Proclamation of the German Empire in the Hall of Mirrors in the palace of Versailles

CHAPTER OUTLINE AND FOCUS QUESTIONS

The France of Napoleon III
Q: What were the characteristics of Napoleon III’s government, and how did his foreign policy contribute to the unification of Italy and Germany?

National Unification: Italy and Germany
Q: What actions did Cavour and Bismarck take to bring about unification in Italy and Germany, respectively, and what role did war play in their efforts?

Nation Building and Reform: The National State in Midcentury
Q: What efforts for reform occurred in the Austrian Empire, Russia, and Great Britain between 1850 and 1870, and how successful were they in alleviating each nation’s problems?

Industrialization and the Marxist Response
Q: What were the main ideas of Karl Marx?

Science and Culture in an Age of Realism
Q: How did the belief that the world should be viewed realistically manifest itself in science, art, and literature in the second half of the nineteenth century?

CRITICAL THINKING
Q: What was the relationship between nationalism and reform between 1850 and 1871?

ACROSS THE EUROPEAN continent, the revolutions of 1848 had failed. The forces of liberalism and nationalism appeared to have been decisively defeated as authoritarian governments reestablished their control almost everywhere in Europe by 1850. And yet within twenty-five years, many of the goals sought by the liberals and nationalists during the first half of the nineteenth century seemed to have been achieved. National unity became a reality in Italy and Germany, and many European states were governed by constitutional monarchies, even though the constitutional-parliamentary features were frequently facades.

All the same, these goals were not achieved by liberal and nationalist leaders but by a new generation of conservative leaders who were proud of being practitioners of Realpolitik (ray-AHL-poh-lee-teek), the “politics of reality.” One reaction to the failure of the revolutions of 1848 had been a new toughness of mind as people prided themselves on being realistic in their handling of power. The new conservative leaders used armies and power politics to achieve their foreign policy goals. And they did not hesitate to manipulate liberal means to achieve conservative ends at home. Nationalism had failed as a revolutionary movement in 1848–1849, but between 1850 and 1871, these new leaders found a variety of ways to pursue nation building. Winning wars was, however, only one means of nation building as rulers sought to improve the economy and foster cultural policies that led the citizens of their states to a greater sense of national identity.
One of the most successful of these new conservative leaders was the Prussian Otto von Bismarck, who used both astute diplomacy and war to achieve the unification of Germany. On January 18, 1871, Bismarck and six hundred German princes, nobles, and generals filled the Hall of Mirrors in the palace of Versailles, outside Paris. The Prussian army had defeated the French, and the assembled notables were gathered for the proclamation of the Prussian king as the new emperor of a united German state. When the words “Long live His Imperial Majesty, the Emperor William!” rang out, the assembled guests took up the cry. One participant wrote, “A thundering cheer, repeated at least six times, thrilled through the room while the flags and standards waved over the head of the new emperor of Germany.” European rulers who feared the power of the new German state were not so cheerful. “The balance of power has been entirely destroyed,” declared the British prime minister.

The France of Napoleon III

**Focus Question:** What were the characteristics of Napoleon III’s government, and how did his foreign policy contribute to the unification of Italy and Germany?

After 1850, a new generation of conservative leaders came to power in Europe. Foremost among them was Napoleon III (1852–1870) of France, who taught his contemporaries how authoritarian governments could use liberal and nationalistic forces to bolster their own power. It was a lesson others quickly learned.

**Louis Napoleon: Toward the Second Empire**

Even after his election as the president of the French Republic, many of his contemporaries dismissed “Napoleon the Small” as a nonentity whose success was due only to his name. But Louis Napoleon was a clever politician who was especially astute at understanding the popular forces of his day. After his election, he was clear about his desire to have personal power. He wrote, “I shall never submit to any attempt to influence me. … I follow only the promptings of my mind and heart. … Nothing, nothing shall trouble the clear vision of my judgment or the strength of my resolution.”

Louis Napoleon was a patient man. For three years, he persevered in winning the support of the French people, and when the National Assembly rejected his wish to revise the constitution and be allowed to stand for reelection, Louis used troops to seize control of the government on December 1, 1851. After restoring universal male suffrage, Louis Napoleon asked the French people to restructure the government by electing him president for ten years (see the box on p. 672). By an overwhelming majority, 7.5 million yes votes to 640,000 no votes, they agreed. A year later, on November 21, 1852, Louis Napoleon returned to the people to ask for the restoration of the empire. This time, 97 percent responded affirmatively, and on December 2, 1852, Louis Napoleon assumed the title of Napoleon III (the first Napoleon had abdicated in favor of his son, Napoleon II, on April 6, 1814). The Second Empire had begun.

**The Second Napoleonic Empire**

The government of Napoleon III was clearly authoritarian in a Bonapartist sense. Louis Napoleon had asked, “Since France has carried on for fifty years only by virtue of the administrative, military, judicial, religious and financial organization of the Consulate and Empire, why should she not also adopt the political institutions of that period?”

As chief of state, Napoleon III controlled the armed forces, police, and civil service. Only he could introduce legislation and declare war. The Legislative Corps gave an appearance...
During the mid-nineteenth century, a new generation of conservative leaders emerged who were proud of being practitioners of Realpolitik, the “politics of reality.” Two of the most prominent were Louis Napoleon of France and Otto von Bismarck of Prussia. The first selection is taken from Louis Napoleon’s proclamation to the French people in 1851, asking them to approve his actions after his coup d’état on December 1, 1851. The second and third selections are excerpts from Bismarck’s famous “iron and blood” speech to a committee of the Prussian Reichstag and his 1888 speech to the German Reichstag on Germany’s need for military preparation.

Louis Napoleon, Proclamation to the People, 1851

Frenchmen! The present situation cannot last much longer. Each passing day increases the danger to the country. The [National] Assembly, which ought to be the firmest supporter of order, has become a center of conspiracies. . . . It attacks the authority that I hold directly from the people; it encourages all evil passions; it jeopardizes the peace of France: I have dissolved it and I make the whole people judge between it and me. . . .

I therefore make a loyal appeal to the whole nation, and I say to you: If you wish to continue this state of uneasiness which degrades us and makes our future uncertain, choose another in my place, for I no longer wish an authority which is powerless to do good, makes me responsible for acts I cannot prevent, and chains me to the helm when I see the vessel speeding toward the abyss. . . .

Persuaded that the instability of authority and the preponderance of a single Assembly are permanent causes of trouble and discord, I submit to you the following fundamental bases of a constitution which the Assemblies will develop later.

