



FIGURE 8.1 | EUROPE Stretching from Iceland in the Atlantic to the Black Sea, Europe includes 40 countries, ranging in size from large states, such as France and Germany, to the microstates of Liechtenstein, Andorra, San Marino, and Monaco. Currently the population of the region is about 531 million. Europe is highly urbanized and, for the most part, relatively wealthy, particularly the western portion. However, economic and social differences between eastern and western Europe remain a problem. (left) Migration remains one of Europe's most troublesome issues. While some immigrants willingly embrace European values and culture, others prefer to remain more distant by resisting cultural and political integration. In Britain, for example, there is ongoing debate about Muslim women wearing their traditional veils. (Dave Thompson/AP Wide World Photos)

SETTING THE BOUNDARIES

The European region is small compared to the United States. In fact, Europe from Iceland to the Black Sea would fit easily into the eastern two-thirds of North America. A more apt comparison would be Canada, as Europe, too, is a northern region. More than half of Europe lies north of the 49th parallel, the line of latitude forming the western border between the United States and Canada (see Figure 8.4).

Europe currently contains 40 countries that range in size from large countries, such as France and Germany, to microstates, such as Liechtenstein, Andorra, Monaco, and San Marino. Currently Europe totals about 531 million people.

The notion that Europe is a continent with clearly defined boundaries is a mistaken belief with historical

roots. The Greeks and Romans divided their worlds into the three continents of Europe, Asia, and Africa separated by the Mediterranean Sea, the Red Sea, and the Bosphorus Strait. A northward extension of the Black Sea was thought to separate Europe from Asia, and only in the 16th century was this proven false. Instead, explorers and cartographers discovered that the “continent” of Europe was firmly attached to the western portion of Asia.

Since that time, geographers have not agreed on the eastern boundary of Europe. During the existence of the Soviet Union, most geographers drew the line at the western boundary of the Soviet Union. However, with the disintegration of the Soviet Union in 1990, the eastern boundary of Europe became even more

problematic. Now some geography textbooks extend Europe to the border with Russia, which places the two countries of Ukraine and Belarus, former Soviet republics, in eastern Europe. Though an argument can be made for that expanded definition of Europe, recent events, along with a bit of crystal-ball gazing into the near future, lead us to draw our eastern border with Poland, Slovakia, and Romania. To the north, the three Baltic republics of Estonia, Lithuania, and Latvia are also included in Europe. Our justification is this: These six countries are currently clearly engaged with Europe as witnessed by their membership in the European Union (EU), while this is not the case with Ukraine and Belarus, which instead show a decidedly eastern orientation toward Russia.

ENVIRONMENTAL GEOGRAPHY

Western Europe is one of the “greenest” areas of the world, with strong laws and stringent enforcement of recycling, energy efficiency, and pollution measures.

SETTLEMENT AND POPULATION

With no natural population growth, immigration into Europe from other world regions is both a solution to labor needs but also a troublesome political issue.

CULTURAL COHERENCE AND DIVERSITY

With a long history of cultural and ethnic tensions, Europe today is experiencing major problems with many immigrant groups as they resist integration into a common European culture.

GEOPOLITICAL FRAMEWORK

After 40 years of the Cold War, which divided Europe into two parts, east and west, the region is now experiencing political integration of former adversaries.

ECONOMIC AND SOCIAL DEVELOPMENT

Despite considerable hardships because of their communist past, eastern European economies are now increasingly linked with those in western Europe.

EUROPE IS ONE OF THE MOST DIVERSE REGIONS IN THE WORLD, encompassing a wide assortment of people and places in an area considerably smaller than North America. More than half a billion people reside in this region, living in 40 countries that range in size from giant Germany to microstates such as Andorra and Monaco (Figure 8.1).

The region’s remarkable cultural diversity produces a geographical mosaic of different languages, religions, and landscapes. Commonly, a day’s journey finds a traveler speaking two or three languages, possibly changing money several times, and sampling distinct regional food and drink.

Though the traveler may revel in Europe’s cultural and environmental diversity, these regional differences are also entangled with Europe’s troubled past (see “Setting the Boundaries”). It is often said that Europe invented the nation-state, yet this nationalism has also been Europe’s downfall, leading it into devastating wars and destructive regional rivalries. In the 20th century alone, Europe was the principal battleground of two world wars, followed by a 44-year **Cold War** (1945–1990) that divided the continent and the world into two hostile, highly armed camps—Europe and the United States against the former Soviet Union. Today, however, a spirit of cooperation prevails as Europe sets aside nationalistic pride and works toward regional economic, political, and cultural integration through the **European Union (EU)**. This supranational organization is made up of 27 countries, anchored by the western European states of Germany, France, Italy, and the United Kingdom but also including most eastern European countries. Undoubtedly, the geographical reach and economic policies of the EU will continue to transform the region during the 21st century (Figure 8.2).

Europe, like most world regions, is caught up in the tension between globalization and national and local diversity. Given Europe’s considerable impact on the rest of the world as the hearth of Western civilization, the cradle of the Industrial Revolution, and the home of global colonialism, many would argue that Europe actually invented



FIGURE 8.2 | ANTI-EU PROTEST Farmers in western England burn a European Union flag during an anti-EU demonstration. These farmers are protesting the EU ban on British beef imports into continental Europe because of BSE/Mad Cow disease. Protests against EU agricultural policies are fairly common throughout Europe as farmers struggle against the submergence of local ways to European integration. (AP/Wide World Photos)



FIGURE 8.3 | ICELAND LANDSCAPE This remote high-latitude corner of Europe, which sits directly on the Mid-Atlantic rift zone, is characterized by spectacular landscapes of ice caps, glaciers, geysers, and waterfalls. Here, in a typical scene from Iceland's east coast, a farmstead draws upon water falling off the lava plateau for its water supply. (Les Rowntree)

globalization. But while all world regions struggle with this problem of trading off global convergence against national interests, Europe finds itself with an added third layer of complexity as it moves into the new and untested waters of economic, political, and cultural integration through the EU.

Environmental Geography: Human Transformation of a Diverse Landscape

Despite its small size, Europe's environmental diversity is extraordinary. Within its borders are found a startling range of landscapes from the Arctic tundra of northern Scandinavia to the barren hillsides of the Mediterranean islands, and from the explosive volcanoes of southern Italy to the glaciers of Iceland (Figure 8.3).

Four factors explain this environmental diversity:

- First, the complex geology of this western extension of the Eurasian landmass has produced some of the newest, as well as the oldest, landscapes in the world.
- Europe's latitudinal extent creates opportunities for diversity because the region extends from the Arctic to the Mediterranean subtropics (Figure 8.4).
- These latitudinal controls are further modified by the moderating influence of the Atlantic Ocean and Black, Baltic, and Mediterranean seas.

FIGURE 8.4 | EUROPE: SIZE AND NORTHERLY LOCATION Europe is about two-thirds the size of North America, as shown in this cartographic comparison. Another important characteristic is the northerly location of the region, which affects its climate, vegetation, and agriculture. Much of Europe lies at the same latitude as Canada; even the Mediterranean lands are farther north than the U.S.–Mexico border.



- Last, the long history of human settlement has transformed and modified Europe's natural landscapes in fundamental ways over thousands of years.

Environmental Issues: Local and Global, East and West

Because of its long history of agriculture, resource extraction, industrial manufacturing, and urbanization, Europe has its share of serious environmental problems. Compounding the situation is the fact that pollution rarely stays within political boundaries. Air pollution from England, for example, creates serious acid-rain problems in Sweden, and water pollution of the upper Rhine River by factories in Switzerland creates major problems for the Netherlands, where Rhine River water is used for urban drinking supplies. When environmental problems cross national boundaries, solutions must come from intergovernmental cooperation (Figure 8.5).

FIGURE 8.5 | ENVIRONMENTAL ISSUES IN EUROPE In terms of environmental protection, there is a major gap between western and eastern Europe. While the West has worked energetically over the last 30 years to solve problems such as air and water pollution, those same problems are still widespread in the East because of the long environmental neglect during the communist period. Because Europe is made up of relatively small nation-states, most environmental problems must be solved at the regional level, rather than by each country alone.

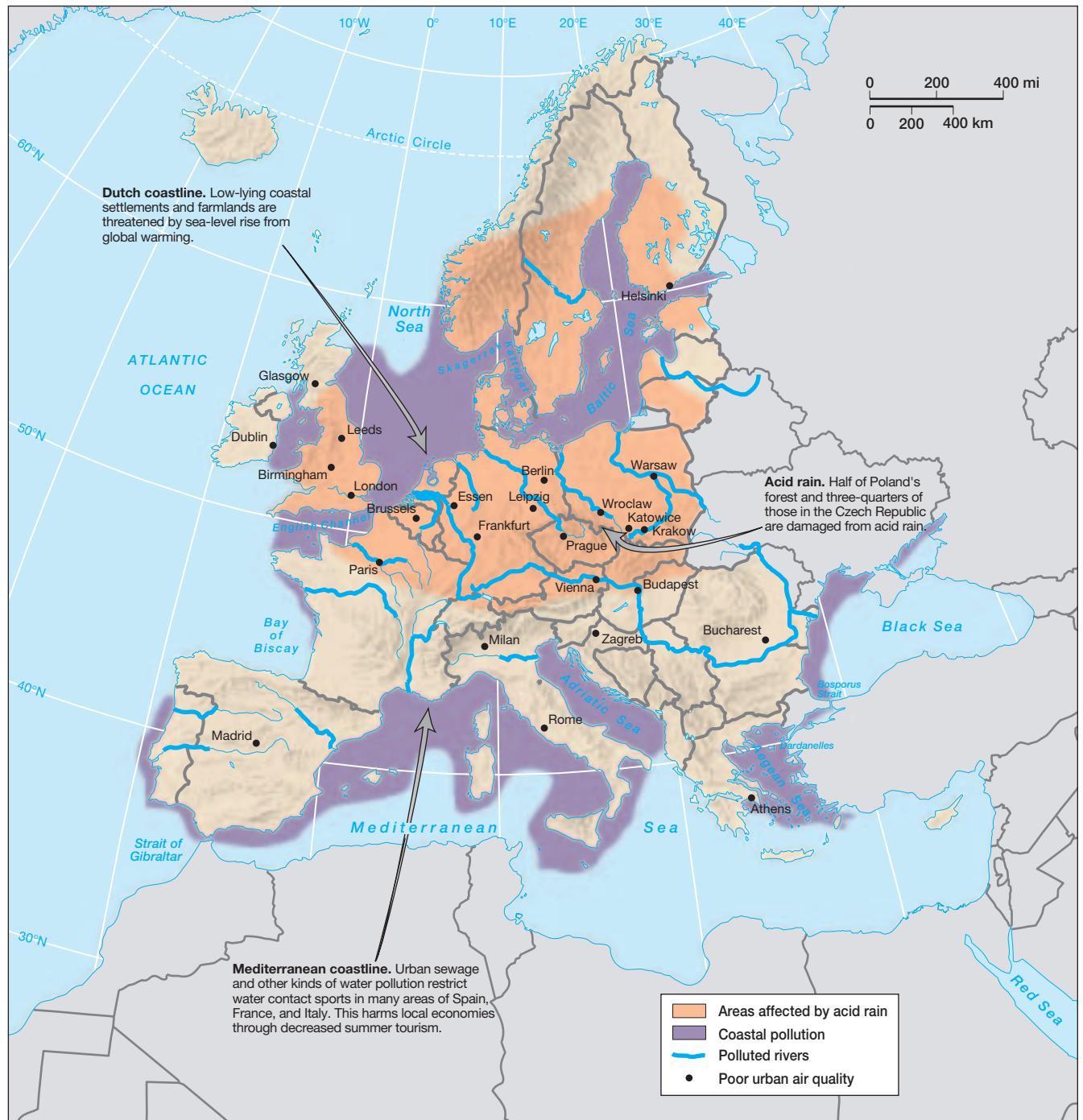




FIGURE 8.6 | ACID RAIN AND FOREST DEATH Acid precipitation has taken a devastating toll on eastern European forests, such as those shown here in Bohemia, the Czech Republic. In this country, three-quarters of the forests are dead or injured from acid precipitation, which was caused by industrial and auto emissions. (Karol Kallay/Bilderberg Archiv der Fotografen)

FIGURE 8.7 | TOXIC LANDSCAPE IN ROMANIA This site in Romania is an example of the numerous toxic dump sites and polluted landscapes that are left over from the Soviet communist era in eastern Europe. As Romania joins the EU, the country must enact environmental legislation and strategies to clean up these toxic dumps. (Filip Horvat/Corbis/SABA Press Photos, Inc.)



