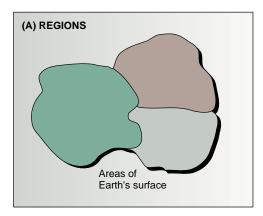
Geography is about Places

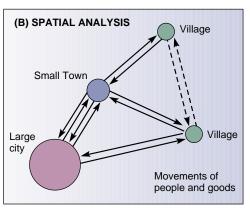
Geographers study **places** on Earth's surface as the environments and spaces in which humans live. When we say we visit a place, it might be an individual building (ski center), small town (Freeport, Maine), large city (New York), rural area (Midwest), another state, or another country. Places may be points on a map or areas of several thousand square kilometers.

A place's location is defined by reference either to its position on Earth's surface—**absolute location**, often recorded as its latitude and longitude—or by its level of interactions with other places—**relative location**. The increasing availability of rapid transportation facilities and the "global information highway" bring people into easier contact with each other, making them relatively—but not absolutely—closer.

The two basic geographic concepts of place and location are combined in three main approaches to geographic studies.

• Regional geography evaluates the differences among places. A region is an area of Earth's surface with similar physical and human characteristics that distinguish it from other regions and cause it to interact with other regions in specific ways (Figure 1.9a). Regional geography involves the description of the characteristics within each region that give rise to distinctive landscapes. It places





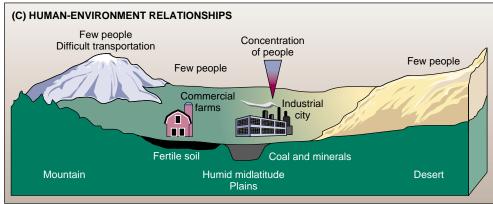


FIGURE 1.9 Geographers study how people use Earth's surface. (a) By dividing the surface into regions. (b) By analyzing spatial relationships among places. (c) By evaluating human-environment relationships.

each region and its location in a country, world region, or global context. Regional geographers recognize the uniqueness of some places and the features that several places may have in common.

- Spatial analysis highlights the relationships among places that are based on linkages across Earth's surface (Figure 1.9b). The character and location of places can be considered as geometrical points, lines, and areas. Statistical links among places add to the mathematical basis of spatial analysis. Studies often focus on a particular aspect of geographic significance, such as economic or population changes, or on geographic relationships among different sectors of towns or rural areas. Spatial analysis helps to assess linkages within and among regions.
- In investigating human-environment relationships (Figure 1.9c), geographers consider relationships between physical and human geography. Physical geography is the study of nonhuman processes and environments across Earth's surface (e.g., the distribution of climate variety, plant ecology, and soil types; the location of mountain building or river action). Human geography is the study of the distribution of people and their activities (e.g., economies, cultures, politics, and urban changes). Although it helps to study aspects of geography separately and systematically, the links between human activities and the natural environment are important.

Earlier in the 1900s, the study of the interactions between human activities and the natural environment was concerned mainly with the impacts of climate, mountain and lowland relief, and soil types on human affairs. More recent studies assess the impacts of human activities on the environment. Geographers see landscapes as summarizing the outcomes of interactions between people and natural environments over time. Distinctive elements in urban and rural landscapes help to define regional characteristics.

REGIONS IN A NEW GLOBAL ORDER

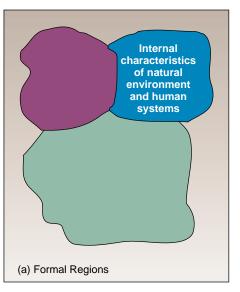
The tensions between globalization and localization focus attention on regional geography, which this text adopts as its approach to world geography. Political, economic, cultural, and environmental tendencies in the post-Cold War world interact in different ways with local areas, countries, and major world regions. They give a new significance to regional distinctions that evolved through human history.

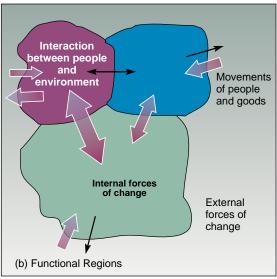
Regional Scales

Regions within the overall global realm are of varied scales from local to continental. In this text, we identify three regional scales within the global (see Figure 1.2).

 Major world regions each encompass several countries and occupy a major part or all of a continent. Nine such regions are identified, largely on the basis of their cultural

FIGURE 1.10 Formal and functional regions. (a) Formal regions reflect a static understanding of regions, each one seen as separate and different from others. (b) Functional regions are a dynamic concept that involves exchanges of raw materials, products, people, and information, and considers the relative influences of regions on each other. This understanding is more appropriate to world regional geography.





features. Their human and physical geography are considered together with studies of distinctive subregions within each major region in Chapters 3 through 11. Groups of countries, or very large countries such as Russia, Canada, China, the United States of America, Brazil, and India, form subregions.

- Countries are self-governing political entities within major world regions. Their borders provide the boundaries of major world regions and subregions.
- Local regions are subdivisions of countries that may vary in size from cities to urban neighborhoods or from an area of distinctive farm products to places with less human imprint that are distinguished by their physical features.

Formal and Functional Regions

Two complementary concepts of regions operate at each of the geographic scales.

Regional Differences Described

Formal regions are distinctive parts of Earth's surface that have characteristic combinations of physical and human geographic features. Each region is unique and treated as if it is unconnected to the rest of the world (Figure 1.10a). It may be defined by such criteria as the arrangement and type of physical features, descriptions of local landscapes, or economic characteristics. Business and government bodies utilize formal regional divisions in defining their marketing and administrative areas.

Linkages and Changes in Dynamic Regions

Functional regions are dynamic geographic entities that have distinctive patterns of internal movements of goods and people and interactions with other regions (Figure 1.10b). The growth of worldwide trading and communications systems

results in regions changing their roles and relative locations within the systems. Some become political, economic, or cultural cores, while others become parts of peripheries. Interactions between cores and peripheries result in continuing changes of political significance, economic products, and cultural attitudes over time. Each set of changes leaves behind relic features in the landscapes and built environments of regions as much of their land is recycled into new uses.

Seen from a viewpoint of rapid changes in the late 1900s, the components of the complex mosaic of geographic regions have five characteristics that combine the past, present, and possible future character of each region.

People create regions. The people who live in a region have a dominating role in determining its characteristics. The relative importance of regions is determined less by criteria such as the possession of natural resources and more by human actions at critical phases of history. People strengthen this regional identity by creating their own images of their country's or local region's role, portraying their idea of its importance and relating other parts of the world to it as friendly or "other."

The greater importance of human agency is shown where people act in different ways in similar natural environments and regard each type of natural environment as having different potentials for development. For example, the margins of the Sahara desert of northern Africa remained home to nomadic tribes into the 1900s, while British engineers from the late 1800s reclaimed the deserts of Pakistan in Southern Asia for commercial agriculture (see Chapters 4 and 5). The expansion of Los Angeles in southern California was an American urban response to a desert environment (see Chapter 9).

Furthermore, similar patterns of human organization are applied across different environments. For example, within the United States, similar economic, social, and political systems occur across the arid, humid, subtropical, and temperate environments.

• Regions shape people's activities. Each region is an environment for human activity. People in a region live and work within limits imposed by the economic, social, and political systems and the natural environments that operate there. People living in very dry or cold regions have more limited options than those in humid midlatitudes. People living in New York are constrained by the way in which it is built and how the different neighborhoods have developed.