1. A responsible chief elected for ten years.
2. Ministers dependent upon the executive power alone.
3. A Council of State composed of the most distinguished men to prepare the laws and discuss them before the legislative body.
4. A legislative body to discuss and vote the laws, elected by universal [male] suffrage. . . .

This system, created by the First Consul [Napoleon I] at the beginning of the century, has already given France calm and prosperity; it will guarantee them to her again.

Such is my profound conviction. If you share it, declare that fact by your votes. If, on the contrary, you prefer a government without force, monarchical or republican, borrowed from I know not what past or from which chimerical future, reply in the negative. . . .

If I do not obtain a majority of your votes, I shall then convocate a new assembly, and I shall resign to it the mandate that I received from you. But if you believe that the cause of which my name is the symbol, that is, France regenerated by the revolution of 1789 and organized by the Emperor, is forever yours, proclaim it by sanctioning the powers that I ask from you. Then France and Europe will be saved from anarchy, obstacles will be removed, rivalries will disappear, for all will respect the decree of Providence in the decision of the people.

Bismarck, Speech to the Prussian Reichstag, 1862

. . . It is true that we can hardly escape complications in Germany, although we do not seek them. Germany does not look to Prussia’s liberalism, but to her power. The south German States—Bavaria, Württemberg, and Baden—would like to indulge in liberalism, and because of that no one will assign Prussia’s role to them! Prussia must collect her forces and hold them in reserve for an opportune moment, which has already come and gone several times. Since the Treaty of Vienna, our frontiers have not been favorably designed for a healthy body politic. Not by speeches and majorities will the great questions of the day be decided—that was the mistake of 1848 and 1849—but by iron and blood.

Bismarck, Speech to the German Reichstag, 1888

When I say that it is our duty to endeavor to be ready at all times and for all emergencies, I imply that we must make greater exertions than other people for the same purpose, because of our geographical position. We are situated in the heart of Europe, and have at least three fronts open to an attack. France has only her eastern, and Russia only her western frontier where they may be attacked. We are also more exposed to the dangers of a coalition than any other nation, as is proved by the whole development of history, by our geographical position, and the lesser degree of cohesiveness, which until now has characterized the German nation.
In the 1860s, as opposition to some of the emperor’s policies began to mount, Napoleon III liberalized his regime. He reached out to the working class by legalizing trade unions and granting them the right to strike. He also began to liberalize the political process. The Legislative Corps had been closely controlled during the 1850s. In the 1860s, opposition candidates were allowed greater freedom to campaign, and the Legislative Corps was permitted more say in affairs of state, including debate over the budget. Napoleon’s liberalization policies did serve initially to strengthen the hand of the government. In a plebiscite in May 1870 on whether to accept a new constitution that might have inaugurated a parliamentary regime, the French people gave Napoleon another resounding victory. This triumph was short-lived, however. Foreign policy failures led to growing criticism, and war with Prussia in 1870 turned out to be the death blow for Napoleon III’s regime (see “The Franco-Prussian War” later in this chapter).

Foreign Policy: The Mexican Adventure
Napoleon III was considerably less accomplished at dealing with foreign policy, especially his imperialistic adventure in Mexico. Seeking to dominate Mexican markets for French goods, the emperor sent French troops to Mexico in 1861 to join British and Spanish forces in protecting their interests in the midst of the upheaval caused by a struggle between liberal and conservative Mexican factions. Although the British and Spanish withdrew their troops after order had been restored, French forces remained, and in 1864, Napoleon III installed Archduke Maximilian of Austria, his handpicked choice, as the new emperor of Mexico. When the French troops were needed in Europe, Maximilian became an emperor without an army. He surrendered to liberal Mexican forces in May 1867 and was executed in June. His execution was a blow to the prestige of the French emperor.

Foreign Policy: The Crimean War
Napoleon III’s participation in the Crimean War (1854–1856) had been more rewarding. As heir to the Napoleonic empire, Napoleon III was motivated by the desire to free France from the restrictions of the peace settlements of 1814–1815 and to make France the chief arbiter of Europe. In the decline of the Ottoman Empire, he saw an opportunity to take steps toward these goals.

THE OTTOMAN EMPIRE
The Crimean War was yet another attempt to answer the Eastern Question: Who would be the chief beneficiaries of the disintegration of the Ottoman Empire? In the seventeenth century, the Ottoman Empire had controlled southeastern Europe, but in 1699 it had lost Hungary, Transylvania, Croatia, and Slovenia to the expanding Austrian Empire. The Russian Empire to its north also encroached on the Ottoman

Q
Why did Louis Napoleon’s argument to the French people have such a strong popular appeal? What are the similarities in the practice of Realpolitik by these two leaders? What are the noticeable differences in their approaches? Are the similarities more important than the differences? Why or why not? What can you learn about Realpolitik from these three selections?
Empire by seizing the Crimea in 1783 and Bessarabia in 1812 (see Map 22.1).

By the beginning of the nineteenth century, the Ottoman Empire had entered a fresh period of decline. A nationalist revolt had gained independence for Greece in 1830. Serbia claimed autonomy in 1827, which was recognized by the Ottoman Empire in 1830. The Russians had obtained a protectorate over the Danubian provinces of Moldavia and Wallachia in 1829.

As Ottoman authority over the outlying territories in southeastern Europe waned, European governments began to take an active interest in the empire’s apparent demise. Russia’s proximity to the Ottoman Empire and the religious bonds between the Russians and the Greek Orthodox Christians in Ottoman-dominated southeastern Europe naturally gave it special opportunities to enlarge its sphere of influence. Other European powers not only feared Russian ambitions but also had objectives of their own in the area. Austria craved more land in the Balkans, a desire that inevitably meant conflict with Russia, and France and Britain were interested in commercial opportunities and naval bases in the eastern Mediterranean.

**WAR IN THE CRIMEA** War erupted between Russia and the Ottoman Empire in 1853 when the Russians demanded the right to protect Christian shrines in Palestine, a privilege that had already been extended to the French. When the Ottomans refused, the Russians occupied Moldavia and Wallachia. Failure to resolve the dispute by negotiations led the Ottoman Empire to declare war on Russia on October 4, 1853. The following year, on March 28, Great Britain and France declared war on Russia.

Why did Britain and France take that step? Concern over the prospect of an upset in the balance of power was clearly one reason. The British in particular feared that an aggressive Russia would try to profit from the obvious weakness of the Ottoman government by seizing Ottoman territory or the long-coveted Dardanelles. Such a move would make Russia the major power in eastern Europe and would enable the Russians to challenge British naval
control of the eastern Mediterranean. Napoleon III felt that the Russians had insulted France, first at the Congress of Vienna and now by their insistence on replacing the French as the protectors of Christians living in the Ottoman Empire. The French also feared the collapse of the Ottoman Empire and the growth of Russian influence there. Although the Russians assumed that they could count on support from the Austrians (since Russian troops had saved the Austrian government in 1849), the Austrian prime minister blithely observed, “We will astonish the world by our ingratitude,” and Austria remained neutral. Since the Austrians had perceived that it was not in their best interest to intervene, Russia had to fight alone.