Since the 1970s when the European Union (EU) added environmental issues to its economic and political agenda, western Europe has been increasingly effective in addressing its environmental problems with regional solutions. Besides focusing on the more obvious environmental problems of air and water pollution, the EU is a world leader in recycling, waste management, reduced energy usage, and sustainable resource use. As a result, western Europe is probably the “greenest” of the major world regions. Further, support for environmental protection is also expressed on the international scene. The EU, for example, has become an aggressive advocate and world leader for the reduction of atmospheric pollutants responsible for global climate change. More specifically, as an energy-efficient group of countries, the EU has pushed other industrialized countries—including the United States—to reduce greenhouse emissions and attain the same level of energy efficiency. Given the Bush administration’s cautious and conservative position on greenhouse gas reductions, political tensions have increased between the EU and the United States over emission reduction agreements.

While western Europe is successfully addressing environmental issues in that part of the region, the situation is more grim in eastern Europe (Figure 8.6). During the period of Soviet economic planning (1945–90), little attention was paid to environmental issues because of a clear emphasis on short-term industrial output. Since communist economics did not take into account environmental costs, they were therefore not a factor of concern. As a result, the environment was ignored as industry grew and there were few controls on air and water pollution, environmental safety and health, and the dumping of toxic and hazardous wastes.

Unfortunately, the contemporary environmental costs of that historical period are high. For example, 90 percent of Poland’s rivers have no aquatic or plant life, and more than 50 percent of the country’s forest trees show signs of damage from air pollution. Humans also are suffering. Fully one-third of Poland’s population is expected to suffer from an environmentally induced disease such as cancer or respiratory illness.

The future, however, appears more positive with the expansion of EU environmental laws, policies, and cleanup funds to the new member states of Poland, Hungary, Slovakia, and the Czech Republic. Additionally, now that Romania and Bulgaria have been admitted to the EU, they must bring their environmental laws—and enforcement—up to EU standards (Figure 8.7).

Landform and Landscape Regions

European landscapes can be organized into four general topographic regions (Figure 8.8):

- The European Lowland forms an arc from southwest France to the northeast plains of Poland and also includes southeastern England.
- The Alpine mountain systems extend from the Pyrenees in the west to the Balkan mountains of southeast Europe.
- The Central Uplands are positioned between the Alps and the European Lowland, stretching from France into eastern Europe.
- And the Western Uplands include mountains in Spain, portions of the British Isles, and the highlands of Scandinavia.

The European Lowland This lowland (also known as the North European Plain) is the unquestionable focus of western Europe with its high population density, intensive agriculture, large cities, and major industrial regions. Though not completely flat by any means, most of this lowland lies below 500 feet (150 meters) in elevation, though it is broken in places by rolling hills, plateaus, and uplands (such as in Brittany, France), where elevations exceed 1,000 feet (300 meters). Many of Europe’s major rivers, such as the Rhine, the Loire, the Thames, and the Elbe, meander across this lowland and form broad estuaries before emptying into the Atlantic. Several of Europe’s great ports are located on the lowland, including London, Le Havre, Rotterdam, and Hamburg.

The Rhine River delta conveniently divides the unglaciated lowland to the south from the glaciated plain to the north, which was covered by a Pleistocene (or “Ice



FIGURE 8.8 | PHYSICAL GEOGRAPHY OF EUROPE Much of the mountain and upland topography of Europe is a function of the gradual northward movement of the African tectonic plate into the Eurasian Plate. Besides these tectonic forces, Pleistocene glaciation has also shaped the European region. Until about 15,000 years ago, much of the region was covered by continental glaciers that extended south to the mouth of the Rhine River. The southern extent of this glaciated area is shown by the red dotted line on the map.

Age”) ice sheet until about 15,000 years ago. Because of these continental glaciers, the area of the North European Lowland that includes Netherlands, Germany, Denmark, and Poland is far less fertile for agriculture than the unglaciated portion in Belgium and France (Figure 8.9). Rocky clay materials in Scandinavia were eroded and transported south by glaciers. As the glaciers later retreated with a warming climate, piles of glacial debris known as **moraines** were left on the plains of Germany and Poland. Elsewhere in the north, glacial meltwater created infertile outwash plains that have limited agricultural potential.

The Alpine Mountain System The Alpine Mountain System consists of a series of east–west-running mountains from the Atlantic to the Black Sea and the southeastern Mediterranean. Though these mountain ranges carry distinct regional



FIGURE 8.9 | THE EUROPEAN LOWLAND

Also known as the North European Plain, this large lowland extends from southwestern France to the plains of northern Germany and into Poland. Although this landform region has some rolling hills, most of it is less than 500 feet (150 meters) in elevation. (P. Vauthey/Corbis/Sygma)

FIGURE 8.10 | NORTHERN LANDSCAPES

Northern Europe is a harsh land characterized by landscapes with little soil, expanses of bare rock, sparse vegetation, and thousands of lakes. This results from the glaciers that sculpted this region until about 15,000 years ago. (Macduff Everton/Corbis)



names, such as the Pyrenees, Alps, Carpathians, Dinaric Alps, and Balkan Ranges, they have similar geologic traits. All were created more recently (about 20 million years ago) than other upland areas of Europe, and all are made up from a complex arrangement of rock types.

The Pyrenees form the political border between Spain and France (including the microstate of Andorra). This rugged range extends almost 300 miles (480 kilometers), stretching from the Atlantic to the Mediterranean. Within the mountains, glaciated peaks reaching to 11,000 feet (3,350 meters) alternate with broad glacier-carved valleys. The centerpiece of this larger geologic system is the Alpine range itself, the Alps, reaching more than 500 miles (800 kilometers) from France to eastern Austria. These impressive mountains are highest in the west, reaching more than 15,000 feet (4,575 meters) in Mt. Blanc on the French–Italian border; whereas in Austria, to the east, few peaks exceed 10,000 feet (3,050 meters). The Appenine Mountains, located to the south, are physically connected to the Alps by the hilly coastline of the French and Italian Riviera. Forming the mountainous spine of Italy, the Appenines are generally lower and lack the scenic glaciated peaks and valleys of the true Alps. To the east, the Carpathian Mountains define the limits of the Alpine system in eastern Europe. They are a plow-shaped upland area that extends from eastern Austria to where the borders of Romania and Yugoslavia intersect. About the same length as the main Alpine chain, the Carpathians are not nearly as high. The highest summits in Slovakia and southern Poland are less than 9,000 feet (2,780 meters).

Central Uplands In western Europe, a much older highland region occupies an arc between the Alps and the European Lowland in France and Germany. These mountains are much lower in elevation than the Alpine system, with their highest peaks at 6,000 feet (1,830 meters). Their importance to western Europe is great because they contain the raw materials for Europe’s industrial areas. In both Germany and France, for example, these uplands have provided the iron and coal necessary for each country’s steel industry. And in the eastern part of this upland area, mineral resources have also fueled major industrial areas in Germany, Poland, and the Czech Republic.

Western Highlands Defining the western edge of the European subcontinent, the Western Highlands extend from Portugal in the south, through the northwest portions of the British Isles, to the highland backbone of Norway, Sweden, and Finland in the far north. These are Europe’s oldest mountains, formed about 300 million years ago.

As with other upland areas that traverse many separate countries, specific place-names for these mountains differ from country to country. A portion of the Western Highlands forms the highland spine of England, Wales, and Scotland, where picturesque glaciated landscapes are found at elevations of 4,000 feet (1,220 meters) or less. These U-shaped glaciated valleys are also present in Norway’s uplands, where they produce a spectacular coastline of **fjords**, or flooded valley inlets similar to the coastlines of Alaska and New Zealand.

Though lower in elevation, the Fenno-Scandian Shield of Sweden and northern Finland is noteworthy because it is made up of some of the oldest rock formations in the world, dated conservatively at 600 million years. This **shield landscape** was eroded to bedrock by Pleistocene glaciers and, because of the cold climate and sparse vegetation, has extremely thin soils that severely limit agricultural activity (Figure 8.10).

Europe’s Climates

Three principal climates characterize Europe (Figure 8.11). Along the Atlantic coast, a moderate and moist **maritime climate** dominates, modified by oceanic influences. Farther inland, continental climates

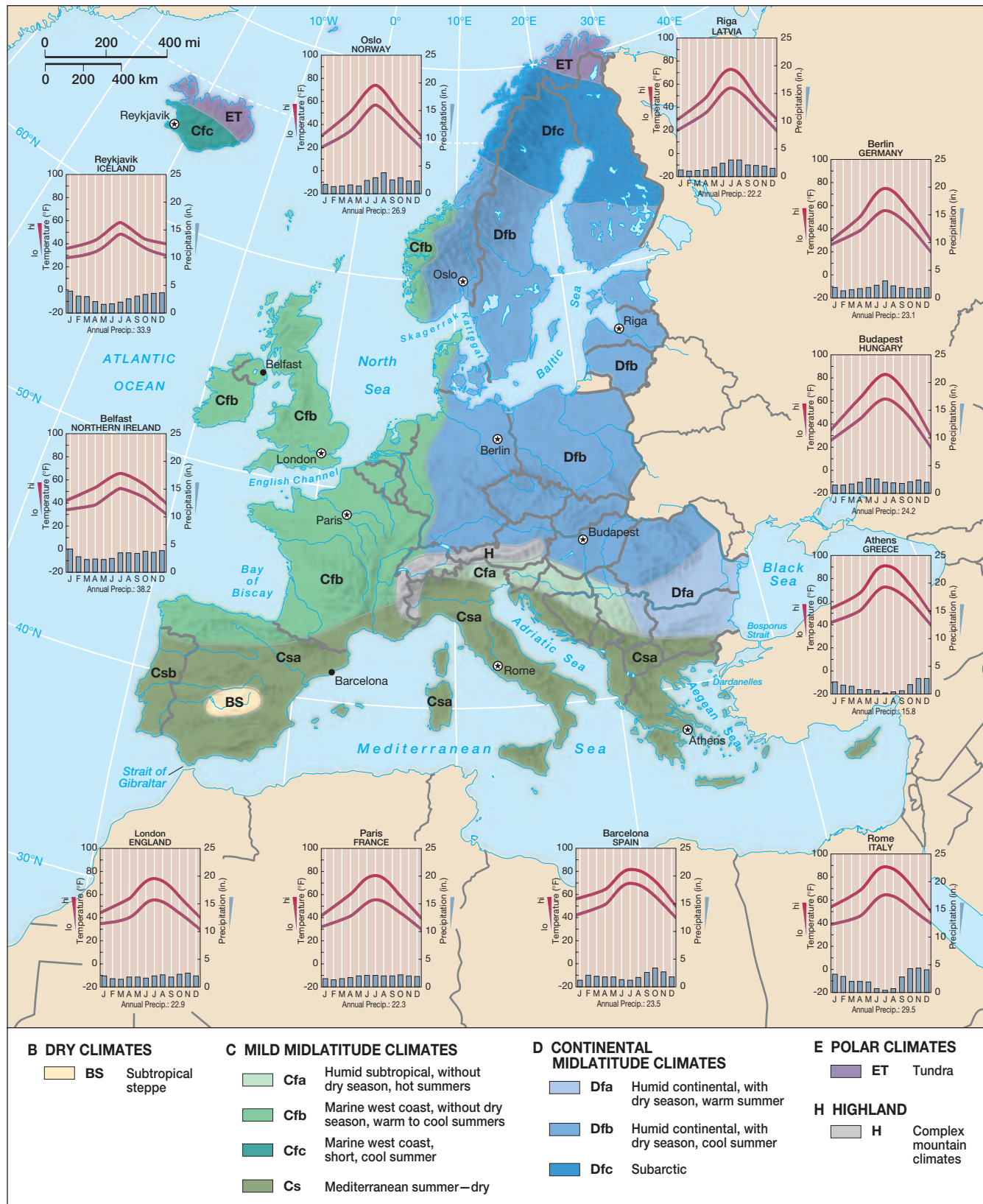


FIGURE 8.11 | CLIMATE MAP OF EUROPE Three major climate zones dominate Europe. The marine west coast climate is found close to the Atlantic Ocean, with cool seasons and steady rainfall throughout the year. Farther inland, continental climates are found. They have at least one month averaging below freezing, and they have hot summers, with a precipitation maximum falling during the summer season. The dry summer Mediterranean climate is found in southern Europe. Contrasted to continental climates, most precipitation falls during the cool winter period in the Mediterranean region.



FIGURE 8.12 | MEDITERRANEAN

AGRICULTURE Because of water scarcity during the hot, dry summers in the Mediterranean climate region, local farmers have evolved agricultural strategies for making the best use of soil and water resources. In this photo from Portugal, the terraces prevent soil erosion on steep slopes, while trees shade ground crops to reduce water evaporation. (Getty Images, Inc.—Image Bank)

prevail, with hotter summers and colder winters. Finally, dry-summer Mediterranean climates are found in southern Europe, from Spain to Greece. An extensive area of warm-season high pressure inhibits summer storms and rainfall in this region, creating the seemingly endless blue skies so attractive to tourists from northern Europe.

Though most of Europe is at a relatively high latitude (London, England, for example, is slightly farther north than Vancouver, British Columbia), the oceanic influence moderates coastal temperatures from Norway to Portugal and even inland to the western reaches of Germany. As a result, Europe has a climate 5 to 10 °F (2.8 to 5.7 °C) warmer than comparable latitudes without this oceanic effect. In the **marine west coast climate** region, no winter months average below freezing, though cold rain, sleet, and an occasional blizzard are common winter visitors. Summers are often cloudy and overcast with frequent drizzle and rain. Ireland, the Emerald Isle, offers a fitting picture of this maritime climate.