There is thus a two-way process at work. While people are the main forces creating the distinctive features of regions, they are themselves affected by the regional characteristics that others established. Regional characteristics are perpetuated through people developing cultural traits and social habits in a place.

 People remake regions. Regions change over time at varying rates. A sequence of changes may leave relics (buildings, street or field patterns, derelict factories) and introduce new features in continuously recycled landscapes.

An example of changes generated internally over a long period of time began with people in medieval Europe cutting down forest to expand farmland. They built market towns that became the basis for craft industries and trade (see Chapter 7). From the 1800s, manufacturing industries, together with the expansion of some towns and cities, created contrasting urban and rural regional identities.

As an example of external market conditions altering the basic features of a region during the 1950s, farmers in northern Nigeria largely abandoned the traditional subsistence economies that evolved over centuries to cope with climatic fluctuations on the Sahara margins. Instead, they grew commercial crops such as peanuts and cotton for world markets (see Chapter 3). They turned all their land over to the new crops. Education and health both improved as the sale of crops generated income to supply the need for healthy, educated workers. The economy, social structures, and political influences in this part of Nigeria changed along with the land uses and communal practices.

Within a country, particular groups or individuals may have such an influence that they determine the course and pace of regional changes. The former Soviet Union arose out of the revolution of 1917 that brought communists to power through leaders such as Vladimir Lenin. During the next 70 years, successors such as Josef Stalin changed the way in which the country's economy functioned. Mikhail Gorbachev in the late 1980s and Boris Yeltsin in the 1990s had important roles in the breakup of the Soviet Union.

• Regions interact with other regions. No region is an isolated entity. Each region interacts with other regions through processes that encourage political, economic, and cultural exchanges on a global scale. Coal miners in Appalachia and farmers in the American Midwest see their jobs and incomes affected by world market prices for fuels and farm products (see Chapter 9). Even the world's remotest regions, such as the upper Amazon River basin and interior Borneo

(Indonesia), are being increasingly affected by external economic influences.

Changes in regions generated by the people who live in a region often have impacts on other regions. When world markets for cotton and peanuts collapsed and drought brought poverty, the people of northern Nigeria moved into urban areas, affecting both urban areas in other parts of the country and the abandoned farmland. From 1950 to 1990, the countries of Eastern Europe and the Balkans were tied to the Soviet bloc, which tried to isolate itself economically from the world economic system. When the Soviet Union collapsed in 1991, the other countries suddenly had to reorient their economies toward the global economic system (see Chapters 7 and 8).

Some places have continuing strategic roles that affect surrounding regions. Those with positions at narrow throughways on ocean trade routes may be termed **global choke points**. Examples include the Suez and Panama Canals, Straits of Hormuz (entrance to the Persian Gulf), Dardanelles and Bosporus (entrance to the Black Sea in Turkey), and Malacca Straits (near Singapore). Such strategic places are held or defended by core countries to maintain access to their markets and raw material sources.

Interactions among countries may result in them working closely together in trade or defense agreements. Regions within countries often have complementary exchanges of goods and ideas to each other's benefit.

Interactions among countries and local regions may result in conflicts. The presence of several cultural groups within a country, each having territorial claims, often means that one group becomes dominant and others are discriminated against. The Bosnian and Kosovan conflicts stemmed from differences among Serbs, Croats, and Muslims (Figure 1.11). Each group had supporters outside Bosnia and Kosovo that supplied them with arms and so kept the conflict going. Conflicts over the ownership and allocation of water resources, as along the Nile River Valley or over the sources of pollution, as in northwestern Europe, lead to political tensions among countries and regions. Regional differences thus become sources of separation instead of integration.

• Regions are used by those in power. Regional character often reflects the deliberate actions of powerful governments. Regions were manipulated to change people's lives in the former Soviet Union, where rural areas were industrialized on a major scale, even north of the Arctic Circle. Groups of people were moved from their traditional homes to other parts of the country for state security reasons (see Chapter 8). In other countries, attempts to modernize regions that lag behind in economic development may destroy local characteristics of culture and discourage local enterprise. In the United States, federal government attempts to develop the economically lagging region of Appalachia were criticized because the modernization introduced was accompanied by the decline of distinctive local cultures (see Chapter 9).



FIGURE 1.11 Importance of cultural differences. The former country of Yugoslavia in the Balkans of Europe. After 1991, Yugoslavia broke into five independent countries, although Serbia-Montenegro continues to call itself "Yugoslavia." Slovenia, Croatia, Bosnia, and Macedonia maintain their independence with difficulty, and the Albanian southern part of Serbia (Kosovo) became an area of civil conflict in the late 1990s. The colors show areas where particular ethnic groups comprise over 50 percent of the population. Which country has the greatest potential for ethnic conflict?

Political and economic power is also exercised against foreign countries. Despite the ending of the era when major powers held territory as colonies, the strategic interests of powerful countries—as defined by the countries themselves—maintain strong influences in some parts of the world. This was particularly noticeable during the Cold War from 1950 to 1990, but it still exists. The United States, for example, views the oil-producing Persian Gulf countries as important to its own economic well-being as major suppliers of energy. It went to war in 1991 to free the oil-producing country of Kuwait after Iraq's invasion. It long resisted, however, involvement to stem the advances of invading Serbs in the Muslim and Croat sectors of Bosnia, rating that situation as less significant.

MAJOR WORLD REGIONS

Both the defining of formal regions and a more dynamic regional geography—the creation and remaking of regions and their interactions with each other—are basic to understanding the differences and changing circumstances around our world. The study of world regions provides opportunities for assessing the potential impacts on places of the country-based politi-

cal order, the expanding global economic system, the clashes of cultures, and the pressures on the natural environment.

In this text, the globe is divided into nine major world regions and a chapter is devoted to each. Countries that have features in common are grouped into major world regions (Figure 1.12) and subregions. The criteria for the major groupings are cultural, economic, political, and physical—in that order.

The following divisions are not established for all time. Shifts that are currently in progress led to the eastward extension of the boundary of the "Western Europe" major region of the first edition (1997). In the present edition, the countries of eastern Europe that set their sights westward after 1990 by applying to join the European Union are grouped together as "Europe" with those already in the EU. What remains of the major region previously titled "Eastern Europe, Balkans, and the Former Soviet Union" becomes the "Commonwealth of Independent States," incorporating the countries of the former Soviet Union minus the Baltic states.

Africa South of the Sahara, the cradle of the human race, is marked by tensions produced by a mosaic of small ethnic groups within a pattern of countries imposed by European colonizers. Its religions have environmental, or animistic, bases with Islamic or Christian overlays resulting from trade and colonization (Chapter 3).

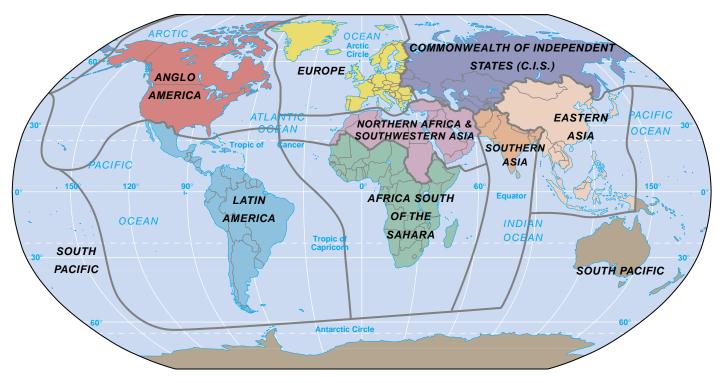


FIGURE 1.12 Major world regions based mainly on cultural characteristics. These regions form the subjects of Chapters 3 through 11. World maps in Chapter 2 are divided on this basis so that comparisons may be made.