Poorly planned and poorly fought, the Crimean War is perhaps best remembered for the suicidal charge of the British Light Brigade at the Battle of Balaklava. Britain and France decided to attack Russia’s Crimean peninsula in the Black Sea. After a long siege and at a terrible cost in manpower for both sides, the main Russian fortress of Sevastopol fell in September 1855, six months after the death of Tsar Nicholas I. His successor, Alexander II, soon sued for peace. By the Treaty of Paris, signed in March 1856, Russia was forced to give up Bessarabia at the mouth of the Danube and accept the neutrality of the Black Sea. In addition, the principalities of Moldavia and Wallachia were placed under the protection of all five great powers.

The Crimean War proved costly to both sides. More than 250,000 soldiers died in the war, with 60 percent of the deaths coming from disease (especially cholera). Even more would have died on the British side if it had not been for the efforts of Florence Nightingale (1820–1910). Her insistence on strict sanitary conditions saved many lives and helped make nursing a profession of trained, middle-class women.

The Crimean War broke up long-standing European power relationships and effectively destroyed the Concert of Europe. Austria and Russia, the two chief powers maintaining the status quo in the first half of the nineteenth century, were now enemies because of Austria’s unwillingness to support Russia in the war. Russia, defeated, humiliated, and weakened by the obvious failure of its serf-armies, withdrew from European affairs for the next two decades to set its house in order. Great Britain, disillusioned by its role in the war, also pulled back from Continental affairs. Austria, paying the price for its neutrality, was now without friends among the great powers. Not until the 1870s were new combinations formed to replace those that had disappeared, and in the meantime, the European international situation remained fluid. Leaders who were willing to pursue the “politics of reality” found themselves in a situation rife with opportunity. It was this new international situation that made possible the unification of Italy and Germany.
National Unification: Italy and Germany

**Focus Question:** What actions did Cavour and Bismarck take to bring about unification in Italy and Germany, respectively, and what role did war play in their efforts?

The breakdown of the Concert of Europe opened the way for the Italians and the Germans to establish national states. Their successful unifications transformed the power structure of the European continent. Europe would be dealing with the consequences well into the twentieth century.

The Unification of Italy

In 1850, Austria was still the dominant power on the Italian peninsula. After the failure of the revolution of 1848–1849, a growing number of advocates for Italian unification focused on the northern Italian state of Piedmont as their best hope to achieve their goal. The royal house of Savoy ruled the kingdom of Piedmont, which also included the island of Sardinia (see Map 22.2). Although soundly defeated by the Austrians in 1848–1849, Piedmont under King Charles Albert had made a valiant effort; it seemed reasonable that Piedmont would now assume the leading role in the cause of national unity. The little state seemed unlikely to supply the needed leadership, however, until the new king, Victor Emmanuel II (1849–1878), named Count Camillo di Cavour (kuh-MEE-oh deh kuh-VOOR) (1810–1861) as his prime minister in 1852.

**The Leadership of Cavour** Cavour was a liberal-minded nobleman who had made a fortune in agriculture and went on to make even more money in banking, railroads, and shipping. Cavour was a moderate who favored constitutional government. He was a consummate politician with the ability to persuade others of the rightness of his own convictions. After becoming prime minister in 1852, he pursued a policy of economic expansion, encouraging the building of roads, canals, and railroads and fostering business enterprise by expanding credit and stimulating investment in new industries. The growth in the Piedmontese economy and the subsequent increase in government revenues enabled Cavour to pour money into equipping a large army.

Cavour had no illusions about Piedmont’s military strength and was well aware that he could not challenge Austria directly. He would need the French. In 1858, Cavour came to an agreement with Napoleon III. The emperor agreed to ally with Piedmont in driving the Austrians out of Italy. Once the Austrians were driven out, Italy would be reorganized. Piedmont would be extended into the kingdom of Upper Italy by adding Lombardy,

**MAP 22.2 The Unification of Italy.** Piedmont under the able guidance of Count Camillo di Cavour provided the nucleus for Italian unification. Alliances with France and Prussia, combined with the military actions of republican nationalists like Giuseppe Garibaldi, led to complete unification in 1870.

**Q** Taking geographic factors and size of population into account, which of the countries shown on this map would likely have posed the greatest military threat to the new Italian state?

**View an animated version of this map or related maps on the CourseMate website.**
Venetia, Parma, Modena, and part of the Papal States to its territory. In compensation for its efforts, France would receive the Piedmontese provinces of Nice and Savoy. A kingdom of Central Italy would be created for Napoleon III’s cousin, Prince Napoleon, who would be married to the younger daughter of King Victor Emmanuel. This agreement between Napoleon and Cavour seemed to assure the French ruler of the opportunity to control Italy. Confident that the plan would work, Cavour provoked the Austrians into invading Piedmont in April 1859.

In the initial stages of fighting, it was the French who were largely responsible for defeating the Austrians in two major battles at Magenta and Solferino. It was also the French who made peace with Austria on July 11, 1859, without informing their Italian ally. Why did Napoleon withdraw so hastily? For one thing, he realized that despite two losses, the Austrian army had not yet been defeated; the struggle might be longer and more costly than he had anticipated. Moreover, the Prussians were mobilizing in support of Austria, and Napoleon III had no desire to take on two enemies at once. As a result of Napoleon’s peace with Austria, Piedmont received only Lombardy; Venetia remained under Austrian control. Cavour was furious at the French perfidy, but events in northern Italy now turned in his favor. Soon after the war with Austria had begun, some northern Italian states, namely, Parma, Modena, Tuscany, and part of the Papal States, had been taken over by nationalists. In plebiscites held in 1860, these states agreed to join Piedmont. Napoleon agreed to the annexations in return for Nice and Savoy.

THE EFFORTS OF GARIBALDI Meanwhile, in southern Italy, a new leader of Italian unification had come to the fore. Giuseppe Garibaldi (joo-ZEP-pay gar-uh-BAHL-dee) (1807–1882), a dedicated Italian patriot who had supported Mazzini and the republican cause of Young Italy, raised an army of a thousand Red Shirts, as his volunteers were called because of their distinctive dress, and on May 11, 1860, landed in Sicily, where a revolt had broken out against the Bourbon king of the Two Sicilies.