With increasing distance from the ocean (or where a mountain chain limits the maritime influence, as in Scandinavia), landmass heating and cooling produces hotter summers and colder winters. Indeed, all **continental climates** average at least one month below freezing during the winter. In Europe, the transition between maritime and continental climates takes place close to the Rhine River border of France and Germany. Farther north, although Sweden and other nearby countries are close to the moderating influence of the Baltic Sea, high latitude and the blocking effect of the Norwegian mountains produces cold winter temperatures characteristic of continental climates. Precipitation in continental climates comes as rain from summer storms and winter snowfall. Usually this moisture is sufficient to support non-irrigated agriculture, though supplemental summer watering is increasingly common where high-value crops are grown.

The **Mediterranean climate** is characterized by a distinct dry season during the summer. While these rainless summers may attract tourists from northern Europe, the seasonal drought can be problematic for agriculture. In fact, traditional Mediterranean cultures, such as the Arab, Moorish, Greek, and Roman, have all used irrigated agriculture (Figure 8.12).

Seas, Rivers, Ports, and Coastline

Europe remains a maritime region with strong ties to its surrounding seas. Even its landlocked countries, such as Austria and the Czech Republic, have access to the ocean through an interconnected network of navigable rivers and canals.

Rivers and Ports Europe's navigable rivers are connected by a system of canals and locks that allow inland barge travel from the Baltic and North seas to the Mediterranean, and between western Europe and the Black Sea. Many rivers on the European Lowland, such as the Loire, Seine, Rhine, Elbe, and Vistula, flow into Atlantic or Baltic waters. However, the Danube and the Rhône, although they both begin near the headwaters of the Rhine in Germany and Switzerland, have a different direction of flow. The Danube, Europe's longest river, flows east and south from Germany to the Black Sea. It provides a connecting artery between central and eastern Europe. The Rhône flows southward into the Mediterranean. Both of these rivers are connected by locks and canals with the rivers of the European Lowland, making it possible for barge traffic to travel between all of Europe's surrounding seas and oceans.

Major ports are found at the mouths of most western European rivers, serving as transshipment points for inland waterways as well as focal points for rail and truck networks. From south to north, these ports include Bordeaux at the mouth of the Garonne, Le Havre on the Seine, London on the Thames, Rotterdam (the world's largest port in terms of tonnage) at the mouth of the Rhine, Hamburg on the Elbe River, and, to the east in Poland, Szczecin on the Oder and Gdansk on the Vistula. Of the major Mediterranean ports, only Marseilles, France, is close to the mouth of a major river, the Rhône. Other modern-day ports, such as Genoa, Naples, Venice, and Barcelona, are some distance from the delta harbors that served historic trade.

Apparently, as Mediterranean forests were cut in past centuries, erosion on the hillslopes carried sediment down the rivers to the delta regions, effectively filling in the historic ports used by the Greeks and Romans.

Reclaiming the Dutch Coastline Much of the Netherlands landscape is a product of the people's long struggle to protect their agricultural lands against coastal and river flooding. Beginning around 900 C.E., dikes were built to protect these fertile but low-lying lands against periodic flooding from the nearby Rhine River, as well as from the stormy North Sea. By the 12th century, these landscapes were known as **polders**, or diked agricultural settlements, a term that is still used today to describe low-lying coastal lands that have been reclaimed for agricultural usage. While windmills had long been used to grind grain in the Netherlands and Belgium, this wind power was also employed to pump water from low-lying wetlands. As a result, windmills became increasingly common on the Dutch landscape to drain marshes. This technology worked so well that the Dutch government began a widespread coastal reclamation plan in the 17th century that converted an 18,000-acre (7,275-hectare) lake into agricultural land (Figure 8.13).

With steam- (and later, electric-) powered pumps, even more ambitious polder reclamation was possible. The last of these plans was the massive Zuider Zee project of the 20th century, in which the large bay north of Amsterdam was dammed, drained, and converted to agricultural lands over the course of a half-century. This project improved a major flooding hazard and also opened up new lands for farming and settlement in the heart of the Netherlands. The problem today, however, is that rising sea level from global warming may once again make the Netherlands vulnerable to North Sea and river flooding.

Settlement and Population: Slow Growth and Rapid Migration

The map of Europe's population distribution shows that, in general, population densities are higher in the historical industrial core areas of western Europe (England, the Netherlands, northern France, northern Italy, and western Germany) than in the periphery to the east and north (Figure 8.14). While this generalization overlooks important urban clusters in Mediterranean Europe, it does express a sense of a densely settled European core set apart from a more rural, agricultural periphery. Much of this distinctive population pattern is linked to areas of early industrialization, yet there are many modern consequences of this core-periphery distribution. For example, economic subsidies from the wealthy, highly urbanized core to the less affluent, agricultural periphery have been an important part of the EU's development policies for several decades. Further, while the urban-industrial core is characterized by extremely low natural growth rates, it is also the target area for migrants—both legal and illegal—from Europe's peripheral countries, as well as from outside Europe.

Natural Growth: Beyond the Demographic Transition

Probably the most striking characteristic of Europe's population is its slow natural growth (Table 8.1). More to the point, in many European countries the death rate exceeds the birthrate, meaning that there is simply no growth at all. Instead, many countries are experiencing negative growth rates; were it not for in-migration from other countries and other world regions, these countries would record a decline in population over the next few decades. Italy, for example, currently has a population of 59 million. Yet if current natural growth holds true for 20 years and is not offset by immigration, the population will decrease to 58.7 million by the year 2025.

There seem to be several reasons for zero population growth in western Europe. First of all, recall from Chapter 1 that the concept of the demographic transition was based upon the historical change in European growth rates as the population moved from rural settings to more urban and industrial locations. What we see today



FIGURE 8.13 | POLDER LANDSCAPE Coastal areas of the Netherlands are characterized by the presence of diked agricultural settlements, or polders. Because these lands, such as the fields on the left side of this photo, are reclaimed from the sea, many are at or below sea level. The English Channel and North Sea are to the right. (Adam Woolfitt/Woodfin Camp & Associates)

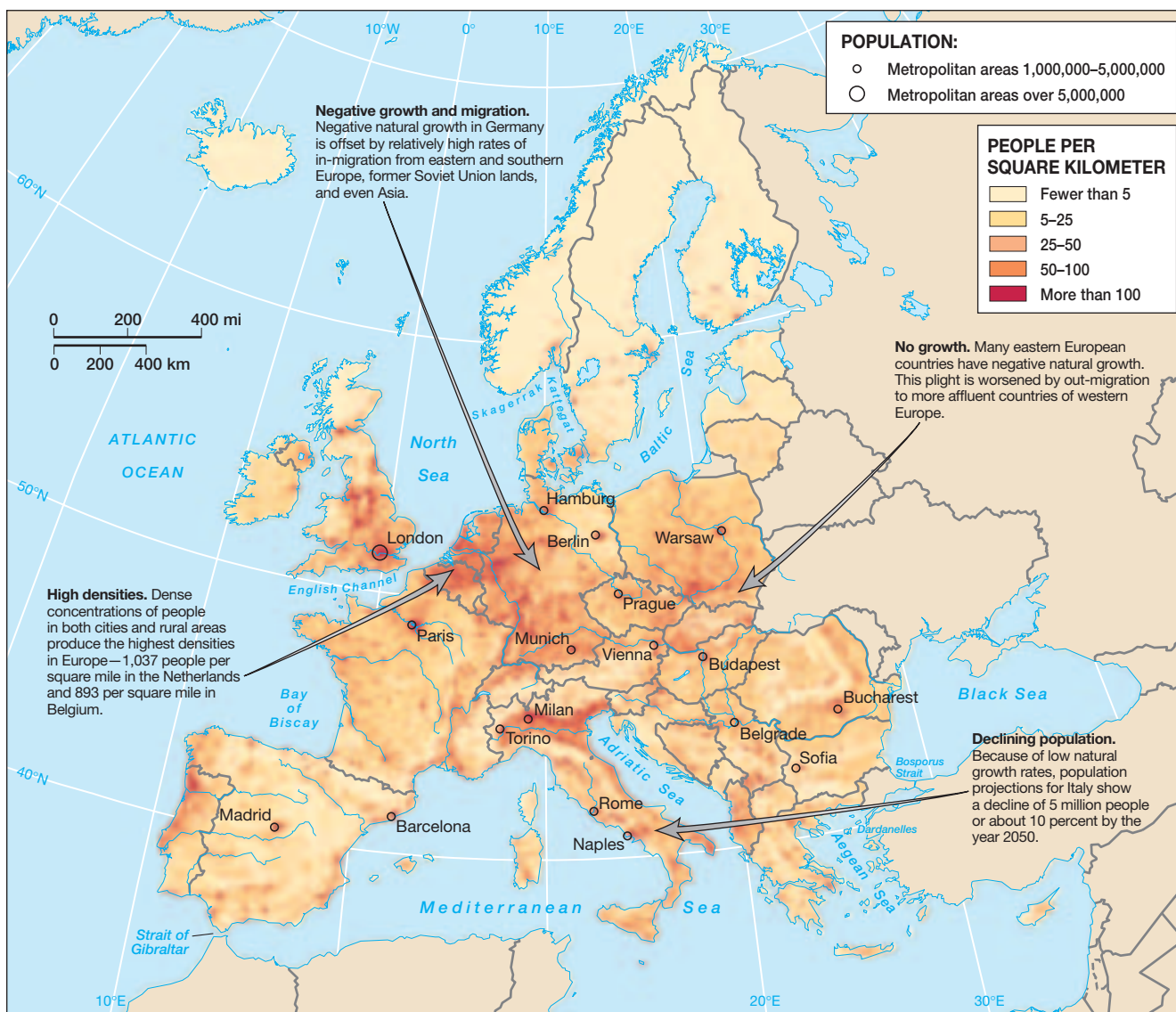


FIGURE 8.14 | POPULATION MAP OF EUROPE

The European region includes more than 531 million people, many of them clustered in large cities in both western and eastern Europe. As can be seen on this map, the most densely populated areas are in England, the Netherlands, Belgium, western Germany, northern France, and south across the Alps to northern Italy.

is an extension of that model, namely, the continued expression of the low fertility–low mortality fourth stage of the demographic transformation. Some demographers suggest adding a fifth stage to the model—a “postindustrial” phase in which population falls below replacement levels, which means parents have less than two children. Evidence for this possible fifth stage comes from the highly urbanized and industrialized populations of Germany, France, and England, all of which are below zero population growth.

Additional explanations, however, are needed to explain the negative population growth in the eastern European countries, the most striking examples of which are found in Bulgaria, Hungary, Croatia, Latvia, Estonia, and Lithuania. The explanation for this current negative growth traces back to the development of these countries while they were under communist rule.

Following World War II, the growth of centralized planning and industrial development under the Soviet Union led to a labor shortage in eastern Europe, as well as in the Soviet Union itself. This was compounded by the huge losses suffered during World War II. As a result, women were needed in the workforce. So that child rearing would not conflict with jobs, Soviet policy was to make all forms of family planning and birth control available, including abortion. As a result, small families became the norm. Another factor was the widespread housing shortage that prevailed in

TABLE 8.1 • Population Indicators †

Country	Population (millions) 2006	Population Density (per square mile)	Rate of Natural Increase	Total Fertility Rate	Percent Urban	Life Expectancy
<i>Western Europe</i>						
Austria	8.3	256	0.0	1.4	54	79
Belgium	10.5	893	0.1	1.6	97	79
France	61.2	287	0.4	1.9	76	80
Germany	82.4	598	-0.2	1.3	88	79
Liechtenstein	0.04	567	0.5	1.4	21	80
Luxembourg	0.5	460	0.4	1.7	91	78
Monaco	0.03	44,000	0.6	—	100	—
Netherlands	16.4	1,037	0.3	1.7	65	79
Switzerland	7.5	469	0.2	1.4	68	81
United Kingdom	60.5	640	0.2	1.8	89	78
<i>Eastern Europe</i>						
Bulgaria	7.7	180	-0.5	1.3	70	72
Czech Republic	10.3	337	-0.1	1.3	77	76
Hungary	10.1	280	-0.3	1.3	65	73
Poland	38.1	306	-0.0	1.3	62	75
Romania	21.6	234	-0.2	1.3	55	71
Slovakia	5.4	285	0.0	1.3	56	74
<i>Southern Europe</i>						
Albania	3.2	284	0.8	1.9	45	75
Andorra	0.1	501	0.7	1.3	92	—
Bosnia and Herzegovina	3.9	196	0.1	1.2	43	74
Croatia	4.4	204	-0.2	1.4	56	75
Cyprus	0.7		0.4	1.8	—	77
Greece	11.1	218	0.0	1.3	60	79
Italy	59.0	507	-0.0	1.3	90	80
Macedonia	2.0	206	0.2	1.04	59	73
Malta	0.4	3,278	0.2	1.4	91	79
Montenegro	0.6	117	0.3	1.7	—	—
Portugal	10.6	299	0.1	1.4	53	78
San Marino	0.03	1,338	0.3	1.2	84	81
Serbia	9.5	277	0.1	1.8	52	72
Slovenia	2.0	256	-0.0	1.2	49	77
Spain	45.5	233	0.2	1.3	76	81
<i>(Continued)</i>						

TABLE 8.1 • (Continued)

Country	Population (millions) 2006	Population Density (per square mile)	Rate of Natural Increase	Total Fertility Rate	Percent Urban	Life Expectancy
<i>Northern Europe</i>						
Denmark	5.4	327	0.2	1.8	72	78
Estonia	1.3	77	-0.2	1.5	69	72
Finland	5.3	40	0.2	1.8	62	79
Iceland	0.3	8	0.8	2.1	93	81
Ireland	4.2	156	0.8	1.9	60	78
Latvia	2.3	92	-0.5	1.3	68	73
Lithuania	3.4	135	0.4	1.3	67	72
Norway	4.7	37	0.3	1.8	78	80
Sweden	9.1	52	0.1	1.8	84	81

Source: Population Reference Bureau, World Population Data Sheet, 2006.

most Soviet countries, a result of concentrating people in cities for industrial jobs. Evidence from eastern Europe suggests that people experiencing a housing crunch tend to have few (if any) children.