Northern Africa and Southwestern Asia is dominated by the twin uniting cultural features of Islamic religion and Arabic language, together with a natural environment that provides much oil but limited water resources (Chapter 4).

Southern Asia is characterized by the intermingling of and clashes among Hindu, Islamic, and Buddhist religious cultures overlaid by former British colonial influences and changes since independence (Chapter 5).

Eastern Asia was the scene of historic civilizations in China, from which cultural influences permeated the rest of the region. It had less European colonial intervention than other world regions (Chapter 6). The overseas Chinese play important parts in the economies of many countries in the region outside of China itself.

Europe is the home of mainly Catholic and Protestant Christian religious groups, and of capitalism and modern industrial technology. It is increasingly defined as those countries that identify themselves as present or potential members of the European Union, including those in Eastern Europe and the Balkans (Chapter 7).

Commonwealth of Independent States stretches from easternmost Europe across northern Asia. Russia, the largest and still dominant country, was the scene of long-term clashes between the Orthodox Christian and Islamic faiths, overlaid and subdued for most of the 1900s by the communist political culture of the Soviet Union (Chapter 8).

Anglo America is dominated by the culture brought by settlers beginning in the A.D. 1500s, at first mainly from northern and western Europe. Later people came from southern and eastern Europe and eventually from most parts of the world. It comprises the United States and Canada (Chapter 9). French and Spanish dominate some local regions, but English remains the most important language overall.

Latin America is dominated by the Roman Catholic culture and languages brought by settlers mainly from Iberia (Portugal and Spain), who interacted with native peoples and their cultures (Chapter 10). As with Anglo America, there are enclaves of other languages, including English, French, and Dutch, mainly in the West Indies.

South Pacific includes former European colonies, of which the largest and wealthiest are Australia and New Zealand. Distant from the other core countries, they are integrating trade with their close neighbors in Eastern Asia. Some of the many island groups are among the world's poorest countries. Antarctica, the uninhabited continent, is included in this region.

The major world regions also reflect the world economy core-periphery relationships (see Figure 1.5). Europe and Anglo America were established as the world core regions by the early 1900s and continued to grow economically at the expense of the rest of the world in the periphery (Figure 1.13). Japan joined the core countries to form a new core that

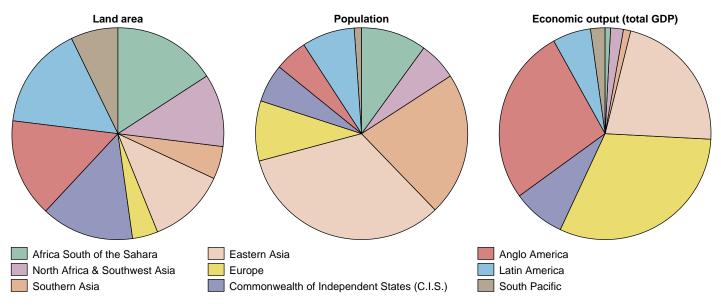


FIGURE 1.13 Major world regions: comparisons of area, population, and economic output (gross domestic product, GDP). Pie charts show the variations. Which major regions have more of the world's land area than its population? Which major regions have a higher proportion of the world's economic output than its population?

RECAP 1B: Geography and Regions

Geographers study the differences between places and interactions among them. They take account of political, economic, cultural, and environmental factors and their influences on particular sections of Earth's surface, or regions.

Regions are areas of Earth's surface with distinctive characteristics that emerge from people's interactions with the natural environment and human institutions. Regional character and boundaries change over time. Regions interact with other regions.

1B.1 How would you define Geography and Regional Geography?

1B.2 What do you think are the major differences among the nine major world regions identified here? See if your perceptions change as you go through this course.

Key Terms:

geography spatial analysis country place human-environment local region absolute location relations major world region relative location physical geography formal region regional geography human geography functional region global choke point region **Key Places:** Anglo America Africa South of Southern Asia the Sahara Eastern Asia Latin America Northern Africa and Europe South Pacific Southwestern Asia Commonwealth of

interacts with and encourages the growing economies of Eastern Asia. The former Soviet Union and its linked bloc of socialist countries appeared to be challenging the wealthiest core countries up to the 1980s, but their political breakup exposed an economic position that was no better than that of

Independent States

many peripheral countries. In the 2000s, South Africa is likely to establish itself in a higher group than other African countries, while the People's Republic of China is already a leading world economy.

Geographers do not agree in detail upon divisions of world regions. Other texts draw some boundaries differently. For example, Mauritania (an Arab country) is included here with Western Africa rather than with North Africa because of its closer historic ties to the former; Sudan, another country that straddles the Muslim and southern African cultures, is included with Egypt because of their common reliance on Nile River waters. Myanmar (Burma), which its dictators made an isolated country, was included in Southern Asia in the first edition because of historic colonial ties, but its 1997 membership of the Association of South East Asian Nations (ASEAN) relocated it in Eastern Asia in this edition.

GEOGRAPHIC DEVELOPMENT OF WORLD REGIONS

The development of today's diverse world geography can be traced from the earliest city-based civilizations. It moved through the formation of unified empires with expanding trade links across parts of the globe, to the current position in which a single economic system incorporates the whole world.

Through history, periods of wealth and empire creation, based on expanding political power and trade areas, alternated with periods of empire breakup, unsettled conditions, and reduced trade. Each left an inheritance of distinctive traditions, buildings, and land patterns that formed the basis of distinctive regions. Later groups of people recreated regions

by modifying older regional characteristics or incorporating them in the changes they brought.

Three distinctive ways emerged, in which peoples produced goods and organized societies.

- For much of human history, people lived in small groups by hunting, gathering, or low-productivity agriculture.
 Limited specialization and the exchange of goods operated on a local bartering basis. Such small-group and local scales of activity are typical of mini-systems.
- With greater organization, world regional empires replaced mini-systems. Technical advances increased agricultural productivity so that surpluses of food supported craft artisans and administrative-priestly-military ruling classes.
 Empires traded and warred with each other across areas that expanded or contracted over time.
- Capitalism led to the evolution of the current world economic system from the A.D. 1400s. The criterion of profitability led to new forms of accumulating surplus wealth in a single world market, but the global basis of competition demanded individual countries and corporations and worked against an overriding global political order. This system replaced mini-systems and empires by the 1800s.

Making some huge generalizations and simplifications, the history of world regions can be summarized in five major phases.

Phase I. Local Systems: Hunting and Farming

Around 10,000 years ago (8000 B.C.), humans formed minisystems of small hunting and gathering bands, the numbers in each and the distribution of which depended on the natural productivity of the local ecosystems. Productivity could be raised in places by increasing the edible plants and animals, as where human-set fire extended natural grassland into forested areas to sustain more larger, meat-providing animals.

Settled farming began in southwestern Asia some time before 9000 B.C., at first located in the subhumid hilly areas between mountains and plains. Farming based on early irrigation techniques spread from the surrounding hills to the Tigris–Euphrates River valleys after 5000 B.C. The economic, political, and technological changes that followed spread to other areas with similar natural environments—the lower Nile River valley (modern Egypt) and the Indus River valley (modern Pakistan).