Although his forces were greatly outnumbered, Garibaldi’s daring tactics won the day (see the box on p. 678). By the end of July 1860, most of Sicily had been pacified under Garibaldi’s control. In August, Garibaldi and his forces crossed over to the mainland and began a victorious march up the Italian peninsula. Naples and the Two Sicilies fell in early September. At this point, Cavour reentered the scene. Aware that Garibaldi planned to march on Rome, Cavour feared that such a move would bring war with France as the defender of papal interests. Moreover, Garibaldi and his men favored a democratic republicanism; Cavour did not and acted quickly to preempt Garibaldi. The Piedmontese army invaded the Papal States and, bypassing Rome, moved into the kingdom of Naples. Ever the patriot, Garibaldi chose to yield to Cavour’s fait accompli rather than provoke a civil war and retired to his farm. Plebiscites in the Papal States and the Two Sicilies resulted in overwhelming support for union with Piedmont. On March 17, 1861, the new kingdom of Italy was proclaimed under a centralized government subordinated to the control of Piedmont and King Victor Emmanuel II (1861–1878) of the house of Savoy. Worn out by his efforts, Cavour died three months later.

Despite the proclamation of the new kingdom, the task of unification was not yet complete since Venetia in the

**CHRONOLOGY The Unification of Italy**

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<td>Count Cavour becomes prime minister of Piedmont</td>
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<td>Plebiscites in the northern Italian states</td>
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Garibaldi and Romantic Nationalism

Giuseppe Garibaldi was one of the most colorful figures involved in the unification of Italy. Accompanied by only one thousand of his famous Red Shirts, the Italian soldier of fortune left Genoa on the night of May 5, 1860, for an invasion of the kingdom of the Two Sicilies. The ragged band entered Palermo, the chief city on the island of Sicily, on May 31. This selection is taken from an account by a correspondent for the Times of London, the Hungarian-born Nandor Eber.

London Times, June 13, 1860

PALERMO, May 31—Anyone in search of violent emotions cannot do better than set off at once for Palermo. However blasé he may be, or however milk-and-water his blood, I promise it will be stirred up. He will be carried away by the tide of popular feeling...

In the afternoon Garibaldi made a tour of inspection round the town. I was there, but find it really impossible to give you a faint idea of the manner in which he was received everywhere. It was one of those triumphs which seem to be almost too much for a man.... The popular idol, Garibaldi, in his red flannel shirt, with a loose colored handkerchief around his neck, and his worn "wide-awake" [a soft-brimmed felt hat], was walking on foot among those cheering, laughing, crying, mad thousands; and all his few followers could do was to prevent him from being bodily carried off the ground. The people threw themselves forward to kiss his hands, or, at least, to touch the hem of his garment, as if it contained the panacea for all their past and perhaps coming suffering. Children were brought up, and mothers asked on their knees for his blessing; and all this while the object of this idolatry was calm and smiling as when in the deadliest fire, taking up the children and kissing them, trying to quiet the crowd, stopping at every moment to hear a long complaint of houses burned and property sacked by the retreating soldiers, giving good advice, comforting, and promising that all damages should be paid for...

One might write volumes of horrors on the vandalism already committed, for every one of the hundred ruins has its story of brutality and inhumanity.... In these small houses a dense population is crowded together even in ordinary times. A shell falling on one, and crushing and burying the inmates, was sufficient to make people abandon the neighboring one and take refuge a little further on, shutting themselves up in the cellars. When the Royalists retired they set fire to those of the houses which had escaped the shells, and numbers were thus burned alive in their hiding places....

If you can stand the exhalation, try and go inside the ruins, for it is only there that you will see what the thing means and you will not have to search long before you stumble over the remains of a human body, a leg sticking out here, an arm there, a black face staring at you a little further on. You are startled by a rustle. You look round and see half a dozen gorged rats scampering off in all directions, or you see a dog trying to make his escape over the ruins.... I only wonder that the sight of these scenes does not convert every man in the town into a tiger and every woman into a fury. But these people have been so long ground down and demoralized that their nature seems to have lost the power of reaction.

Q Why did Garibaldi become such a hero to the Italian people? How does Garibaldi’s comportment as a political and military leader prefigure the conduct of later revolutionary military leaders and activists?

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north was still held by Austria and Rome was under papal control, supported by French troops. To attack either one meant war with a major European state, which the Italian army was not prepared to handle. It was the Prussian army that indirectly completed the task of Italian unification. In the Austro-Prussian War of 1866, the new Italian state became an ally of Prussia. Although the Italian army was defeated by the Austrians, Prussia’s victory left the Italians with Venetia. In 1870, the Franco-Prussian War resulted in the withdrawal of French troops from Rome. The Italian army then annexed the city on September 20, 1870, and Rome became the new capital of the united Italian state.

The Unification of Germany

After the failure of the Frankfurt Assembly to achieve German unification in 1848–1849, German nationalists focused on Austria and Prussia as the only two states powerful enough to dominate German affairs. Austria had long controlled the existing Germanic Confederation, but Prussian power had grown, strongly reinforced by economic expansion in the 1850s. Prussia had formed the Zollverein (TSOHL-fuh-ryn), a German customs union, in 1834. By eliminating tolls on rivers and roads among member states, the Zollverein had stimulated trade and added to the prosperity of its member states. By 1853, all the German states except Austria had joined the Prussian-dominated customs union. A number of middle-class liberals now began to see Prussia in a new light; some even looked openly to Prussia to bring about the unification of Germany.

In 1848, Prussia had framed a constitution that at least had the appearance of constitutional monarchy in that it had established a bicameral legislature with the lower house elected by universal male suffrage. The voting population, however, was divided into three classes determined...
by the amount of taxes they paid, a system that allowed the biggest taxpayers to gain the most seats. Unintentionally, by 1859, this system had allowed control of the lower house to fall largely into the hands of the rising middle classes, whose numbers were growing as a result of continuing industrialization. Their desire was to have a real parliamentary system, but the king’s executive power remained too strong; royal ministers answered for their actions only to the king, not the parliament. Nevertheless, the parliament had been granted important legislative and taxation powers on which it could build.

In 1861, King Frederick William IV died and was succeeded by his brother. King William I (1861–1888) had definite ideas about the Prussian army because of his own military training. He and his advisers believed that the army was in dire need of change if Prussia was to remain a great power. The king planned to double the size of the army and institute three years of compulsory military service for all young men.

Middle-class liberals in the parliament, while willing to have reform, feared compulsory military service because they believed the government would use it to inculcate obedience to the monarchy and strengthen the influence of the conservative-military clique in Prussia. When the Prussian legislature rejected the new military budget submitted to parliament in March 1862, William I appointed a new prime minister, Count Otto von Bismarck (1815–1898). Bismarck, regarded even by the king as too conservative, came to determine the course of modern German history. Until 1890, he dominated both German and European politics.