Migration to and within Europe

Migration is one of the most challenging population issues facing Europe today because the region is caught in a web of conflicting policies and values (Figure 8.15). Currently there is widespread resistance to unlimited migration into Europe, primarily because of high unemployment in the western European industrial countries. Many Europeans argue that scarce jobs should go first to European citizens, not to “foreigners.”

However, with an improving economy, there could be a significant labor shortage that could be solved only through immigration. To illustrate, recent studies suggest that Germany would need about 400,000 in-migrants each year to provide an adequate labor force for its industry. Additionally, given the low rates of natural growth and the aging population in most of Europe, immigration may be needed to provide tax revenue for social security and other programs necessary for an older population. Many demographers (and some politicians) believe an open-door immigration policy will be necessary to ensure Europe’s economic vitality in the next decade. Complicating the issue, though, is the social and political unease linked to the presence of large numbers of foreigners within European countries that are used to cultural and ethnic homogeneity. In the recent past, individual countries decided on their own immigration policies. Today, however, the topic has become so controversial that the EU has committed itself to forging a common immigration policy in the next several years.

During the 1960s postwar recovery when western Europe’s economies were booming, many countries looked to migrant workers to ease labor shortages. Germany, for example, depended on workers from Europe’s periphery, namely Italy, Yugoslavia, Greece, and Turkey, for industrial and service jobs. These *gastarbeiter*, or **guest workers**, arrived by the thousands. As a result, large ethnic enclaves of foreign workers became a common part of the German urban landscape. Today, there are about 2 million Turks in Germany, most of whom are there because of the open-door foreign worker policies of past decades.

However, these foreign workers are now the target of considerable ill will. Western Europe has suffered from economic recession and stagnation for the last



FIGURE 8.15 | MIGRATION INTO EUROPE

After World War II, Europe opened its doors to migrants to help ease its labor shortages, yet now immigration is a contentious and problematic issue as culturally homogenous countries such as France, Germany, and England confront the tensions from large numbers of migrants, legal and illegal. “Schengenland” refers to an agreement between certain countries to have completely open borders with no border stations and no passport checks.

decade, resulting in unemployment rates approaching 25 percent for young people. As noted, many native Europeans protest that guest workers are taking jobs that could be filled by them. Additionally, the region has witnessed a massive flood of migrants from former European colonies in Asia, Africa, and the Caribbean. The former colonial powers of England, France, and the Netherlands have been the major recipients of this immigration. England, for example, has inherited large numbers of former colonial citizens from India, Pakistan, Jamaica, and Hong Kong. Indonesians (from the former Dutch East Indies) are common in the Netherlands, while migrants in France are often from former colonies in both northern and Sub-Saharan Africa (Figure 8.16).



FIGURE 8.16 | IMMIGRANT GHETTOS IN EUROPE A large number of Africans from France's former colonies have migrated to large cities where they form distinct ethnic neighborhoods—even ghettos—in high-rise apartment buildings on the outskirts of Paris, Lyon, and Marseille. (S. Elbaz/Corbis/Sygma)

FIGURE 8.17 | URBAN LANDSCAPES This aerial view of the Marais district of Paris shows how the present-day landscape expresses different historical periods. The narrow streets and small buildings represent the medieval period, while the broad boulevards and large public buildings are examples of later Renaissance–Baroque city planning. (Corbis)



More recently, political and economic troubles in eastern Europe and the former Soviet Union have generated a new wave of migrants to Europe. Within Germany, for example, thousands of former East Germans have taken advantage of the Berlin Wall's removal by moving to the more prosperous and dynamic western parts of unified Germany. With the total collapse of Soviet border controls in 1990, emigrants from Poland, Bulgaria, Romania, Ukraine, and other former Soviet satellite countries poured into western Europe, looking for a better life. This flight from the post-1989 economic and political chaos of eastern Europe has also included refugees from war-torn regions of what was Yugoslavia, particularly from Bosnia and Kosovo.

As a result of these different migration streams, Germany has become a reluctant land of migrants that now receives 400,000 newcomers each year. Currently, about 7.5 million foreigners live in Germany, making up about 9 percent of the population. This is about the same percentage as the foreign-born segment of the U.S. population. However, while the U.S. celebrates its history of immigration, Germany, along with other European countries, struggles with this new kind of cultural diversity.

The Landscapes of Urban Europe

One of the major characteristics of Europe's population is its high level of urbanization. All but several Balkan countries have more than half their population in cities, and several countries, such as the United Kingdom and Belgium, are more than 90 percent urbanized. Once again, the gradient from the highly urbanized European heartland to the less-urbanized periphery reinforces the distinctions between the affluent, industrial core area and the more rural, less well-developed periphery.

The Past in the Present Three historical eras dominate most European city landscapes. The medieval (roughly 900–1500 C.E.), Renaissance–Baroque (1500–1800), and industrial (1800–present) periods each left characteristic marks on the European urban scene. Learning to recognize these stages of historical growth provides visitors to Europe's cities with fascinating insights into both past and present landscapes (Figure 8.17).

The **medieval landscape** is one of narrow, winding streets, crowded with three- or four-story masonry buildings with little setback from the street. This is a dense landscape with few open spaces, except around churches or public buildings. Here and there, public squares or parks are clues to medieval open-air marketplaces where commerce was transacted. As picturesque as we find medieval-era districts today, they nevertheless present challenges to modernization because of their narrow, congested streets and old housing. Often modern plumbing and heating are lacking, and rooms and hallways are small and cramped compared to our present-day standards. Because these medieval districts usually lack modern facilities, the majority of people living in them have low or fixed incomes. In many areas this majority is made up of the elderly, university students, and ethnic migrants.

Many cities in Europe, though, are enacting legislation to upgrade and protect their historic medieval landscapes. This movement began in the late 1960s and has become increasingly popular as cultures work to preserve the uniqueness of special urban centers as their suburbs increasingly surrender to sprawl and shopping centers (Figure 8.18).

In contrast to the cramped and dense medieval landscape, those areas of the city built during the **Renaissance–Baroque** period produce a landscape that is much more open and spacious, with expansive ceremonial buildings and squares, monuments, ornamental gardens, and wide boulevards lined with palatial residences. During this period (1500–1800), a new artistic sense of urban planning arose in Europe that resulted in the restructuring of many European cities, particularly the large capitals. These changes were primarily for the benefit of the new urban elite, namely royalty and successful merchants. City dwellers of lesser means remained in the medieval quarters, which became increasingly crowded and cramped as more of the city space was devoted to the ruling classes.

FIGURE 8.18 | HISTORIC PRESERVATION OF CITIES Most European countries have laws and regulations designed to preserve and protect their cultural heritage as embodied in historical cities. One of the earliest historic preservation projects in Germany was the medieval city of Regensburg, on the Danube River. (Les Rowntree)

During this period, city fortifications limited the outward spread of these growing cities, thus increasing density and crowding within. With the advent of assault artillery, European cities were forced to build an extensive system of defensive walls. Once encircled by these walls, the cities could not expand outward. Instead, as the demand for space increased within the cities, a common solution was to add several new stories to the medieval houses.

Industrialization dramatically altered the landscape of European cities. Historically, factories clustered together in cities beginning in the early 19th century, drawn by their large markets and labor force and supplied by raw materials shipped by barge and railroad. Industrial districts of factories and worker tenements grew up around these transportation lines. In continental Europe, where many cities retained their defensive walls until the late 19th century, the new industrial districts were often located outside the former city walls, removed from the historic central city. In Paris, for example, when the railroad was constructed in the 1850s, it was not allowed to enter the city walls. As a result, terminals and train stations for the network of tracks were located beyond the original fortifications. Although the walls of Paris are long gone, this pattern of outlying train stations persists today (Figure 8.19). As noted, the historical industrial areas were also along these tracks, outside the walls in what were essentially suburban locations. This contrasts with the geography of industrial areas in North American cities, where factories and working-class housing often occupied central city locations.

Cultural Coherence and Diversity: A Mosaic of Differences

The rich cultural geography of Europe demands our attention for several reasons. First, the highly varied and fascinating mosaic of languages, customs, religions, ways of life, and landscapes that characterizes Europe has also shaped strong local and regional identities that have all too often stoked the fires of conflict. Second, European cultures have played leading roles in processes of globalization. Through European colonialism, regional languages, religion, economies, and values have been changed in every corner of the globe. If you doubt this, consider cricket games in Pakistan, high tea in India, Dutch architecture in South Africa, and the millions of French-speaking inhabitants of equatorial Africa. Even before modern technologies such as satellite TV, the Internet, and Hollywood films and video, European culture

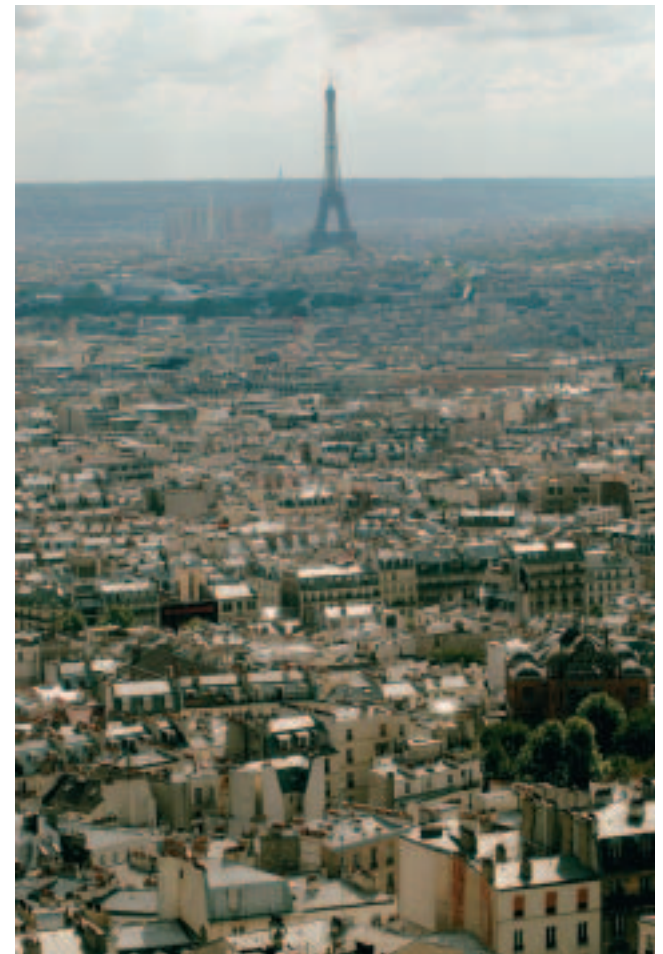


FIGURE 8.19 | PROTECTING THE PARIS SKYLINE The Parisians so value their traditional skyline and its landmarks (such as the Eiffel Tower, shown here) that they have passed regulations banning high-rises in the central city. Instead, skyscrapers are clustered just outside the historic city center. (Les Rowntree)



FIGURE 8.20 | GLOBAL CULTURE IN EUROPE

The Europeans have mixed feelings about the influx of U.S. popular culture. While many people welcome everything from fast food to Hollywood movies, at the same time they protest the loss of Europe's traditional regional cultures. (David R. Frazier Photolibrary, Inc.)

spread across the world, changing the speech, religion, belief systems, dress, and habits of millions of people on every continent.