Within another millennium, China and southeastern Asia became important centers for settled farming based on the domestication of plants and animals. Africa and Europe were later on the scene and settled farming did not reach northwestern Europe until 4000 B.C. Although the Americas were isolated from these developments, recorded plant cultivation there began around 7000 B.C. By 1500 B.C., corn formed the basic crop of settled villages and some larger towns with craft industries and local trades.

The first agriculture was based on selected species of plants and animals that varied from southwestern Asia (wheat, barley), to China (millet, rice), the Americas (corn, squashes, beans, potatoes, peppers, tomatoes, cotton), and Africa (sorghum, yams). Animals were herded near cultivated fields, providing meat, wool, and milk, were used in field work, and carried loads. Some of the domestic animals, especially the horse and camel, gave mobility to nomadic herders. Villages grew into the first small towns, such as Jericho (c. 8000 B.C.), that produced pottery, textiles, and metal goods.

The geographic scale of interaction in this phase was dominantly local. The first broad human regional distinctions emerged between places that depended on settled farming and those that remained dependent on hunting and collecting.

Phase II. First World Regional Empires: City Civilizations and the Bronze Age, 2500 to 1000 B.C.

This phase saw the formation of the first world empires, together with increased levels of interaction among them. The massive human interventions in the irrigated lowlands of Mesopotamia—drained by the Tigris and Euphrates Rivers—formed the central core and periphery of world regional empires. Such empires stretched from the Mediterranean Sea to China (Figure 1.14). Successive city-based states in Mesopotamia, such as Sumer, Ur, and Akkad, controlled the irrigation farming, and Akkad created the world's first empire. At times, the onslaught of peoples from the hinterland broke down the processes of wealth accumulation and trade. From 2000 to 1000 B.C., the Babylonians and the Hittites took control of parts or all of southwestern Asia.

This phase was marked by the first writing—to keep track of economic transactions including trade; the further extension of arts in warlike human likenesses, animal paintings, and statues; the foundations of complex mathematics; technological innovations in metalworking, pottery, and construction materials, and the invention of the wheel; the development of religious beliefs linked to mythical prehistories; and a codification of laws, including those giving rights to women.

Mesopotamia became the center of a trading network based on exporting its agricultural and craft products and importing timber, metal ores, stone, and gemstones from the local periphery. Longer routes dealt in luxuries, with connections to Egypt, Persia, the Indus River valley, and, after 1500 B.C., to China. Slavery provided the main source of labor—often men and women captured in warfare and moved to work in the core area cities.

Other cores imitated developments in Mesopotamia, but Mesopotamia remained central to trade links. Irrigation farming also formed the basis of wealth accumulation in Egypt, where a series of kingdoms controlled the lower Nile River valley and built huge memorials in the pyramids. Three periods of Egyptian kingdoms were separated by local rebellions or invasions of outsiders, including the Hyksos, who captured the northern delta region around 1750 B.C.

The island of Crete flourished as the center of the Minoan civilization from 1900 to 1600 B.C. Less is known about the civilization in the Indus River valley around Harappa and

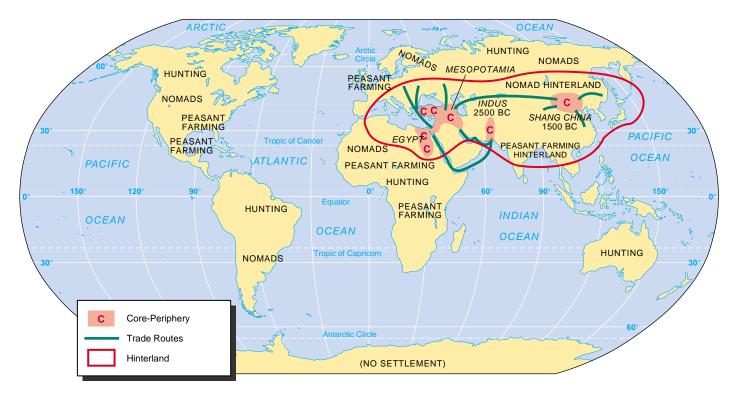


FIGURE 1.14 First world regional empires, about 2500 to 1000 B.c. The first civilizations of southwestern Asia and the Nile and Indus River valleys, with somewhat later developments in China. The core-periphery areas were the main centers of world trade and development, linking with each other along sea and overland routes. The near hinterland supplied some raw materials, but most of the world lay beyond in an unconnected outer hinterland.

Mohenjo-Daro, but its influence extended widely and its products have been found in Mesopotamian sites. It ended around 1550 B.C. after invasions from the north. In China, a confederation of cities and states gradually drew together, but it was not until the Shang dynasty (1523–1028 B.C.) that there was wider control and an opening of trade relations to the north and west.

The first empires arose where the combination of water and sun allowed extra productivity. Most of the world remained outside the core-periphery areas with mini-system economies, and was only occasionally caught up in the affairs of the core regions of wealth accumulation.

Phase III. New World Regional Empires: Classical Civilizations of the Iron Age, 1000 B.C. to A.D. 600

During this phase, "classical" periods that formed the cultural basis of modern world regions and originated several major world universal religions occurred in Persia, Greece, Rome, India, and China. Confucius, Zoroaster, Buddha, many of the Hebrew prophets and Greek philosophers, Jesus Christ, and Mohammed all lived between the 500s B.C. and the 600s A.D. The Greek pantheon of gods (taken up by the Romans), the Celtic druidical religion, Scandinavian gods under Wotan, and the Egyptian Isis, however, failed to sustain a major role. Only in Hinduism did more ancient traditions and polytheism remain.

The geographic coverage of political and commercial activities spread from the centers established in Phase II and

shifted outward from Mesopotamia into new empires (Figure 1.15). In the west, Rome's legions incorporated much of northern Africa, modern Spain, France, and Britain into its empire. New controlling interests took over Egypt, Persia, and India. In China, the Zhou, Qin, and Han dynasties expanded the empire, opening the route through Central Asia to Persia and Rome by A.D. 200. Slavery remained the main form of labor in the fields, workshops, and domestic realms of life in the empires.

Indian empires emerged from a phase of complex movements of people and changes after the invasion of Aryan peoples, becoming a region of settled farmers concentrated along the Ganges River valley. After 800 B.C., Aryans penetrated into southern India and Ceylon, clearing woodland with their iron implements. Seafaring ties to southwestern Asia increased. By A.D. 100, Indian merchants established links with southwestern Asia and Egypt, exporting precious stones, indigo, and silk yarn on their way to Rome.

China suffered a long period of internal disorder as emperors became figureheads without power and a hundred feudal states fought for power. Yet this was also a time when Chinese culture was consolidated and spread into surrounding lands. Warring states within China continued to vie for power. The scale of destruction increased as iron weapons came into use alongside the implements that brought new land into cultivation. China combined a rising population, innovative technology, and expanding trade at a time when the Roman Empire reached its greatest extent in the west.