**BISMARCK** Otto von Bismarck was born into the Junker class, the traditional, landowning aristocracy of Prussia, and remained loyal to it throughout his life. “I was born and raised as an aristocrat,” he once said. As a university student, Bismarck indulged heartily in wine, women, and song yet managed to read widely in German history. After earning a law degree, he embarked on a career in the Prussian civil service but soon tired of bureaucratic, administrative routine and retired to manage his country estates. Comparing the civil servant to a musician in an orchestra, he responded, “I want to play the tune the way it sounds good to me or not at all. . . . My pride bids me command rather than obey.”3 In 1847, desirous of more excitement and power than he could find in the country, he reentered public life. Four years later, he began to build a base of diplomatic experience as the Prussian delegate to the parliament of the Germanic Confederation. This, combined with his experience as Prussian ambassador to Russia and later to France, gave him opportunities to acquire a wide knowledge of European affairs and to learn how to assess the character of rulers.

Because Bismarck succeeded in guiding Prussia’s unification of Germany, it is often assumed that he had determined on a course of action that led precisely to that goal. That is hardly the case. Bismarck was a consummate politician and opportunist. He was not a political gambler but a moderate who waged war only when all other diplomatic alternatives had been exhausted and when he was reasonably sure that all the military and diplomatic advantages were on his side. Bismarck has often been portrayed as the ultimate realist, the foremost nineteenth-century practitioner of **Realpolitik**. He was also quite open about his strong dislike of anyone who opposed him. He said one morning to his wife, “I could not sleep the whole night; I hated throughout the whole night.”

In 1862, Bismarck resubmitted the army appropriations bill to parliament along with a passionate appeal to his liberal opponents: “Germany does not look to Prussia’s liberalism, but to her power. . . . Not by speeches and majorities will the great questions of the day be decided—that was the mistake of 1848–1849—but by iron and blood”4 (see the box on p. 672). His opponents were not impressed and rejected the bill once again. Bismarck went ahead, collected the taxes, and reorganized the army anyway, blaming the liberals for causing the breakdown of constitutional government. From 1862 to 1866, Bismarck governed Prussia by largely ignoring parliament. Unwilling to revolt, parliament did nothing. In the meantime,
opposition to his domestic policy determined Bismarck on an active foreign policy, which in 1864 led to his first war.

**THE DANISH WAR (1864)** In the three wars that he waged, Bismarck’s victories were as much diplomatic and political as they were military. Before war was declared, Bismarck always saw to it that Prussia would be fighting only one power and that that opponent was isolated diplomatically.

The Danish War arose over the duchies of Schleswig (SHLESS-vik) and Holstein (HOHL-shyn). In 1863, contrary to international treaty, the Danish government moved to incorporate the two duchies into Denmark. German nationalists were outraged since both duchies had large German populations and were regarded as German states. The diet of the Germanic Confederation urged its member states to send troops against Denmark, but Bismarck did not care to subject Prussian policy to the Austrian-dominated German parliament. Instead, he persuaded the Austrians to join Prussia in declaring war on Denmark on February 1, 1864. The Danes were quickly defeated and surrendered Schleswig and Holstein to the victors (see Map 22.3). Austria and Prussia then agreed to divide the administration of the two duchies; Prussia took Schleswig while Austria administered Holstein. The plan was Bismarck’s. By this time, Bismarck had come to the realization that for Prussia to expand its power by dominating the northern, largely Protestant part of the Germanic Confederation, Austria would have to be excluded from German affairs or, less likely, be willing to accept Prussian
domination of Germany. The joint administration of the two duchies offered plenty of opportunities to create friction with Austria and provide a reason for war if it came to that. While he pursued negotiations with Austria, he also laid the foundations for the isolation of Austria.

**THE AUSTRO-PRUSSIAN WAR (1866)** Bismarck had no problem gaining Russia’s agreement to remain neutral in the event of an Austro-Prussian war because Prussia had been the only great power to support Russia’s repression of a Polish revolt in 1863. Napoleon III was a thornier problem, but Bismarck was able to buy his neutrality with vague promises of territory in the Rhineland. Finally, Bismarck made an alliance with the new Italian state and promised it Venetia in the event of Austrian defeat.

With the Austrians isolated, Bismarck used the joint occupation of Schleswig-Holstein to goad the Austrians into a war on June 14, 1866. Many Europeans, including Napoleon III, expected a quick Austrian victory, but they overlooked the effectiveness of the Prussian military reforms of the 1860s. The Prussian breech-loading needle gun had a much faster rate of fire than the Austrian muzzleloader, and a superior network of railroads enabled the Prussians to mass troops quickly. At Königgrätz (kur-nig-GRETS) (Sadowa) on July 3, the Austrian army was defeated. Looking ahead, Bismarck refused to create a hostile enemy by burdening Austria with a harsh peace as the Prussian king wanted. Austria lost no territory except Venetia to Italy but was excluded from German affairs. The German states north of the Main River were organized into the North German Confederation, controlled by Prussia. The southern German states, largely Catholic, remained independent but were coerced into signing military agreements with Prussia. In addition to Schleswig and Holstein, Prussia annexed Hanover and Hesse-Cassel because they had openly sided with Austria.

The Austrian war was a turning point in Prussian domestic affairs. After the war, Bismarck asked the Prussian parliament to pass a bill of indemnity, retroactively legalizing the taxes he had collected illegally since 1862. Even most of the liberals voted in favor of the bill because they had been won over by Bismarck’s successful use of military power. With his victory over Austria and the creation of the North German Confederation, Bismarck had proved Napoleon III’s dictum that nationalism and authoritarian government could be combined. In using nationalism to win support from liberals and prevent governmental reform, Bismarck showed that liberalism and nationalism, the two major forces of change in the early nineteenth century, could be separated.

He showed the same flexibility in the creation of a new constitution for the North German Confederation. Each German state kept its own local government, but the king of Prussia was head of the confederation, and the chancellor (Bismarck) was responsible directly to the king. Both the army and foreign policy remained in the hands of the king and his chancellor. Parliament consisted of two bodies: the Bundesrat (BOON-duhs-raht), or federal council, composed of delegates nominated by the states, and a lower house, the Reichstag, elected by universal male suffrage. Like Napoleon, Bismarck believed that the peasants and artisans who made up most of the population were conservative at heart and could be used to overcome the advantages of the liberals.