Today, though, many European countries resist the varied expressions of global culture (Figure 8.20). France, for example, struggles against both U.S.-dominated popular culture and the multicultural influences of its large migrant population. In many ways the same is true of Germany and England. The cultural geography of contemporary Europe is also complicated by the fact that culture operates at many different scales and in many different ways. For example, while Europe fends off global culture with one hand, with the other it creates its own unique culture through economic and political integration. But as individual countries come together in political alliances and unions that transcend national sovereignty, such as the EU, local and regional cultures—the Basques in Spain, for example—demand autonomy and independence. Underlying the complexity of this ever-changing cultural mosaic are the fundamentals of language and religion, traits that form the basis of so many of Europe's cultural patterns.

Geographies of Language

Language has always been an important component of nationalism and group identity in Europe (Figure 8.21). Today, while some small ethnic groups, such as the Irish or the Bretons, work hard to preserve their local language in order to reinforce their cultural identity, millions of Europeans are also busy learning multiple languages so they can communicate across cultural and national boundaries. In this age of globalization and world culture, the European who does not speak at least two languages is rare.

As their first language, 90 percent of Europe's population speaks Germanic, Romance, or Slavic languages belonging to western linguistic groups of the Indo-European family. Germanic and Romance speakers each number almost 200 million in the European region. There are far fewer Slavic speakers (about 80 million) when Europe's boundaries are drawn to exclude Russia, Belarus, and Ukraine.

Germanic Languages Germanic languages dominate Europe north of the Alps. Today about 90 million people speak German as their first language. This is the dominant language of Germany, Austria, Liechtenstein, Luxembourg, eastern Switzerland, and several small areas in Alpine Italy. Until recently, there were also large German-speaking minorities in Romania, Hungary, and Poland, but many of these people left eastern Europe when the Iron Curtain was lifted in 1990. As "ethnic Germans," they were given automatic citizenship in Germany itself. As is true of most languages, there are very strong regional dialects in German that set apart German-speaking Swiss, for example, from the *Letzeburgish* German spoken in Luxembourg. Nevertheless, speakers of these different dialects can usually understand each other.

English is the second-largest Germanic language, with about 60 million speakers using it as their first language. Additionally, a large number learn English as a second language, particularly in the Netherlands and Scandinavia, where many are as fluent as native speakers. Linguistically, English is closest to the Low German spoken along the coastline of the North Sea, which reinforces the theory that an early form of English evolved in the British Isles through contact with the coastal peoples of northern Europe. However, one of the distinctive traits of English that sets it apart from German is that almost a third of the English vocabulary is made up of Romance words brought to England during the Norman French conquest of the 11th century.

Elsewhere in this region, Dutch (Netherlands) and Flemish (northern Belgium) account for another 20 million people, and roughly the same number of Scandinavians speak the closely related languages of Danish, Norwegian, and Swedish. Icelandic, though, is a distinct language because of its long separation from its Scandinavian roots.

Romance Languages Romance languages, such as French, Spanish, and Italian, evolved from the vulgar (or everyday) Latin used within the Roman Empire. Today Italian is the largest of these regional dialects, with about 60 million Europeans



FIGURE 8.21 | LANGUAGE MAP OF EUROPE

Ninety percent of Europeans speak an Indo-European language, grouped into the major categories of Germanic, Romance, and Slavic languages. As a first language, 90 million Europeans speak German, which places it ahead of the 60 million who list English as their native language. However, given the large number of Europeans who speak fluent English as a second language, one could make the case that English is the dominant language of modern Europe.

speaking it as their first language. In addition, Italian is an official language of Switzerland and is also spoken on the French island of Corsica.

French is spoken in France, western Switzerland, and southern Belgium, where it is known as *Walloon*. Today there are about 55 million native French speakers in Europe. As with other languages, French also has very strong regional dialects. Linguists differentiate between two forms of French in France itself, that spoken in the north (the official form because of the dominance of Paris) and the language of the south, or *langue d'oc*. This linguistic divide expresses long-standing tensions between Paris and southern France. In the last decade the strong regional awareness of the southwest (centered on Toulouse and the Pyrenees) has led to a rebirth of its own distinct language, *Occitanian*.

Spanish also has very strong regional variations. About 25 million people speak Castillian Spanish, the country's official language, which dominates the interior and northern areas of that large country. However, the *Catalan* form, which some argue is a completely separate language, is found along the eastern coastal fringe, centered on Barcelona, Spain's major city in terms of population and the economy. This distinct language reinforces a strong sense of cultural separateness that has led to the state of Catalonia's being given autonomous status within Spain. Portuguese is spoken by another 12 million speakers in that country and in the northwestern corner of Spain.



FIGURE 8.22 | THE ALPHABET OF ETHNIC TENSION After the war with Kosovo's Serbs, signs in the Serbian Cyrillic alphabet were removed from many stores, shops, and restaurants as Kosovars of Albanian ethnicity restated their claims to the region. Here the Albanian owner of a restaurant in the capital city of Pristina scrapes off Cyrillic letters following the recent war. (David Brauchli/AP/Wide World Photos)

We see, however, Portugal's colonial legacy in the fact that far more people speak this language in its former colony of Brazil in Latin America than in Europe.

Finally, Romanian represents the most eastern extent of the Romance language family; it is spoken by 24 million people in Romania. Though unquestionably a Romance language, Romanian also contains many Slavic words.

The Slavic Language Family Slavic is the largest European subfamily of the Indo-European languages. Traditionally, Slavic speakers are separated into northern and southern groups, divided by the non-Slavic speakers of Hungary and Romania.

To the north, Polish has 35 million speakers, and Czech and Slovakian about 14 million each. These numbers pale in comparison, however, with the number of northern Slav speakers in nearby Ukraine, Belarus, and Russia, where one can easily count more than 150 million. Southern Slav languages include three groups: 14 million Serbo-Croatian speakers (now considered separate languages because of the political troubles between Serbs and Croats), 11 million Bulgarian-Macedonian, and 2 million Slovenian.

The use of two alphabets further complicates the geography of Slavic languages (Figure 8.22). In countries with a strong Roman Catholic heritage, such as Poland and the Czech Republic, the Latin alphabet is used in writing. In contrast, countries with close ties to the Orthodox church use the Greek-derived **Cyrillic alphabet**, as is the case in Bulgaria, Macedonia, Croatia, and Serbia.

Geographies of Religion, Past and Present

Religion is an important component of the geography of cultural coherence and diversity in Europe because so many of today's ethnic tensions result from historical religious events. To illustrate, strong cultural borders in the Balkans and eastern Europe are drawn based upon the eleventh-century split of Christianity into eastern and western churches or between Christianity and Islam; in Northern Ireland blood is still shed over the tensions between the 17th-century division of Christianity into Catholicism and Protestantism; and much of the terrorism of ethnic cleansing in former Yugoslavia resulted from the historical struggle between Christianity and Islam in that part of Europe. Additionally, there is considerable tension regarding the large Muslim migrant populations in England, France, and Germany. Understanding these important contemporary issues thus involves a brief look back at the historical geography of Europe's religions (Figure 8.23).

The Schism between Western and Eastern Christianity In southeastern Europe, early Greek missionaries spread Christianity through the Balkans and into the lower reaches of the Danube. Progress was slower than in western Europe, perhaps because of continued invasions by peoples from the Asian steppes. There were other problems as well, primarily the refusal of these Greek missionaries to accept the control of Roman bishops from western Europe.

This tension with western Christianity led in 1054 to an official split of the eastern church from Rome. This eastern church subsequently splintered into Orthodox sects closely linked to specific nations and states. Today, for example, we find Greek Orthodox, Bulgarian Orthodox, and Russian Orthodox churches, all of which have different rites and rituals, yet share cultural traits. The current political ties between Russians and Serbian, for example, grow from their shared language and religion.

Another factor that distinguished eastern Christianity from western was the Orthodox use of the Cyrillic alphabet instead of the Latin. Because Greek missionaries were primarily responsible for the spread of early Christianity in southeastern Europe, it is not surprising that they used an alphabet based on Greek characters. More precisely, this alphabet is attributed to the missionary work of St. Cyril in the 9th century. As a result, the division between western and eastern churches, and between the two alphabets, remains one of the most problematic cultural boundaries in Europe.



The Protestant Revolt Besides the division between western and eastern churches, the other great split within Christianity occurred between Catholics and Protestants. This division arose in Europe during the 16th century and has divided the region ever since. However, with the exception of the troubles in Northern Ireland, tensions today between these two major groups are far less damaging than in the past.

Conflicts with Islam Both eastern and western Christian churches also struggled with challenges from Islamic empires to Europe's south and east. Even though historical Islam was reasonably tolerant of Christianity in its conquered lands, Christian Europe was not accepting of Muslim imperialism. The first crusade to reclaim Jerusalem from the Turks took place in 1095. After the Ottoman Turks conquered Constantinople in 1453 and gained control over the Bosphorus strait and the Black Sea, they moved rapidly to spread their Muslim empire throughout the Balkans and arrived at the gates of Vienna in the middle of the 16th century. There, Christian Europe stood firm and stopped Islam for expanding into western Europe. Ottoman control of southeastern Europe, however, lasted until the empire's end in the early 20th century. This historical presence of Islam explains the current mosaic of religions in the Balkans, with intermixed areas of Muslims, Orthodox, and Roman Catholics.

FIGURE 8.23 | RELIGIONS OF EUROPE This map shows the divide in western Europe between the Protestant north and the Roman Catholic south. Historically this distinction was much more important than it is today. Note the location of the former Jewish Pale, which was devastated by the Nazis during World War II. Today ethnic tensions with religious overtones are found primarily in the Balkans, where adherents to Roman Catholicism, Eastern Orthodoxy, and Islam live in close proximity.

Today, there are still tensions with Muslims as Europe struggles to address the concerns of its fast-growing immigrant population. Although many of these tensions transcend pure religious issues, there is nevertheless a strong undercurrent of concern about the varying attitudes of Muslims toward cultural assimilation in Europe. Additionally, the EU must also address the issue of Turkey's application to join the Union. Although Turkey is an avowed secular state, its population is predominantly Muslim; thus its membership in the EU remains a contentious issue that Europe ponders.

A Geography of Judaism Europe has long been a difficult homeland for Jews after they were forced to leave Palestine during the Roman Empire. At that time, small Jewish settlements were found in cities throughout the Mediterranean. Later, by 900 CE, about 20 percent of the Jewish population was clustered in the Muslim lands of the Iberian Peninsula, where Islam showed greater tolerance than Christianity had for Judaism. Furthermore, Jews played an important role in trade activities both within and outside of the Islamic lands. After the Christian reconquest of Iberia, however, Jews once more faced severe persecution and fled from Spain to more tolerant countries in western and central Europe.

One focus for migration was the area in eastern Europe that became known as the Jewish Pale. In the late Middle Ages, at the invitation of the Kingdom of Poland, Jews settled in cities and small villages in what is now eastern Poland, Belarus, western Ukraine, and northern Romania (see Figure 8.23). Jews collected in this region for several centuries in the hope of establishing a true European homeland, despite the poor natural resources of this marshy, marginal agricultural landscape.

Until emigration to North America began in the 1890s, 90 percent of the world's Jewish population lived in Europe and most were clustered in the Pale. Even though many emigrants to the United States and Canada came from this area, the Pale remained the largest grouping of Jews in Europe until World War II. Tragically, Nazi Germany used this ethnic clustering to its advantage by focusing its extermination activities on this area.

In 1939, on the eve of World War II, there were 9.5 million Jews in Europe, or about 60 percent of the world's Jewish population. During the war German Nazis murdered some 6 million Jews in the horror of the Holocaust. Today fewer than 2 million Jews live in Europe. Since 1990 and the lifting of quotas on Jewish emigration from Russia, Belarus, and Ukraine, more than 100,000 Jews have emigrated to Germany, giving it the fastest-growing Jewish population outside of Israel (Figure 8.24).

The Patterns of Contemporary Religion In Europe today there are about 250 million Roman Catholics and fewer than 100 million Protestants. Generally, Catholics are found in the southern half of the region, except for significant numbers in Ireland and Poland, while Protestants dominate in the north. Additionally, since World War II there has been a noticeable loss of interest in organized religion, mainly in western Europe, which has led to declining church attendance in many areas. This trend is so marked that the term **secularization** is used, referring to the widespread movement away from the historically important organized religions of Europe.

Catholicism dominates the religious geography and cultural landscapes of Italy, Spain, France, Austria, Ireland, and southern Germany. In these areas large cathedrals, monasteries, monuments to Christian saints, and religious place-names draw heavily on pre-Reformation Christian culture. Since visible beauty is part of the Catholic tradition, elaborate religious structures and monuments are more common than in Protestant lands.

Protestantism is most widespread in northern Germany, the Scandinavian countries, and England and is intermixed with Catholicism in the Netherlands, Belgium, and Switzerland. Because of its reaction against ornate cathedrals and

FIGURE 8.24 | JEWISH SYNAGOGUE IN BERLIN

Before World War II, Berlin had a large and thriving Jewish population, as attested to by this synagogue built in 1866. However, during the Nazi period, the Jewish population was forcibly removed and largely exterminated. This synagogue was then used by the Nazis to store military clothing until it was heavily damaged by bombing. After the war, it was restored and opened again in 1995 as both a synagogue and a museum. (*Les Rowntree*)



statues of the Catholic Church, the landscape of Protestantism is much more sedate and subdued. Large cathedrals and religious monuments in Protestant countries are associated primarily with the Church of England, which has strong historical ties to Catholicism; St. Paul's Cathedral and Westminster Abbey in London are examples.