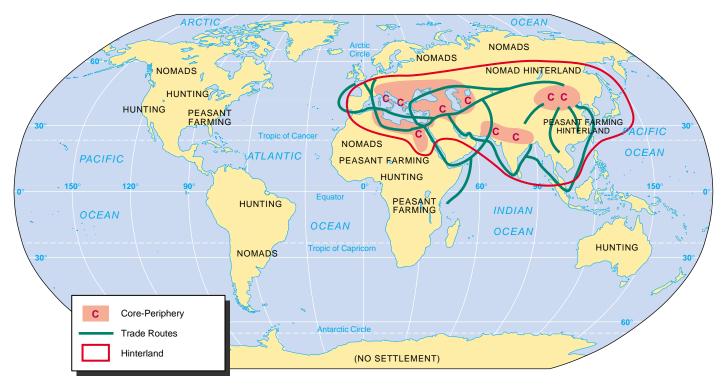


FIGURE 1.15 New world regional empires, about 1000 B.C. to A.D. 600. During this phase, the Greek and Roman empires expanded westward, the central Persian empire and northern India provided new cores, and the Chinese empires became organized and expansionist. By A.D. 200, there was a considerable eastwest trade in luxury goods and a major growth of trade within the core-periphery zones.

Economic and cultural contacts from one end of Eurasia to the other had never been so close. Later, the combination of a court weakened by factions and child emperors, incursions by nomadic Xiongnu from the north, and poor harvests led to the breakdown and division of the empire.

Phase IV. Feudal Empires: Medieval Times, A.D. 600 to 1450

Although the term *medieval* is applied mainly to Europe, it signifies a middle phase in the development of world systems between the classical and modern eras. Interruptions to wealth accumulation and trade earned it the term, "Dark Ages." Invasions from central Asia affected the core areas in Rome, Greece, northern China, Persia, and India. Western Europe remained disorganized and backward as the result of continuous invasions from the east. The uncertainties of this time resulted in the spread of feudalism, by which a hierarchy of emperors, kings, princes, barons, and local warlords provided protection for their serfs and local peasants in exchange for labor and military service.

New Empires

Byzantium, centered on Constantinople, became the center of the Roman Empire following the collapse of Rome in A.D. 300. New empires arose in Persia, northern India, China, Indo-China, Korea, and Japan. The Muslim expansion from the A.D. 600s out of southwestern Asia to Persia and northern

Africa—one of the most important events in history—was followed by Arab traders penetrating across the Sahara in northern Africa and taking a major role in the Mediterranean Sea and Indian Ocean. In western Africa, the empires of Ghana, Mali, and Songhai followed each other. In the Americas, the Maya, Aztec, and Incan empires established military-economic control over large areas (Figure 1.16).

Mass Migrations

Invading hordes set off huge movements of peoples from the steppe grasslands of central Asia. Mobile mounted archers with light armaments successfully attacked crucial centers of power. As they moved out of central Asia, they often pushed other groups ahead of them into southern China, India, and western Europe. They spread Turkish languages westward but were seldom able to govern settled peoples for long.

In the westward movements caused by such pressures during the A.D. 300s to 500s, German and Slavic tribes moved on to former Roman Empire lands. Further disruption and resettlement followed the Magyar invasions of Hungary in the late 800s. The Great Wall of China, however, proved an effective defense frontier for the Chinese. The most significant and final invaders were the Mongols in the 1200s and 1300s, conquering and ruling China for 200 years. In India, Muslims gained political control of the north by the 1200s, setting up the Sultanate of Delhi, which lasted until European conquests.

From the late 700s to the 1100s, the Vikings of northern Europe set out by sea to raid and settle lands. They reached

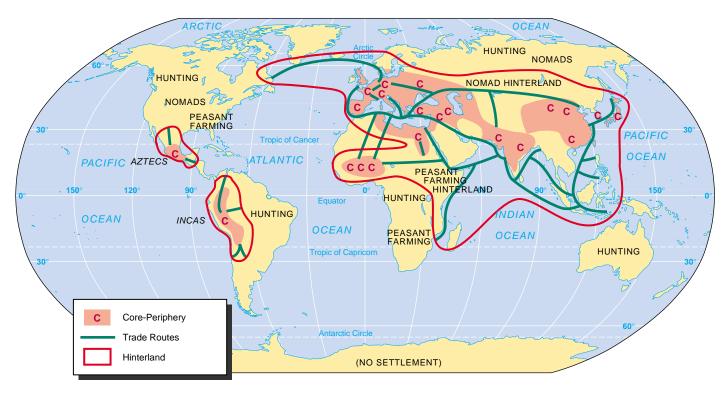


FIGURE 1.16 Feudal empires, about A.D. 600 to 1450. This period began with disruptions in Europe and included invasions from the Eurasian steppes and Viking homelands. It also saw the development of new empires outside the previous world systems, including the Americas. Some regions experienced important periods of political consolidation and wealth accumulation.

Iceland, Greenland, and the British Isles in the west, entered France and northern Europe, and sailed down the Volga River valley in present-day Russia—where they traded furs and slaves with Muslims.

New Geographic Patterns

Toward the end of this phase, the future cultural and territorial patterns of European and other powers began to emerge. The Christian church, previously confined to the Roman Empire, sent missions to northern Europe, resulting in the conversion of most of the region by A.D. 1000. The eastern (Orthodox) church centered in Constantinople spread its influence northward and eastward. Muslim advances, however, swamped the church in southwestern Asia, India, and northern Africa. By the end of phase IV, Muslim armies conquered the Balkan Peninsula, southern Italy, and Iberia (Spain and Portugal), as well as northern Africa. In northern Europe, the Franks of central Germany established control over modern France and Germany by A.D. 800, while the Saxons moved into England and tried to fight off the Vikings. Slavic states emerged in eastern Europe, including the first Russian state in the mid-800s.

China again became the world's most prosperous empire with extensive sea power. Hangzhou was the world's greatest city, with 1.5 million inhabitants. China's visual arts, literature, philosophy, science, technology (first printing), and education were in advance of the rest of the world. Rich merchants and a growing middle class emerged through the increasing numbers of trained state officials, bankers, and independent peasants.

The basics of Chinese culture (language and political organization) were adopted by surrounding states in Korea, Japan, Manchuria, and Yunnan (southern China). Southeastern Asia became a world crossroads between India and China, later affected by Muslim trading and military missions.

Links to the Future

By the 1100s, Europe was climbing out of political and economic dislocation. In a period of warmer climate, the population increased, especially in (modern) France, Germany, and England. Farmers opened new lands by cutting woodland and draining marshes. In western Europe, the feudal system came under stresses during the 1400s, when many serfs became freeholders or wageworkers. Peasant farmers gained more independence, and towns expanded with craft industries and markets, some of which had international significance through their trade fairs.

The end of phase IV was marked by the attacks of Genghis Khan and his Mongol hordes, the expansion of the Ottoman Turks, the Black Death, and the worsening climate leading to the Little Ice Age (approx. A.D. 1450 to 1850). The resultant economic recession and population decimation (up to one-third in some parts of western Europe) reduced trade across Eurasia.

Phase V. Capitalist World System and Modern Times: A.D. 1450 to the Present

The final phase of world history built on the past to produce detailed geographic differences among places in A.D. 2000.