**THE FRANCO-PRUSSIAN WAR (1870–1871)** Bismarck and William I had achieved a major goal by 1866. Prussia now dominated all of northern Germany, and Austria had been excluded from any significant role in German affairs. Nevertheless, unsettled business led to new international complications and further change. Bismarck realized that France would never be content with a strong German state to its east because of the potential threat to French security. At the same time, after a series of setbacks, Napoleon III needed a diplomatic triumph to offset his serious domestic problems. The French were not happy with the turn of events in Germany and looked for opportunities to humiliate the Prussians.

After a successful revolution had deposed Queen Isabella II, the throne of Spain was offered to Prince Leopold of Hohenzollern-Sigmaringen (hoh-en-TSULL-urn-zig-mah-RING-un), a distant relative of the Hohenzollern king of Prussia. Bismarck welcomed this possibility for the same reason that the French objected to it. If Leopold were placed on the throne of Spain, France would be virtually encircled by members of the Hohenzollern dynasty. French objections caused King William I to force his relative to withdraw his candidacy. Bismarck was disappointed with the king’s actions, but at this point, the French overreached. Not content with their diplomatic victory, they pushed William I to make a formal apology to France and promise never to allow Leopold to be a candidate again. When Bismarck received a telegram from the king informing him of the French request, Bismarck edited it to make it appear even more insulting to the French, knowing that the French would be angry and declare war. The French reacted as Bismarck expected they would and declared war on Prussia on July 15, 1870. The French prime minister remarked, “We go to war with a light heart.”

Unfortunately for the French, a “light heart” was not enough. They proved no match for the better-led and better-organized Prussian forces. The southern German states honored their military alliances with Prussia and joined the war effort against the French. The Prussian armies advanced into France, and at Sedan on September 2, 1870, an entire French army and Napoleon III himself were captured. The Second French Empire collapsed, but the war was not yet over. After four months of bitter resistance, Paris finally capitulated on January 28, 1871, and an official peace treaty was signed in May. France had to pay an indemnity of 5 billion francs (about $1 billion) and give up the provinces of Alsace and Lorraine to the new German state, a loss that angered the French and left them burning for revenge.
Even before the war had ended, the southern German states had agreed to enter the North German Confederation. On January 18, 1871, in the Hall of Mirrors in Louis XIV’s palace at Versailles, William I, with Bismarck standing at the foot of the throne, was proclaimed kaiser or emperor of the Second German Empire (the first was the medieval Holy Roman Empire). German unity had been achieved by the Prussian monarchy and the Prussian army. In a real sense, Germany had been merged into Prussia, not Prussia into Germany. German liberals also rejoiced. They had dreamed of unity and freedom, but the achievement of unity now seemed much more important. One old liberal proclaimed:

I cannot shake off the impression of this hour. I am no devotee of Mars; I feel more attached to the goddess of beauty and the mother of graces than to the powerful god of war, but the trophies of war exercise a magic charm even upon the child of peace. One’s view is involuntarily chained and one’s spirit goes along with the boundless row of men who acclaim the god of the moment—success. 

The Prussian leadership of German unification meant the triumph of authoritarian, militaristic values over liberal, constitutional sentiments in the development of the new German state. With its industrial resources and military might, the new state had become the strongest power on the Continent. A new European balance of power was at hand.

**FOCUS QUESTION: What efforts for reform occurred in the Austrian Empire, Russia, and Great Britain between 1850 and 1870, and how successful were they in alleviating each nation’s problems?**

While European affairs were dominated by the unification of Italy and Germany, other states were also undergoing transformations (see Map 22.4). War, civil war, and changing political alignments served as catalysts for domestic reforms.

### The Austrian Empire: Toward a Dual Monarchy

After the Habsburgs had crushed the revolutions of 1848–1849, they restored centralized, autocratic government to the empire. What seemed to be the only lasting result of the revolution of 1848 was the act of emancipation of September 7, 1848, that freed the serfs and eliminated all compulsory labor services. Nevertheless, the development of industrialization after 1850, especially in Vienna and the provinces of Bohemia and Galicia, served to bring economic and social change to the empire in the form of an urban proletariat, labor unrest, and a new industrial middle class.

In 1851, the revolutionary constitutions were abolished, and a system of centralized autocracy was imposed on the empire. Under the leadership of Alexander von Bach (1813–1893), local privileges were subordinated to a unified system of administration, law, and taxation implemented by German-speaking officials. Hungary was subjected to the rule of military officers, and the Catholic Church was declared the state church and given control of education. Economic troubles and war, however, soon brought change. After Austria’s defeat in the Italian war in 1859, the Emperor Francis Joseph (1848–1916) attempted to establish an imperial parliament—the Reichsrat (RYKHSS-raht)—with a nominated upper house and an elected lower house of representatives. Although the system was supposed to provide representation for the nationalities of the empire, the complicated formula used for elections ensured the election of a German-speaking majority and thus served once again to alienate the ethnic minorities, particularly the Hungarians.

**THE AUSGLEICH OF 1867** Only when military disaster struck again in the Austro-Prussian War did the Austrians deal with the fiercely nationalistic Hungarians. The result was the negotiated Ausgleich (OWSS-glykh), or Compromise, of 1867, which created the Dual Monarchy of Austria-Hungary. Each part of the empire now had a constitution, its own bicameral legislature, its own governmental machinery for domestic affairs, and its own capital (Vienna for Austria and Buda—soon to be united with Pest, across the river—for Hungary). Holding the two states together were a single monarch (Francis Joseph was emperor of Austria and king of Hungary) and a common army, foreign policy, and system of finances. In domestic affairs, the Hungarians had become an independent nation. The Ausgleich did not, however, satisfy the other nationalities that made up the multinational Austro-Hungarian Empire (see Map 22.5). The Dual Monarchy simply enabled the German-speaking Austrians and Hungarian Magyars to dominate the minorities,
of the great powers, which had the greatest overall exposure to the others in terms of shared borders and sea access?

especially the Slavic peoples (Poles, Croats, Czechs, Serbs, Slovaks, Slovenes, and Little Russians), in their respective states. As the Hungarian nationalist Louis Kossuth remarked, “Dualism is the alliance of the conservative, reactionary and any apparently liberal elements in Hungary with those of the Austrian Germans who despise liberty, for the oppression of the other nationalities and races.” The nationalities problem persisted until the demise of the empire at the end of World War I.

Imperial Russia

Russia’s defeat in the Crimean War at the hands of the British and French revealed the blatant deficiencies behind the facade of absolute power and made it clear even to staunch conservatives that Russia was falling hopelessly behind the western European powers. Tsar Alexander II (1855–1881), who came to power in the midst of the Crimean War, turned his energies to a serious overhaul of the Russian system.