Tragically, another sort of religious landscape has emerged in Northern Ireland, where barbed-wire fences and concrete barriers separate Protestant and Catholic neighborhoods in an attempt to reduce violence between warring populations (Figure 8.25). Religious affiliation is a major social force that influences where people live, work, attend school, shop, and so on. Of the 1.6 million inhabitants of Northern Ireland, 54 percent are Protestant and 42 percent Roman Catholic. The Catholics feel they have been discriminated against by the Protestant majority and have been treated as second-class citizens. As a result, they want a closer relationship with the Republic of Ireland across the border to the south. The Protestant reaction is to forge even stronger ties with the United Kingdom. Unfortunately, these differences have been expressed in prolonged violence that has led to about 4,000 deaths since the 1960s, largely resulting from paramilitary groups on both sides who promote their political and social agendas through terrorist activities.

This religious and social strife goes back to the 17th century when Britain attempted to colonize Ireland and dilute Irish nationalism by subsidizing the migration and settlement of Protestants from England and Scotland. This strategy was most successful in the north, as that population chose to remain part of the United Kingdom when the rest of Ireland declared its independence from Britain in 1921. However, peace between the two religious groups was short-lived in Northern Ireland. The breakdown of law and order was so bad that British troops were ordered onto the streets of Belfast in 1969, leading to a military occupation that lasted for decades. Current peace talks have centered on three difficult issues: the Protestant insistence that their desire for a continued relationship with the United Kingdom be honored; the Catholic insistence on a closer relationship with Ireland that might lead to eventual unification with that country; and the need for some form of political power-sharing by these two groups. While mainstream paramilitary groups have declared a series of cease-fires, splinter groups from both sides continue to engage in terrorism.

European Culture in a Global Context

Europe, like all world regions, is currently caught up in a period of profound cultural change; in fact, many would argue that the pace of cultural change in Europe is accelerated because of the complicated interactions between globalization and Europe's internal agenda of political and economic integration. While newspaper analysts celebrate the "New Europe" of integration and unification, other critics refer to a more tension-filled New Europe of foreign migrants and guest workers troubled by ethnic discrimination and racism.

Globalization and Cultural Nationalism Since World War II, Europe has been trying to control cultural contamination from North America. Some countries are more outspoken than others. While a few large countries, such as England and Italy, seem to accept the onrush of U.S. popular culture, other countries have expressed outright indignation over the corrupting impact of U.S. popular culture on speech, music, food, and fashion. France, for example, is often thought of as the poster child for the antiglobalization struggle as it fights to preserve its local foods and culture against the homogenizing onslaught of fast food outlets and genetically engineered crops.

France, in fact, has taken cultural nationalism to new levels with laws protecting other cultural elements, such as music, films, and language. Radio stations, for example, must devote at least 40 percent of their air play to French songs and musicians, and French filmmakers are subsidized in the hope of preventing a complete takeover by Hollywood. The official body of the French Academy, whose job it is to legislate



FIGURE 8.25 | RELIGIOUS TENSIONS IN NORTHERN IRELAND Despite ongoing efforts to forge peace between Protestants and Catholics in Northern Ireland, outbreaks of violence are still common. Here, in Belfast, fighting between Catholics and Protestants broke out only hours after groups from both religions met to discuss ways to end the fighting. (Cathal McNaughton/Getty Images, Inc.—Liaison)



FIGURE 8.26 | TURKISH STORE IN GERMANY This Turkish store in the Kreuzberg district of Berlin, sometimes referred to as “Little Istanbul,” serves not only the large Turkish population, but also German shoppers who enjoy this aspect of the country’s increasing ethnicity. Unfortunately, to many others, Europe’s migrant cultures are less appealing. (*Stefano Pavasi/Matrix International, Inc.*)

FIGURE 8.27 | NEO-NAZIS IN GERMANY Purporting to embrace “pure and true” Aryan values, these neo-Nazi Germans provoke police at a rally against foreigners. A rise in extreme forms of nationalism has become increasingly problematic in many European countries as a response to foreign immigration. (*Joanna B. Pinneo/Aurora & Quanta Productions*)



proper usage of the French language, has a long list of English and American words and phrases that are banned from use in official publications and from highly visible advertisements or billboards. Though the French commonly use “le weekend” or “le software” in their everyday speech, these words will never be found in official governmental speeches or publications.

Migrants and Culture Migration patterns are also influencing the cultural mix in Europe. Historically, Europe spread its cultures worldwide through aggressive colonialization. Today, however, the region is experiencing a reverse flow as millions of migrants move into Europe, bringing their own distinct cultures from the far-flung countries of Africa, Asia, and Latin America. Unfortunately, in some areas of Europe, the products of this cultural exchange are highly problematic.

Ethnic clustering leading to the formation of ghettos is now common in the cities and towns of western Europe. The high-density apartment buildings of suburban Paris, for example, are home to large numbers of French-speaking Africans and Arab Muslims caught in the crossfire of high unemployment, poverty, and racial discrimination. Recent estimates are that there are 4.5 million Muslims in France, constituting 7.5 percent of the total population. Similarly, about 2 million Muslim Turks live in Germany (Figure 8.26). As a result, cultural battles have emerged in many European countries. For example, French leaders, unsettled by the country’s large Muslim migrant population, attempted to speed assimilation of female high school students into French mainstream culture by banning a key symbol of conservative Muslim life, the head scarf. This rule triggered riots, demonstrations, and counterdemonstrations. As a result of these kinds of conflicts, the political landscape of many European countries now contains far-right, nationalist parties with thinly veiled agendas of excluding migrants from their countries (Figure 8.27).

Geopolitical Framework: A Dynamic Map

One of Europe’s unique characteristics is its dense fabric of 40 independent states within a relatively small area. No other world region demonstrates the same mosaic of geopolitical division. Europe invented the nation-state. Later, these same political ideas founded in Europe fueled the flames of political independence and democracy worldwide that replaced Europe’s colonial rule in Asia, Africa, and the Americas.

Europe’s diverse geopolitical landscape has been as much problem as promise. Twice in the last century Europe shed blood to redraw its political borders. Within the last several decades, eight new states have appeared in Europe, more than half through war. Further, today’s map of geopolitical troubles suggests that still more political fragmentation may take place in the near future (Figure 8.28).

Most of Europe, however, sees a brighter geopolitical future. For many, this is based on a widespread spirit of cooperation through unification rather than continued fragmentation. This results mainly from the European Union’s recent successes at political and economic integration since the sudden and unanticipated end of the Cold War in 1990. Many argue that the disasters of the 20th century were of Europe’s own making. If true, this region seems determined to avoid those mistakes in the 21st century by giving the world a new geopolitical model for peace and prosperity.

Redrawing the Map of Europe through War

Two world wars redrew the geopolitical maps of 20th-century Europe (Figure 8.29). Because of these conflicts, empires and nation-states have appeared and disappeared within the last 100 years. By the early 20th century, Europe was divided into two opposing and highly armed camps that tested each other for a decade before the outbreak of World War I in 1914. France, Britain, and Russia were allied against the new nation-states of Italy and Germany, along with the

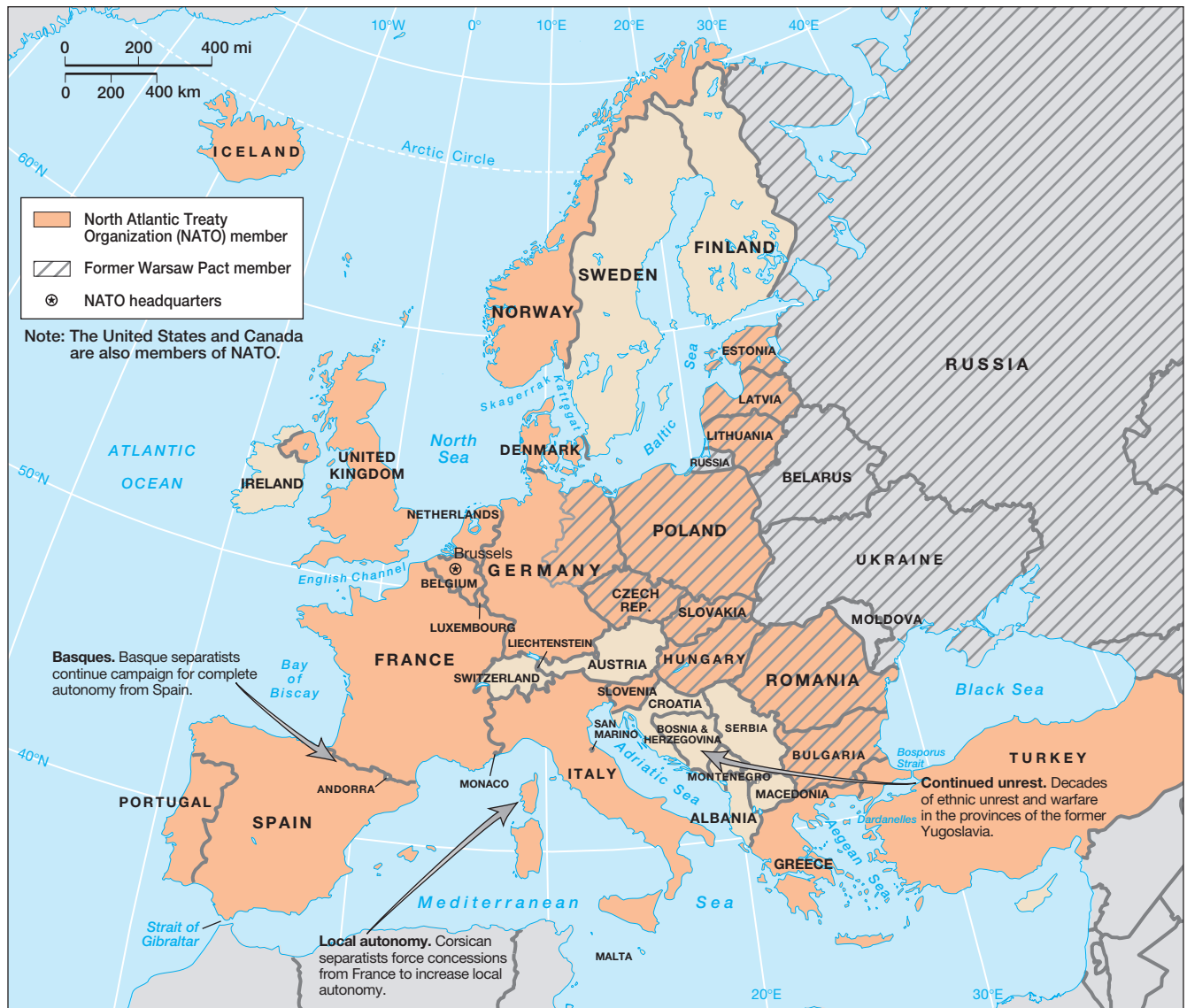


FIGURE 8.28 | GEOPOLITICAL ISSUES IN EUROPE

While the major geopolitical issue of the early 21st century remains the integration of eastern and western Europe in the European Union, numerous issues of ethnic nationalism could cause future geopolitical fragmentation. In other parts of Europe, such as Spain, France, and Great Britain, issues of local ethnic autonomy also challenges central governments.

Austro-Hungarian or Hapsburg Empire, which controlled a complex assortment of ethnic groups in central Europe and the Balkans. Though at the time World War I was referred to as the “war to end all wars,” it fell far short of solving Europe’s geopolitical problems. Instead, according to many experts, it made another European war unavoidable.

When Germany and Austria-Hungary surrendered in 1918, the Treaty of Versailles peace process set about redrawing the map of Europe with two goals in mind: to punish the losers through loss of territory and severe financial reparations and, second, to recognize the nationalistic aspirations of unrepresented peoples by creating new nation-states. As a result, the new states of Czechoslovakia and Yugoslavia were born. Additionally, Poland was reestablished, as were the Baltic states of Finland, Estonia, Latvia, and Lithuania.

Though the goals of the Treaty were admirable, few European states were satisfied with the resulting map. New states were resentful when their ethnic citizens were left outside the new borders and became minorities in other new states. This created an epidemic of **irredentism**, or state policies for reclaiming lost territory and peoples. Examples include the large German population in the western portion of the newly created state of Czechoslovakia and the Hungarians stranded in western Romania by border changes.



FIGURE 8.29 | A CENTURY OF GEOPOLITICAL CHANGE When the 20th century began, central Europe was dominated by the German, Austro-Hungarian (or Hapsburg), and Russian empires. Following World War I, these empires were largely replaced by a mosaic of nation-states. More border changes followed World War II, largely as a result of the Soviet Union's turning that area into a buffer zone between itself and western Europe. With the fall of Soviet power in 1990, additional political division took place with a number of independent nations appearing in the last decades.