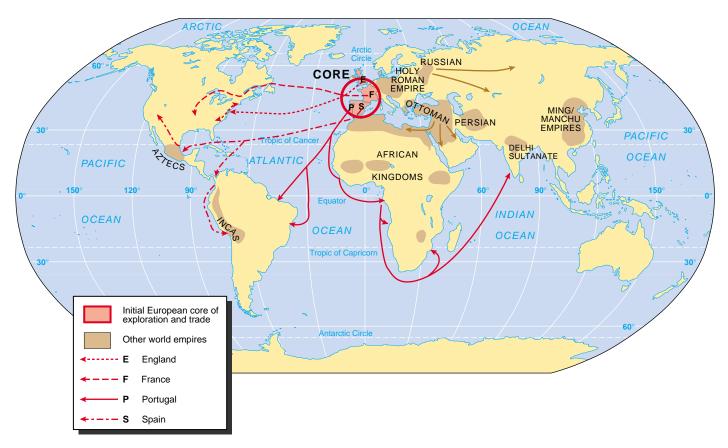


FIGURE 1.17 Capitalist world system, part 1, about A.D. 1450 to 1750. This phase was dominated by the capitalist means of wealth accumulation. In the first period, about A.D. 1450 to 1750, mercantile capitalism led to the exploration from Europe of new lands, along with some colonization. Other empires existed outside the European realm and traded with each other (see also Figures 1.18 and 1.22).

The growth of capitalism and associated colonialism paralleled the centralization of economic and political power in western Europe. The whole world became incorporated in a single system of production and trade facilitated by the increased speed and capacity of transportation and communications. The modern pattern of countries emerged. Interactions among regions and countries increased. Environmental restrictions on production gradually gave way to changing economic and political priorities. **Modernization**, seen as desirable by most people in the world, involved increasing production and trade based on new technologies.

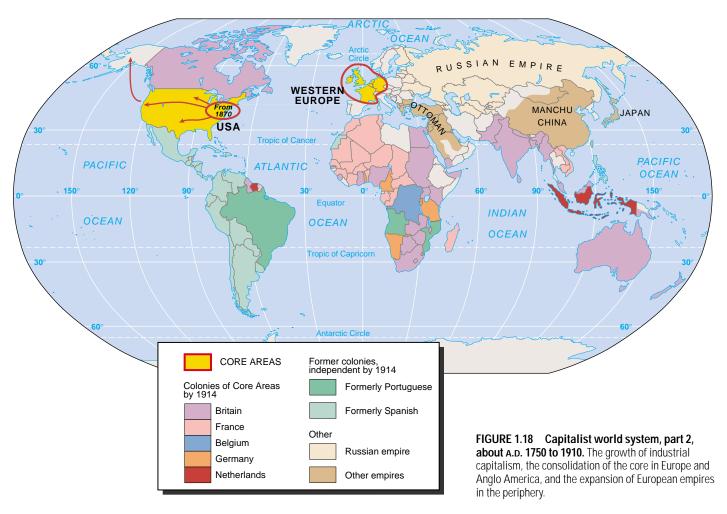
The new form of wealth accumulation spread outward to the Americas, Africa, the South Pacific, and parts of Asia. By the late 1800s, much of the world was ruled by European countries and incorporated in dependent trade relations. This phase of globalization was slowed by the aloofness of the United States until 1940, the disruptions of two world wars, the economic depression of the 1930s, decolonization after 1945, and the Cold War. In the 1990s virtually the entire globe became part of the capitalist world economic system.

Mercantile Capitalism

Capitalism, the dominant world economic system of wealth accumulation since the late 1400s, developed when technologies of production and communication expanded the geographic scope of exchange and control. In the period A.D. 1450 to 1750 (Figure 1.17), mercantile capitalism, or mercantilism, replaced the European land-ownership based wealth and personal ties of feudalism. Merchants in independent market towns and ports traded local products, such as wool and cloth, for spices and dried fish from overseas. The products of the fishing, timber, mining, and farming industries were the main goods distributed through mercantile capitalism.

Mercantilism made possible the accumulation of monetary wealth. Favorable balances of trade were often based on monopolies granted by kings or on the increasing productivity of agriculture and craft manufactures. Some regions specialized in producing cloth from local wool, at first in people's homes with merchants collecting and selling the output. Owners of capital invested it in land and farming improvements, such as the drainage of wetlands in Holland and England, or in trading expeditions to the new colonies.

Trading linkages grew among market towns within European countries and led to the overseas colonization of new territories to provide sources of new products. European countries, beginning with Spain and Portugal in the 1500s, but giving way to French, Dutch, and British merchants and military in the 1600s, invested in exploration and trade with Africa, Asia, and the Americas. Western Europe became the core of the new capitalist economic system, while its colonies



and trading stations were its periphery. Other parts of the world remained in the hinterland of isolated subsistence (mini-systems) or feudal empire systems until the 1800s.

The Four Revolutions of Industrial Capitalism

The mid-1700s formed another watershed in the development of the world economic system. From A.D. 1750 until the early 1900s, the first industrial revolutions set off growth in factory-based manufacturing industries, bringing a new impetus to the capitalist economic system and hastening its world dominance (Figure 1.18). Rates of change increased and new parts of the world were incorporated as interactions among regions increased.

Industrial capitalism is based on the concentration of manufacturing production in factories (Figure 1.19), involving high levels of investment in buildings and machinery and, in many cases, increased profit margins for investors. Production in factories added significant value to the raw materials and components. Manufacturing also required investment in transportation facilities linking the factories to their sources of raw materials, component producers, and markets. New social groups emerged out of the production processes, from the owners to the managers, foremen, and workers. New distinctive patterns of towns, new functional areas within towns, transportation links, and regional wealth inequalities marked this phase.

Industrial capitalism experienced alternating periods of expansion and stagnation from the mid-1700s to the present (Figure 1.20). During periods of expansion, new technologies of production and transportation caused a series of further industrial revolutions and spread the influence of capitalism. These processes had major geographic impacts. Cities expanded as more factories and homes were built to accommodate workers moving from the countryside to work in factory jobs. Overseas exploration from the core countries opened new lands to provide the raw materials for factories and markets for their manufactured goods that entered world trade. Places still dominated by subsistence and feudal economic systems were reoriented as the world economic system advanced further in each phase of expansion. During periods of stagnation, technological innovation slowed, while surpluses of labor, productive capacity, and capital resulted in economic recession.

First industrial revolution, 1750 to 1850. The first factories were in Britain, powered by water mills and then steam engines. They processed agricultural and mine outputs. The early manufacturing industries included ironworking, cotton textiles, leather goods, and pottery. This was a period of competition among family-owned manufacturing firms. Transportation was mainly by water across oceans, around the coasts, up rivers, and along

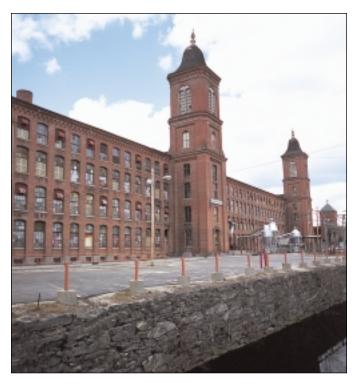


FIGURE 1.19 Industrialization in the 1800s. A textile mill in North Grovnerdale, Connecticut. Built in 1872 beside a canal, its four floors enabled steam power based on burning coal to be used more efficiently.

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specially constructed canals linking the manufacturing areas with ports, raw material sources, and markets. After boom conditions up to the 1820s, economic growth slowed in the 1830s and 1840s as production capacity caught up with demand. Manufacturing production techniques spread from Britain to several parts of northwestern Europe by the 1850s.