Serfdom was the most burdensome problem in tsarist Russia. The continuing subjugation of millions of peasants to the land and their landlords was an obviously corrupt and failing system. Reduced to antiquated methods of production based on serf labor, Russian landowners were economically pressed and unable to compete with foreign agriculture. The serfs, who formed the backbone of the Russian infantry, were uneducated and consequently

MAP 22.4 Europe in 1871. By 1871, most of the small states of Europe had been absorbed into larger ones, leaving the major powers uncomfortably rubbing shoulders with one another. Meanwhile, the power equation was shifting: the German Empire increased in power while Austria-Hungary and the Ottoman Empire declined.
increasingly unable to deal with the more complex machines and weapons of war. Then, too, peasant dissatisfaction still led to local peasant revolts that disrupted the countryside. Alexander II seemed to recognize the inevitable: “The existing order of serfdom,” he told a group of Moscow nobles, “cannot remain unchanged. It is better to abolish serfdom from above than to wait until it is abolished from below.”

**ABOLITION OF SERFDOM** On March 3, 1861, Alexander issued his emancipation edict (see the box on p. 686). Peasants could now own property, marry as they chose, and bring suits in the law courts. Nevertheless, the benefits of emancipation were limited. The government provided land for the peasants by purchasing it from the landowners, but the landowners often chose to keep the best lands. The Russian peasants soon found that they had inadequate amounts of good arable land to support themselves, a situation that worsened as the peasant population increased rapidly in the second half of the nineteenth century.

Nor were the peasants completely free. The state compensated the landowners for the land given to the peasants, but the peasants were expected to repay the state in long-term installments. To ensure that the payments were made, peasants were subjected to the authority of their *mir*, or village commune, which was collectively responsible for the land payments to the government. In a very real sense, then, the village commune, not the individual peasants, owned the land the peasants were purchasing.
Emancipation of the Serfs. On March 3, 1861, Tsar Alexander II issued an edict emancipating the Russia serfs. This watercolor by Alexei Kivshenko shows the tsar proclaiming the emancipation.

And since the village communes were responsible for the payments, they were reluctant to allow peasants to leave their land. Emancipation, then, led not to a free, land-owning peasantry along the Western model but to an unhappy, land-starved peasantry that largely followed the old ways of farming.

OTHER REFORMS Alexander II also attempted other reforms. In 1864, he instituted a system of zemstvos (zemstvos), or local assemblies, that provided a moderate degree of self-government. Representatives to the zemstvos were to be elected from the noble landowners, townpeople, and peasants, but the property-based system of voting gave a distinct advantage to the nobles. Zemstvos were given a limited power to provide public services, such as education, famine relief, and road and bridge maintenance. They could levy taxes to pay for these services, but their efforts were frequently disrupted by bureaucrats, who feared any hint of self-government. The hope of liberal nobles and other social reformers that the zemstvos would be expanded into a national parliament remained unfulfilled. The legal reforms of 1864, which created a regular system of local and provincial courts and a judicial code that accepted the principle of equality before the law, proved successful, however.

Even the autocratic tsar was unable to control the forces he unleashed by his reform program. Reformers wanted more and rapid change; conservatives opposed what they perceived as the tsar’s attempts to undermine the basic institutions of Russian society. By 1870, Russia was witnessing an increasing number of reform movements. One of the most popular stemmed from the radical writings of Alexander Herzen (tsah-SOO-likh) (1849–1919). Daughter of a poor nobleman, she worked as a clerk before joining Land and Freedom, an underground populist organization advocating radical reform. In 1878, Zasulich shot and wounded the governor-general of Saint Petersburg. Put on trial, she was acquitted by a sympathetic jury.

Encouraged by Zasulich’s successful use of violence against the tsarist regime, another group of radicals, known as the People’s Will, succeeded in assassinating Alexander II in 1881. His son and successor, Alexander III (1881–1894), turned against reform and returned to the traditional methods of repression.

Great Britain: The Victorian Age

Like Russia, Britain was not troubled by revolutionary disturbances during 1848, although for quite different reasons. The Reform Act of 1832 had opened the door to political representation for the industrial middle class, and in the 1860s, Britain’s liberal parliamentary system demonstrated once more its ability to make both social and political reforms that enabled the country to remain stable and prosperous.

One of the reasons for Britain’s stability was its continuing economic growth. After 1850, middle-class prosperity was at last coupled with some improvements for the working classes. Real wages for laborers increased more than 25 percent between 1850 and 1870. The British feeling of national pride was well reflected in Queen Victoria, whose reign from 1837 to 1901 was the longest in English history. Her sense of duty and moral respectability reflected the attitudes of her age, which has ever since
Emancipation: Serfs and Slaves

Although overall their histories have been quite different, Russia and the United States shared a common feature in the 1860s. They were the only states in the Western world that still had large enslaved populations (the Russian serfs were virtually slaves). The leaders of both countries issued emancipation proclamations within two years of each other. The first excerpt is taken from the Imperial Decree of March 3, 1861, which freed the Russian serfs. The second excerpt is from Abraham Lincoln’s Emancipation Proclamation, issued on January 1, 1863.

Tsar Alexander II, Imperial Decree, March 3, 1861

By the grace of God, we, Alexander II, Emperor and Autocrat of all the Russias, King of Poland, Grand Duke of Finland, etc., to all our faithful subjects, make known:

Called by Divine Providence and by the sacred right of inheritance to the throne of our ancestors, we took a vow in our innermost heart to respond to the mission which is intrusted to us as to surround with our affection and our Imperial solicitude all our faithful subjects of every rank and of every condition, from the warrior, who nobly bears arms for the defense of the country to the humble artisan devoted to the works of industry; from the official in the career of the high offices of the State to the laborer whose plow furrows the soil.

We thus came to the conviction that the work of a serious improvement of the condition of the peasants was a sacred inheritance bequeathed to us by our ancestors, a mission which, in the course of events, Divine providence called upon us to fulfill.

In virtue of the new dispositions above mentioned, the peasants attached to the soil will be invested within a term fixed by the law with all the rights of free cultivators.

At the same time, they are granted the right of purchasing their close, and, with the consent of the proprietors, they may acquire in full property the arable lands and other appurtenances which are allotted to them as a permanent holding. By the acquisition in full property of the quantity of land fixed, the peasants are free from their obligations toward the proprietors for land thus purchased, and they enter definitely into the condition of free peasants–landholders.