This imperfect geopolitical solution was aggravated greatly by the global economic depression of the 1930s, which brought high unemployment, food shortages, and political unrest to Europe. Three competing ideologies promoted their own solutions to Europe's pressing problems: Western democracy (and capitalism), communism from the Soviet revolution to the east, and a fascist totalitarianism promoted by Mussolini in Italy and Hitler in Germany. With industrial unemployment commonly approaching 25 percent in western Europe, public opinion fluctuated wildly between extremist solutions of fascism and communism. In 1936 Italy and Germany once again joined forces through the Rome–Berlin “axis” agreement. As in World War I, this alignment was countered with mutual protection treaties between France, Britain, and the Soviet Union. When an imperialist Japan signed a pact with Germany, the scene was set for a second global war.

Nazi Germany tested Western resolve in 1938 by first annexing Austria, the country of Hitler's birth, and then Czechoslovakia under the pretense of providing protection for ethnic Germans located there. After signing a nonaggression pact with the Soviet Union, Hitler invaded Poland on September 1, 1939. Two days later France and Britain declared war on Germany. Within a month the Soviet Union moved into eastern Poland, the Baltic states, and Finland to reclaim territories lost through the peace treaties of World War I. Nazi Germany then moved westward and occupied Denmark, the Netherlands, Belgium, and France and began preparations to invade England. In 1941 the war took several startling new turns. In June, Hitler broke the nonaggression pact with the Soviet Union and, catching the Red Army by surprise, took the Baltic states and drove deep into Soviet territory. When Japan attacked Pearl Harbor, Hawaii, in December, the United States entered the war in both the Pacific and Europe.

By early 1944 the Soviet army had recovered most of its territorial losses and moved against the Germans in eastern Europe, beginning the long communist domination in that region. By agreement with the Western powers, the Red Army stopped when it reached Berlin in April 1945. At that time, Allied forces crossed the Rhine River and began their occupation of Germany. With Hitler's suicide, Germany signed an unconditional surrender on May 8, 1945, ending the war in Europe. But with Soviet forces firmly entrenched in the Baltics, Poland, Czechoslovakia, Bulgaria, Romania, Hungary, Austria, and eastern Germany, the military battles of World War II were quickly replaced by the ideological Cold War between communism and democracy that lasted until 1990.

A Divided Europe, East and West

From 1945 until 1990, Europe was divided into two geopolitical and economic blocs, east and west, separated by the infamous **Iron Curtain** that descended shortly after the peace agreement of World War II. East of the Iron Curtain border, the Soviet Union imposed the heavy imprint of communism on all activities—political, economic, military, and cultural. To the west, as Europe rebuilt from the destruction of the war, new alliances and institutions were created to counter the Soviet presence in Europe.

Cold War Geography The seeds of the Cold War are commonly thought to have been planted at the Yalta Conference of February 1945, when Britain, the Soviet Union, and the United States met to plan the shape of postwar Europe. Since the Red Army was already in eastern Europe and moving quickly on Berlin, Britain and the United States agreed that the Soviet Union would occupy eastern Europe and the Western allies would occupy parts of Germany.

The larger geopolitical issue, though, was the Soviet desire for a **buffer zone** between its own territory and western Europe. This buffer zone consisted of an extensive bloc of satellite countries, dominated politically and economically by the Soviet Union that would cushion the Soviet heartland against possible attack from western Europe. In the east the Soviet Union took control of the Baltic states, Poland, Czechoslovakia, Hungary, Bulgaria, Romania, Albania, and Yugoslavia. Austria and

Germany were divided into occupied sectors by the four (former) allied powers. In both cases the Soviet Union dominated the eastern portion of each country, areas that contained the capital cities of Berlin and Vienna. Both capital cities, in turn, were divided into French, British, U.S., and Soviet sectors.

In 1955, with the creation of an independent and neutral Austria, the Soviets withdrew from their sector, effectively moving the Iron Curtain eastward to the Hungary–Austria border. This was not the case with Germany, however, which quickly evolved into two separate states (West Germany and East Germany) that remained separate until 1990.

Along the border between east and west, two hostile military forces faced each other for almost half a century. Both sides prepared for and expected an invasion by the other across the barbed wire of a divided Europe (Figure 8.30). In the west, NATO (the North Atlantic Treaty Organization) forces, including the United States, were stationed from West Germany south to Turkey. To the east, Warsaw Pact forces were anchored by the Soviets but also included small military units from satellite countries. Both NATO and the Warsaw Pact countries were armed with nuclear weapons, making Europe a tinderbox for a devastating world war.

Berlin was the flashpoint that brought these forces close to a fighting war on two occasions. In winter 1948 the Soviets imposed a blockade on the city by denying Western powers access to Berlin across its East German military sector. This attempt to starve the city into submission by blocking food shipments from western Europe was thwarted by a nonstop airlift of food and coal by NATO. Then in August 1961 the Soviets built the Berlin Wall to curb the flow of East Germans seeking political refuge in the west. The Wall became the concrete-and-mortar symbol of a firmly divided postwar Europe. For several days while the Wall was being built and the West agonized over destroying it, NATO and Warsaw Pact tanks and soldiers faced each other with loaded weapons at point-blank range. Though war was avoided, the Wall stood for 28 years, until November 1989.

The Cold War Thaw The symbolic end of the Cold War in Europe came on November 9, 1989, when East and West Berliners joined forces to rip apart the Wall with jackhammers and hand tools (Figure 8.31). By October 1990 East and West Germany were officially reunified into a single nation-state. During this period, all other Soviet satellite states, from the Baltic to the Black Sea, also underwent major geopolitical changes that have resulted in a mixed bag of benefits and problems. While some, such as the Czech Republic, appear to have made a successful transformation to democracy and capitalism, others, such as Romania, appear stalled politically and economically in their search for new directions.

The Cold War's end came as much from a combination of problems within the Soviet Union (discussed in Chapter 9) as from rebellion in eastern Europe. By the mid-1980s, the Soviet leadership was advocating an internal economic restructuring and also recognizing the need for a more open dialogue with the West. Financial problems from supporting a huge military establishment, along with heavy losses from an unsuccessful war in Afghanistan, lessened the Soviet appetite for occupying other countries.

In August 1989 Poland elected the first noncommunist government to lead an eastern European state since World War II. Following this, with just one exception, peaceful revolutions with free elections spread throughout eastern Europe as communist governments renamed themselves and broke with doctrines of the past. In Romania, though, street fighting between citizens and military resulted in the violent overthrow and execution of the communist dictator, Nicolae Ceaucescu.

In October 1989, as Europeans nervously awaited a Soviet response to developments in eastern Europe, President Mikhail Gorbachev said that the Soviet Union had no moral or political right to interfere in the domestic affairs of eastern Europe. Following this statement, Hungary opened its borders to the west,

FIGURE 8.30 | THE IRON CURTAIN The former Czechoslovakian–Austrian border was marked by a barbed-wire fence as part of an extensive border zone that included mine fields, tank barricades, watch towers, and a security zone in which all trespassers were shot on sight. (*James Blair/NGS Image Collection*)





(a)



(b)

FIGURE 8.31 | THE BERLIN WALL In August 1961, the East German and Soviet armies built a concrete and barbed-wire structure, known simply as “the Wall,” to stem the flow of East Germans leaving the Soviet zone. It was the most visible symbol of the Cold War until November 1989, when Berliners physically broke it apart after the Soviet Union gave up its control over eastern Europe. [(a) Bettmann/Corbis; (b) Anthony Suaw/Getty Images, Inc.—Liaison]

and eastern Europeans freely visited and migrated to western Europe for the first time in 50 years. Estimates are that more than 100,000 East Germans fled their country during this time.

As a result of the Cold War thaw, the map of Europe began changing once again. Germany reunified in 1990. Elsewhere, political separatism and ethnic nationalism, long suppressed by the Soviets, were unleashed in southeastern Europe. Yugoslavia broke into the independent states of Slovenia, Croatia, and Bosnia. On January 1, 1993, Czechoslovakia was replaced by two separate states, the Czech Republic and Slovakia. Although the 20th century ended with a largely united Europe from a geopolitical perspective, serious economic and social disparities between east and west still exist today.

Economic and Social Development: Integration and Transition

As the acknowledged birthplace of the Industrial Revolution, Europe in many ways invented the modern economic system of industrial capitalism. Though Europe was the world’s industrial leader in the early 20th century, it was soon eclipsed by Japan and the United States while Europe struggled to cope with the effects of two world wars, a decade of global depression, and the Cold War.

In the last 40 years, however, economic integration guided by the European Union has been increasingly successful. In fact, western Europe’s success at blending national economies has given the world a new model for regional cooperation, an approach that may be imitated in Latin America and Asia in the 21st century. Eastern Europe, however, has not fared as well. The results of four decades of Soviet economic planning were, at best, mixed. The total collapse of that system in 1990 cast eastern Europe into a period of chaotic economic, political, and social transition that may result in a highly differentiated pattern of rich and poor regions. While some countries like the Czech Republic and Slovenia prosper, future prospects for Albania, Slovakia, and Romania are uncertain (Table 8.2).

Accompanying western Europe’s economic boom has been an unprecedented level of social development as measured by worker benefits, health services,

TABLE 8.2 • Development Indicators

Country	GNI Per Capita (2004)	Percent Population Living on Less Than \$2 a Day	GDP Average Annual Growth (2000–04)	Under Age 5 Mortality Rate (per 1,000 children)		Adult Literacy Rate (ages 15 and older)	
				1990	2004	Male	Female
<i>Western Europe</i>							
Austria	32,280		1.2	10	5		
Belgium	31,280		1.4	10	5		
France	30,370		1.5	9	5		
Germany	30,690		0.6	9	5		
Liechtenstein							
Luxembourg	56,380						
Monaco							
Netherlands	32,130	0.5	9	6			
Switzerland	49,600	0.6	9	5			
United Kingdom	33,630	2.3					
<i>Eastern Europe</i>							
Bulgaria	2750	<2	4.8	19	15	99	98
Czech Republic	9130	<2	2.8	13	4		
Hungary	8370	<2	4	17	8	99	99
Poland	6100	<2	2.8	18	8		
Romania	2960	13	5.9	31	20	98	96
Slovakia	6480	3	4.6	14	9	100	100
<i>Southern Europe</i>							
Albania	2120	12	5.4	45	19	99	98
Andorra							

(Continued)

education, literacy, and gender equality. Though the improved social services set an admirable standard for the world, cost-cutting politicians and businesspeople argue that these services now increase the cost of business so that European goods cannot compete in the global marketplace. As a result, many of these traditional benefits, namely job security and long vacation periods, are being eroded, causing considerable social tension in many European countries.

Europe's Industrial Revolution

Europe is the cradle of modern industrialism. Two fundamental changes were associated with this industrial revolution. First, machines replaced human labor in many manufacturing processes, and, second, inanimate energy sources, such as water, steam, electricity, and petroleum, powered the new machines. Though we commonly apply the term *Industrial Revolution* to this transformation, implying rapid change, in reality it took more than a century for the interdependent pieces of the industrial system to come together. This new system emerged first in England between 1730 and 1850. Later, this new industrialism spread to other parts of Europe and the world.

TABLE 8.2 • Development Indicators

Country	GNI Per Capita (2004)	Percent Population Living on Less Than \$2 a Day	GDP Average Annual Growth (2000–04)	Under Age 5 Mortality Rate (per 1,000 children)		Adult Literacy Rate (ages 15 and older)	
				1990	2004	Male	Female
Bosnia and Herzegovina	2040	<2	4.9			98	91
Croatia	6820		4.5	22	15	99	97
Cyprus	16,510			12	7		
Greece	16,730		4.2	11	5	94	88
Italy	26,280		0.8	9	5		
Macedonia	2420	<2	0.7	38	14		
Malta	12,050						
Montenegro	2680		4.7	28	15		
Portugal	14,220	<2	0.3	14	5		
San Marino							
Serbia	2680		4.7	28	15		
Slovenia	14,770	<2	3.2	10	4	100	100
Spain	21,530		3	10	4		
<i>Northern Europe</i>							
Denmark	40,750		1.1	9	5		
Estonia	7080	8	7	16	8		
Finland	32,880		2.3	7	4		
Iceland	37,920						
Ireland	34,310		5.1	9	6		
Latvia	5580	5	7.4	18	12	100	100
Lithuania	5740	8	7.5	13	8	100	100
Norway	51,810		1.6	9	4		
Sweden	35,840	2	9	5			

Sources: World Bank, World Development Indicators, 2006; Key Development Data and Statistics; and Population Reference Bureau, World Data Sheet, 2006.

Centers of Change England's textile industry, located on the flanks of the Pennine Mountains, was the center of early industrial innovation, which took place in small towns and villages away from the rigid control of the urban guilds. The town of Yorkshire, on the eastern side of the Pennines, had been a center of woolen textile making since medieval times, drawing raw materials from the extensive sheep herds of that region and using the clean mountain waters to wash the wool before it was spun in rural cottages. By the 1730s, water wheels were used to power mechanized looms at the rapids and waterfalls of the Pennine streams (Figure 8.32). By the 1790s, the steam engine had become the preferred source of energy to drive the new looms. However, steam engines needed fuel, and only with the building of railroads after 1820 could coal be moved long distances at a reasonable cost.