European colonial expansion accompanied the growth phase. Britain's booming economy in the early 1800s, and its world naval dominance following the defeat of Napoleonic France in 1815, led it to establish political control over India (see Chapter 5) and Australia (see Chapter 11), followed by commercial dominance in the newly independent Latin American countries (see Chapter 10).

The United States (Chapter 9) achieved independence from Britain in 1783 and began its industrial growth in the early 1800s. It accomplished a remarkable expansion of territory by pushing out its borders to incorporate the western two-thirds of its conterminous lands between 1803 and 1853 and adding Alaska in 1867. In so doing, it incorporated huge resources of productive land and industrial minerals.

 Second industrial revolution, 1850 to 1910. During the late 1800s, new technologies based on steel and chemical products, steam power, and railroad transportation networks instigated another industrial revolution and a massive expansion of manufacturing in both scale of production and geographic extent. Coal became the main energy source and a major raw material in steel production; many coalfield areas were centers of industrial expansion (Figure 1.21). Germany and the United States rivaled Britain in output as Britain concentrated on expanding its empire into Africa and failed to continue its lead into new technologies. Once again, an initial spurt of industrial production in the 1860s and 1870s gave way to slower growth in the 1880s and 1890s.

During the late 1800s, manufacturing industry underwent organizational changes that developed further capacity for growth. Family firms struggled in times of recession, and many sold out to growing corporations. For example, Andrew Carnegie, after a rapid rise in the U.S. railroad industry, understood the potential of the new steel technology and established a steel mill near Pittsburgh in the early 1870s; he later bought out other steelmakers. During the 1880s, he took control of all aspects of production from mining coal and iron ore to making steel and selling steel rails and other steel products. By 1900, Carnegie Steel had 20,000 employees and was the world's largest industrial corporation. In the following year, it joined other U.S. steelmakers to form the US Steel Corporation with 168,000 employees—a totally new scale of manufacturing activity and control. The growth of corporation size and power in the United States enabled one or a few firms to control prices and wages. This trend sparked resistance to unfettered corporate control as labor became organized to press for better wages and conditions and the U.S. Congress passed antitrust legislation to regulate price-fixing abuses.

• Third industrial revolution, 1910 to 1950. In the early 1900s, another industrial revolution brought further technological innovations and geographic expansion of capitalist enterprise. The energy dominance of coal and steam was challenged by the use of oil, natural gas, and electricity. Roads, cars, trucks, pipelines, and airplanes challenged the transportation dominance of ocean liners, cargo ships, and railroads. Product ranges diversified into electrical consumer goods, cars and trucks, aircraft, plastics, radios, and telecommunications. There was more economic growth in the world's expanding cores of western Europe and the United States (Figure 1.22).

Production methods in the core manufacturing industries changed to the methods pioneered by Henry Ford in car production. The Fordist regime was based on the mass production of standardized consumer durable goods on assembly lines for the growing mass markets. Economies of scale were linked to the further concentration of production and to the social organization of labor with guaranteed employment and welfare benefits for many. Scientific management and mass consumption in the richer countries backed such methods. Corporate ownership replaced the family ownership of many firms, with U.S. corporations

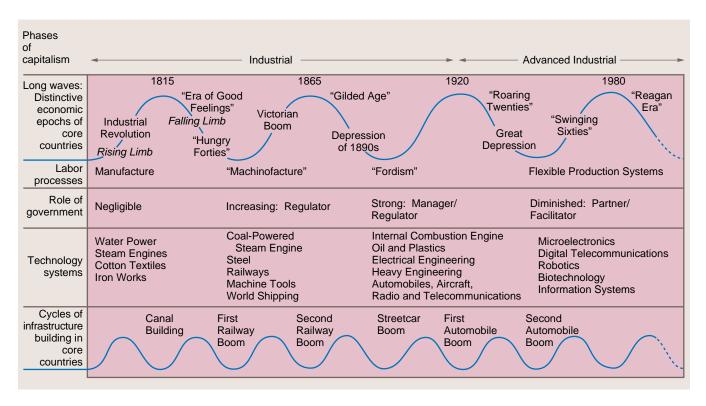


FIGURE 1.20 Capitalist world system: economic fluctuations. This summary mainly reflects experiences in the United States. The rising limb of each long wave was accompanied by the development and use of new technologies of manufacture and transportation that enlarged productive capacity. Coreperiphery relations expanded into new world areas. During the falling limb, costs to manufacturers (such as the price of raw materials from peripheral countries) increased, and there was less money for new investments. Suggest how these fluctuations affected countries in the world periphery.

Adapted from P. Knox and J. Agnew, Geography of the World Economy, 1989. Copyright © 1989 Edward Arnold Publishers, Ltd., London.

beginning to transfer their cost advantages in car and consumer goods manufacture to new factories in Europe.

During the early 1900s, large new areas of agricultural and mineral production opened in southwestern Asia, South America, South Pacific, and parts of Africa, thus expanding the resource base and increasing competition among peripheral resource providers. Raw material costs were reduced for core-country manufacturers. The core countries produced nearly all the manufactured goods and sold their products in reciprocal trade to peripheral countries after having benefited from the added value in manufacturing. Core countries gained further wealth, often invested in urban expansion through the building of suburbs. Public transportation and private cars provided access to suburban housing. More people could afford the new mass-produced consumer products.

Up to 1950, the world economic core remained in western Europe and Anglo America, while most of Africa and southwestern Asia were drawn into the peripheral colonial linkages that dominated the rest of the world outside of Latin America, China, and Japan. Japan went through its own period of industrialization but had limited participation in the expanding world economic system before 1950. Ex-colonial or largely uncolonized areas entered the periphery as their commercial relations with the core countries grew, leading to greater dependency.

The gap between core and periphery increased.

The years of core country economic growth ended temporarily in the economic depression of the 1930s, followed by World War II in the 1940s. Government and trade unions became more involved in the greater regulation and mediation of industrial affairs during this period, while governments achieved further prominence through organizing the production of war materials.

• Fourth industrial revolution, 1950 on. The breakup of the European colonial empires after World War II transferred political power to over 100 newly independent countries. The Cold War established a new form of ideological competition between the capitalist and communist First and Second Worlds. Countries that defied the expansion of capitalism, however, were forced to come to terms with it by the 1990s.

Technological innovation and diffusion resumed, often based on products developed during the war—jet engines, electronics, and aerospace—together with expanded ranges of consumer goods and increasingly packaged foods. Technological advances increased the extent and frequency of changes. The service sector grew in significance as additional jobs were created in expanded health, education, professional, business, recreation, and especially government services. More manufacturing and service industry employment led to further urban growth

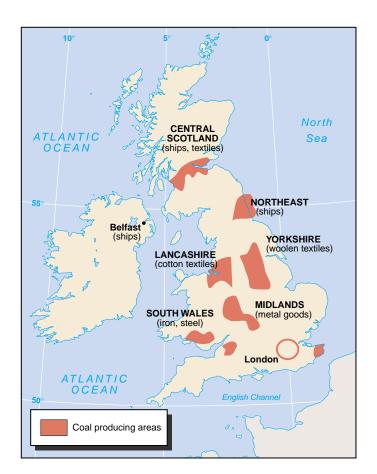


FIGURE 1.21 Industrialization in the 1800s and coalfield locations.

Areas of Britain that produced coal were industrialized and urbanized, growing rapidly in wealth and population. They suffered setbacks in the 1900s as their products competed at a disadvantage with new areas in other parts of the world.

in both core and periphery countries.

During the late 1900s, the huge assembly factories built for Fordist economies of scale declined in profitability. Their inflexibility could not keep up with new products, new technologies, increasing competition from cheaper sources, or changing tastes. They were gradually replaced, following Japanese practice, by flexible, lean-production systems of manufacturing in a post-Fordist production phase. Robots replaced human workers, while new products could be developed more quickly and marketed before competitors crowded the markets and reduced profitability.

Large corporations, beginning with those in the United States and extending to their counterparts in western Europe and Japan, controlled production and distribution in many countries. Such multinational corporations began to maneuver governments and labor interests by siting new production plants in countries where labor and taxation costs were low. Manufacturing employment shifted to newly industrializing countries, mainly in Eastern Asia and Latin America (South Korea, Taiwan, Hong Kong, Singapore, Malaysia, Thailand, Brazil, and Mexico). These countries competed with the core countries of the West, and the new core forming in

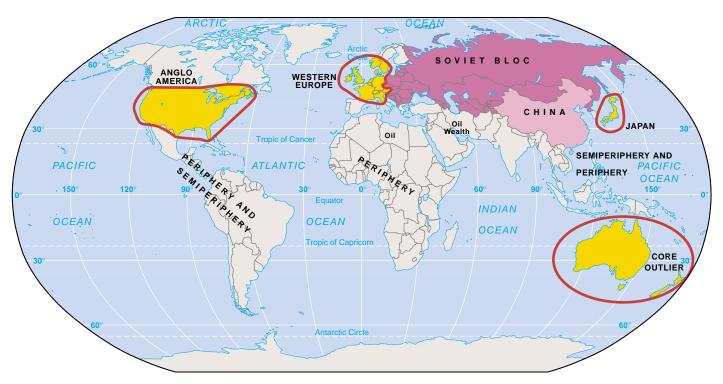


FIGURE 1.22 Capitalist world system, part 3, about A.D. 1910 to present. Central planning in communist countries, advanced industrial capitalism, two world wars, independence of former European colonies, expansion of world trade, and technologic developments in manufacture, transportation, and communications marked this period.

eastern Asia, centered on Japan.

In the 1970s, world economic growth faltered as raw material, and especially energy, prices rose. New prospects for economic growth emerged in the 1980s. The development of microelectronics, biotechnology, robotics, and information systems may signal the start of another period of industrial revolution and world economic growth at the beginning of the new century. Another view of the current situation, however, is that the post-Fordist, or postmodern, period is one of uncertainty and confusion resulting from the global extension of the world economic system.

Conclusions

The modern, capitalist phase was marked by the global expansion of modernization from Europe in the 1600s and 1800s, and then from the increased cores in Europe, Anglo America, and Japan during the 1900s. Each phase created or recreated regions, increased interactions among places, and widened the scope of the capitalist world economy. At the same time, the country basis of political activity was established and strengthened and the long-term cultural distinctiveness of major world regions resisted the onslaught of

RECAP 1C: Growing Global Order

World history records how civilizations spread their geographic impact through core and peripheral regions. Periods of wealth accumulation and expansion of empires and trade alternated with periods of disruption. During the 1900s the world's core regions expanded their periphery to include the whole world in the capitalist economy.

- 1C.1 Construct a chart to summarize the main features of the expanding global order, based on the geographic differentiation of local, regional, countrywide, and global levels.
- 1C.2 Why is a knowledge of the growth of the global order essential to our understanding of modern world geography?

Key Terms:

mini-system modernization Fordist regime world regional empire mercantile capitalism post-Fordist world economic system industrial capitalism production

cultural Westernization alongside economic modernization.

CHAPTER REVIEW OUESTIONS

- Before 1990, the Second World consisted of countries that (a) placed individual rights as the first priority of government (b) tried to implement the communist principles of Marx and Lenin (c) had democratic governments (d) were newly independent
- A group's culture includes (a) ideas (b) beliefs (c) gender roles (d) all of the above
- 3. To a geographer, a landscape is (a) pretty scenery, suitable for an artist to paint (b) planting flowers and shrubbery in front of one's house (c) the result of interaction between people and environment over time (d) the design of a new park
- 4. Which of the following is *not* an example of a global choke point? (a) Strait of Malacca near Singapore (b) Davis Strait in northern Canada (c) Panama Canal in Central America (d) Strait of Hormuz at the entrance to the Persian Gulf

- 5. Settled farming began (a) in Egypt about 3000 B.C. (b) in the Tigris-Euphrates Valley around 5000 B.C. (c) in Africa around A.D. 100 (d) in hill lands of Southwest Asia around 8000 B.C.
- 3. The core of the first world empire system was in (a) Mesopotamia (b) Egypt (c) China (d) Greece
- 7. Which of the following was *not* a characteristic of the Second Industrial Revolution? (a) use of electricity (b) importance of coal (c) growth of railroad networks (d) development of large industrial corporations through vertical and horizontal integration
- 8. Which of the following countries is in the "North" according to the "Brandt Line" but is in the periphery in the New World Order? (a) Russia (b) China (c) Kazakstan (d) Mexico
- 9. The major world region with the largest share of population is (a) Europe (b) Commonwealth of Independent States (c) Anglo America (d) Eastern Asia
- 10. Which of the following is *not* a characteristic of countries with socialist economic systems? (a) state-directed central economic planning (b) health care and education for a large portion of the population (c) widespread ownership of consumer goods (d) most of the population in the lower-income group

- 11. After 1990, Russia was the sole remaining superpower. True / False
- 12. The spread of Western food and drink, popular culture, and consumer goods has completely obliterated cultural differences in the world.

True / False

13. Because of an increasingly interconnected world, in which global forces impact local events, geography no longer matters.

True / False

14. "Classical" periods that formed the basis of modern world systems occurred in Persia, Greece, Rome, India, and China between 1000 B.C. and A.D. 600.

True / False

- 15. The rise of Islam and expansion of the Muslims took place in a period considered "backward" in Europe. True / False
- 16. The first phase of the Industrial Revolution began in the United States.

True / False

17. In the Third Industrial Revolution, more parts of the world were drawn into the capitalist industrial system, and the gap between core and peripheral countries narrowed.

True / False

18. In the Fourth Industrial Revolution, production and distribution of many goods began to be controlled by large multinational corporations.

True / False

19. During the Cold War, countries of the First World competed with countries of the Second World for influence over countries of the Third World.

True / False

20.	The economic system that emphasizes private or corporate organization of business and investment is the system.
21.	Poor countries that have a narrow range of products, less advanced technology, and poorly paid workers are said to be in the
22.	The growing interdependence of the world's peoples, and the increasing integration of economies, technologies, and some aspects of culture is known as
23.	The first form of capitalism, developing from the 1450s and involving European merchants trading local products for fish and spices overseas, was
24.	The use of assembly lines and scientific management in manufacturing is called
25.	In the 1900s, the world population increased from billion in 1900 to billion in 2000.
26.	Countries that are in the process of moving between being in the core and being in the periphery are called
27.	The world as it would be without human modification constitutes the
28.	The location of a place as defined by its position on the Earth's surface, usually in terms of latitude and longitude, is its
29.	Distinctive parts of the Earth's surface with characteristics determined by a combination of physical and human geographic features areregions.
30.	Where people live in small groups by hunting, gathering, or low-productivity agriculture, and have mainly local contacts with others, their mode of life is known as