FIGURE 8.32 | WATER POWER AND TEXTILES Europe's industrial revolution began on the slopes of England's Pennine Mountains, where swift-running streams and rivers were used to power large cotton and wool looms. Later many of these textile plants switched to coal power. (James Marshall/Corbis)

Development of Industrial Regions in Continental Europe By the 1820s, the first industrial districts had begun appearing in continental Europe. These hearth areas were, and still are, near coalfields (Figure 8.33). The first area outside of Britain was the Sambre-Meuse region, named for the two river valleys straddling the French-Belgian border. Like the English Midlands, it also had a long history of cottage-based wool textile manufacturing that quickly converted to the new technology of steam-powered mechanized looms. Additionally, a metalworking tradition drew on charcoal-based iron foundries in the nearby forests of the Ardenne Mountains. Coal

FIGURE 8.33 | INDUSTRIAL REGIONS OF EUROPE From England, the Industrial Revolution spread to continental Europe, starting with the Sambre-Meuse region on the French-Belgian border, then diffusing to the Ruhr area in Germany. Readily accessible surface coal deposits powered these new industrial areas. Early on, iron ore for steel manufacture came from local deposits, but later it was imported from Sweden and other areas in the shield country of Scandinavia. Most of the newer industrial areas are closely linked to urban areas.



was also found in these mountains and in 1823 the first blast furnace outside of Britain started operation in Liege, Belgium.

By the second half of the 19th century, the dominant industrial area in all Europe (including England) was the Ruhr district in northwestern Germany, near the Rhine River. Rich coal deposits close to the surface fueled the Ruhr's transformation from a small textile region to one oriented around heavy industry, particularly iron and steel manufacturing. By the early 1900s, the Ruhr had used up its modest iron ore deposits and was importing ore from Sweden, Spain, and France. Several decades later the Ruhr industrial region became synonymous with the industrial strength behind Nazi Germany's war machine and thus was bombed heavily in World War II (Figure 8.34).

Rebuilding Postwar Europe: Economic Integration in the West

Europe was unquestionably the leader of the industrial world in the early 20th century. More specifically, before World War I, European industry was estimated to produce 90 percent of the world's manufactured output. However, four decades of political and economic chaos and two world wars left Europe divided and in shambles. By mid-century, its cities were in ruins; industrial areas were destroyed; vast populations were dispirited, hungry, and homeless; and millions of refugees moved about Europe looking for safety and stability.

ECSC and EEC In 1950 western Europe began discussing a new form of economic integration that would avoid both the historical pattern of nationalistic independence through tariff protection and the economic inefficiencies resulting from the duplication of industrial effort. Robert Schuman, France's foreign minister, proposed that German and French coal and steel production be coordinated by a new supranational organization. In May 1952, France, Germany, Italy, the Netherlands, Belgium, and Luxembourg ratified a treaty that joined them in the European Coal and Steel Community (ECSC). Because of the immediate success of the ECSC, these six states soon agreed to work toward further integration by creating a larger European common market that would encourage the free movement of goods, labor, and capital. In March 1957 the Treaty of Rome was signed, establishing the European Economic Community (EEC), popularly called the *Common Market* (Figure 8.35).

European Community and Union The EEC reinvented itself in 1965 with the Brussels Treaty, which laid the groundwork for adding a political union to the successful economic community. In this "second Treaty of Rome," aspirations for more than economic integration were clearly stated with the creation of an EEC council, court, parliament, and political commission. The EEC also changed its name to the European Community (EC).

In 1991, the EC again changed its name to the European Union (EU) and expanded its goals once again with the Treaty of Maastricht (named after the town in the Netherlands in which delegates met). While economic integration remains an underlying theme in the new constitution, particularly with its commitment to a single currency through the European Monetary Union (discussed below), the EU has moved further into supranational affairs with discussion of common foreign policies and mutual security agreements.

Euroland: The European Monetary Union As any world traveler knows, each state usually has its own monetary system since coining money has long been a basic component of state sovereignty. As a result, crossing a political border usually means changing money and becoming familiar with a new system of bills and coins. In the recent past, travelers bought pounds sterling in England, marks in Germany, francs in France, lira in Italy, and so on. Today, however, Europe is moving from individual state monetary systems toward a common currency. On January 1, 1999, in a major advance toward a united Europe, 11 of the then 15 EU member states joined in the European Monetary Union (EMU). As of that day, cross-border



FIGURE 8.34 | THE RUHR INDUSTRIAL LANDSCAPE Long the dominant industrial region in Europe, the Ruhr region was bombed heavily during World War II because of its central role in providing heavy arms to the German military. It has since been rebuilt and modernized and today remains competitive with newer industrial regions. (Andrej Reiser/Bilderberg Archiv der Fotografen)



FIGURE 8.35 | THE EUROPEAN UNION The driving force behind Europe's economic and political integration has been the European Union (EU), which began in the 1950s as an organization focused solely on rebuilding the region's coal and steel industries. After that proved successful, the Common Market (as it was then called) expanded into a wider range of economic activities. Today the EU has 27 members, including recent additions in eastern Europe.

business and trade transactions began taking place in the new monetary unit, the *euro*. Then, on January 1, 2002, new euro coins and bills became available for everyday use. This currency completely replaced the different national currencies of **Euroland** (countries belonging to the EMU) member states in July 2002.

By adopting a common currency, Euroland members expect to increase the efficiency and competitiveness of both domestic and international business. Formerly, when products were traded across borders, there were transaction costs associated with payments made in different currencies. These are now eliminated within Euroland. Germany, for example, exports two-thirds of its products to other EU members. With a common currency, this business now becomes essentially domestic trade, protected from the fluctuations of different currencies and without transaction costs.

However, some EU member countries, primarily the United Kingdom, are uncertain about the advantages of joining Euroland, and as a result membership remains a controversial political and economic topic. As well, many of the new EU member countries in eastern Europe are undecided about EMU membership.

Economic Integration, Disintegration, and Transition in Eastern Europe

Through history, the economy of eastern Europe has been less developed than its western counterpart. This is explained in part by the fact that eastern Europe is not particularly rich in natural resources. It has only modest amounts of coal, less iron ore, and little in terms of oil and natural gas. Furthermore, what few resources have been found in the region have been historically exploited by outside interests, including the Ottomans, Hapsburgs, Germans, and, more recently, the Soviet Russians. In many ways eastern Europe has been an economic colony of the more developed states to its west, south, and east.

The Soviet-dominated economic planning of the postwar period (1945–90) was an attempt to develop eastern Europe by coordinating regional economies in a way that also served Soviet interests. When the Soviets took control of eastern Europe, their goals were complete economic, political, and social integration through a **command economy**, one that was centrally planned and controlled. However, the collapse of that centralized system in 1990 threw many eastern European countries into deep economic, political, and social chaos. As a result, many of the present-day problems of this region are closely tied to economic activities of the Soviet era.

The Results of Soviet Economic Planning After 40 years of communist economic planning, the results were mixed and varied widely within eastern Europe. In Poland and Yugoslavia, for example, many farmers strongly resisted the national ownership of agriculture; thus, most productive land remained in private hands (Figure 8.36). However, in Romania, Bulgaria, Hungary, and Czechoslovakia, 80 to 90 percent of the agricultural sector was converted to state-owned communal farms. Across eastern Europe, despite these changes in agricultural structure, food production did not increase dramatically, and, in fact, food shortages became commonplace.

Perhaps most notable during the Soviet period were dramatic changes to the industrial landscape, with many new factories built in both rural and urban areas that were fueled by cheap energy and raw materials imported from the Soviet Union. As a means to economic development in eastern Europe, Soviet planners chose heavy industry, such as steel plants and truck manufacturing, over consumer goods. As in the Soviet Union, the bare shelves of retail outlets in eastern Europe became both a sign of communist shortcomings and, perhaps more important, a source of considerable public tension. As western Europeans enjoyed an increasingly high standard of living with an abundance of consumer goods, eastern Europeans struggled to make ends meet as the utopian vision promised by Soviet communists became increasingly elusive.

Transition and Turmoil Since 1990 As Soviet domination over eastern Europe collapsed in 1990, so did the forced economic integration of the region. In place of Soviet coordination and subsidy has come a painful period of economic transition that was close to outright chaos in some eastern European countries. The causes of this economic pain were complex. As the Soviet Union turned its attention to its own economic and political turmoil, it stopped exporting cheap natural gas and petroleum to eastern Europe. Instead, Russia sold these fuels on the open global market to gain hard currency. Without cheap energy, many eastern European industries were unable to operate and shut down operations, laying off thousands of workers. In the first two years of the transition (1990–92), industrial production fell 35 percent in Poland and 45 percent in Bulgaria (Figure 8.37). In addition, markets guaranteed under a command economy, many of them in the Soviet Union, evaporated. Consequently, many factories and services closed because they lacked a market for their goods.

Given these problems, eastern European countries began redirecting their economies away from Russia and toward western Europe with the goal of joining the EU. This meant moving from a socialist-based economy of state ownership and control to a capitalist economy predicated on private ownership and free markets. To achieve this, countries such as the Czech Republic, Hungary, and Poland went

FIGURE 8.36 | POLISH AGRICULTURE One of the most problematic issues facing eastern European countries is the modernization of the agricultural sector. During the Soviet era, Polish farmers resisted collectivization, resulting in a landscape of small, privately owned farms that persists today. This problem is particularly pressing now that eastern European countries are in the European Union and must compete with heavily subsidized western European farmers. (Hans Madej/Bilderberg Archiv der Fotografen)





FIGURE 8.37 | POST-1989 HARDSHIP With the fall of communism in eastern Europe after 1990, economic subsidies and support from the Soviet Union ended. Accompanying this transition has been a high unemployment rate resulting from the closure of many industries, such as this plant in Bulgaria. (Rob Crandall/Rob Crandall, Photographer)

through a period of **privatization**, which is the transfer to private ownership of those firms and industries previously owned and operated by state governments.

A good deal of hardship came with this transition. Price supports, tariff protection, and subsidies were removed from consumer goods as countries moved to a free market. For the first time, goods from western Europe and other parts of the world became plentiful in eastern European retail stores. The irony, though, is that this prolonged period of economic transition has taken its toll on many eastern European consumers, for not everyone can afford these long-dreamed-of products. Unemployment is commonly double digit and underemployment is common. Financial security is elusive, with irregular paychecks for those with jobs and uncertain welfare benefits for those without. Furthermore, for most people the basic costs of food, rent, and utilities are higher today under a free market system than under the subsidized economies of communism. Nonetheless, it is quite clear that the preferred economic and political trajectory of eastern Europe is toward increased integration with western Europe and the EU, not with Russia (Figure 8.38). More specifically, a handful of former Soviet satellite countries joined the EU in 2004 (Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, and Hungary), with Bulgaria and Romania following in early 2007.



FIGURE 8.38 | CZECH REPUBLIC BORDER STATION This border station between Germany and the Czech Republic was once a highly fortified Iron Curtain checkpoint. Today, though, with the Czech Republic's membership in the European Union, it is both a symbol of a newly united Europe and a gateway between western and eastern Europe through which most people pass with a cursory showing of their passport. (Les Rowntree)

SUMMARY

- The 20th century brought numerous challenges to Europe. Disruption, even chaos, characterized most decades as a result of two world wars, a handful of minor ones, and almost half a century of political and military division during the Cold War. The scars from these hardships are still apparent, particularly in the east and southeast.
- In terms of environmental issues, western Europe has made great progress in the last several decades. Not only have individual countries enacted strong environmental laws, but the EU has played an important role with its strong commitment to regional environmental solutions. And now that most eastern European countries are EU members, those environmental regulations will help that region solve its environmental problems.
- The region also faces ongoing challenges related to population and migration. The most pressing problem is how Europe deals with in-migration from Asia, Africa, Latin America, former Soviet lands, and its own underdeveloped regions. If Europe's economy booms once again, this migration could be the solution to a new labor shortage. But if it stagnates, migration will continue to complicate a large number of issues throughout the region.
- With the end of the Cold War, Europe's geopolitical issues are continually being redefined. More specifically, in the last two decades several new countries have appeared on the European map. Another theme is the integration of the former Soviet satellites in eastern Europe into western European—and even international—geopolitics.
- Much economic uncertainty exists as the EU expands into eastern Europe. While it is easy to envision a positive future for the newly enlarged EU that includes member states in eastern Europe such as Poland, Hungary, and the Czech Republic, it is much more difficult to think of a positive economic, political, and social future for Albania, Bulgaria, and Romania. Sharing the EU's 21st-century dream with these eastern European countries will constitute a political and economic challenge for all of Europe.

KEY TERMS

buffer zone (page 247)

Cold War (page 223)

continental climate (page 230)

Cyrillic alphabet (page 240)

Euroland (page 254)

European Union (EU) (page 223)

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