President Abraham Lincoln, Emancipation Proclamation, January 1, 1863

Now therefore, I, Abraham Lincoln, President of the United States, by virtue of the power in me vested as Commander-in-Chief of the Army and Navy of the United States in time of actual armed rebellion against the authority and government of the United States, and as a fit and necessary war measure for suppressing such rebellion, do, on this 1st day of January, A.D. 1863, and in accordance with my purpose to do so, . . . order and designate as the States and parts of States wherein the people thereof, respectively, are this day in rebellion against the United States the following, to wit:

Arkansas, Texas, Louisiana, . . . Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, and Virginia.

And by virtue of the power for the purpose aforesaid, I do order and declare that all persons held as slaves within said designated States and parts of States are, and henceforward shall be free; and that the Executive Government of the United States, including the military and naval authorities thereof, will recognize and maintain the freedom of said persons.

Q: What changes did Tsar Alexander’s emancipation of the serfs initiate in Russia? What effect did Lincoln’s Emancipation Proclamation have on the southern “armed rebellion”? What reason did each leader give for his action? Were their actions equally effective?

been known as the Victorian Age (see the Film & History feature on p. 687).

Politically, this was an era of uneasy stability as the aristocratic and upper-middle-class representatives who dominated Parliament blurred party lines by their internal strife and shifting positions. One political figure who stood out was Henry John Temple, Lord Palmerston (1784–1865), who was prime minister for most of the period from 1855 to 1865. Although a Whig, Palmerston was without strong party loyalty and found it easy to make political compromises. He was not a reformer, however, and opposed expanding the franchise. He said, “We should by such an arrangement increase the number of Bribable Electors and overpower Intelligence and Property by Ignorance and Poverty.”

DISRAELI AND THE REFORM ACT OF 1867 After Palmerston’s death in 1865, the movement for the extension of the franchise only intensified. Although the Whigs (now called the Liberals), who had been responsible for the Reform Act of 1832, talked about passing additional reform legislation, it was actually the Tories (now called the Conservatives) who carried it through. The Tory leader in Parliament, Benjamin Disraeli (dis-RAY-lee) (1804–1881), was apparently motivated by the desire to win over the newly enfranchised groups to the Conservative
The Reform Act of 1867 was an important step toward the democratization of Britain. By lowering the monetary requirements for voting (taxes paid or income earned), it by and large enfranchised many male urban workers. The number of voters increased from about 1 million to slightly over 2 million (see Table 22.1). Although Disraeli believed that this would benefit the Conservatives, industrial workers helped produce a huge Liberal victory in 1868.

The extension of the right to vote had an important by-product as it forced the Liberal and Conservative Parties to organize carefully in order to manipulate the electorate. Party discipline intensified, and the rivalry between the Liberals and Conservatives became a regular feature of parliamentary life. In large part this was due to the personal and political opposition of the two leaders of these parties, William Gladstone (1809–1898) and Disraeli.

**The Liberal Policies of Gladstone** The first Liberal administration of William Gladstone, from 1868 to 1874, was responsible for a series of impressive reforms. Legislation and government orders opened civil service positions to competitive exams rather than patronage, introduced the secret ballot for voting, and abolished the practice of purchasing military commissions. The Education Act of 1870 attempted to make elementary schools available for all children (see Chapter 24). These reforms were typically liberal. By eliminating abuses and enabling
people with talent to compete fairly, they sought to strengthen the nation and its institutions.

The United States: Slavery and War

By the mid-nineteenth century, American national unity was increasingly threatened by the issue of slavery. Both North and South had grown dramatically in population during the first half of the nineteenth century. But their development was quite different. The cotton economy and social structure of the South were based on the exploitation of enslaved black Africans and their descendants. The importance of cotton is evident from production figures. In 1810, the South produced a raw cotton crop of 178,000 bales worth $10 million. By 1860, it was generating 4.5 million bales of cotton with a value of $249 million. Fully 93 percent of southern cotton in 1850 was produced by a slave population that had grown dramatically in fifty years. Although new slave imports had been barred in 1808, there were 4 million Afro-American slaves in the South by 1860—four times the number sixty years earlier. The cotton economy and plantation-based slavery were intimately related, and the attempt to maintain them in the course of the first half of the nineteenth century led the South to become increasingly defensive, monolithic, and isolated. At the same time, the rise of an abolitionist movement in the North challenged the southern order and created an “emotional chain reaction” that led to civil war.

By the 1850s, the slavery question had caused the Whig Party to become defunct and the Democrats to split along North-South lines. The Kansas-Nebraska Act of 1854, which allowed slavery in the Kansas and Nebraska territories to be determined by popular sovereignty, created a firestorm in the North and led to the creation of a new sectional party. The Republicans were united by anti-slavery principles and were especially driven by the fear that the “slave power” of the South would attempt to spread the slave system throughout the country.

As polarization over the issue of slavery intensified, compromise became less feasible. When Abraham Lincoln, the man who had said in a speech in Illinois in 1858 that “this government cannot endure permanently half slave and half free,” was elected president in November 1860, the die was cast. Lincoln carried only 2 of the 1,109 counties in the South; the Republicans were not even on the ballot in ten southern states. On December 20, 1860, a South Carolina convention voted to repeal the state’s ratification of the U.S. Constitution. In February 1861, six more southern states did the same, and a rival nation—the Confederate States of America—was formed (see Map 22.6). In April, fighting erupted between North and South.

### TABLE 22.1 Expansion of the British Electorate

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER OF VOTERS</th>
<th>PERCENTAGE OF TOTAL POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1831</td>
<td>516,000</td>
<td>2.1</td>
</tr>
<tr>
<td>(Reform Act of 1832)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1833</td>
<td>812,000</td>
<td>3.4</td>
</tr>
<tr>
<td>1866</td>
<td>1,364,000</td>
<td>4.7</td>
</tr>
<tr>
<td>(Reform Act of 1867)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1868</td>
<td>2,418,000</td>
<td>8.4</td>
</tr>
<tr>
<td>1883</td>
<td>3,152,000</td>
<td>9.0</td>
</tr>
<tr>
<td>(Reform Act of 1884)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1885</td>
<td>5,669,000</td>
<td>16.3</td>
</tr>
</tbody>
</table>


**THE CIVIL WAR** The American Civil War (1861–1865) was an extraordinarily bloody struggle, a foretaste of the total war to come in the twentieth century. More than 600,000 soldiers died, either in battle or from deadly infectious diseases spawned by filthy camp conditions. Over a period of four years, the Union states of the North mobilized their superior assets and gradually wore down the Confederate forces of the South. As the war dragged
on, it had the effect of radicalizing public opinion in the North. What began as a war to save the Union became a war against slavery. On January 1, 1863, Lincoln’s Emancipation Proclamation made most of the nation’s slaves “forever free” (see the box on p. 686). The increasingly effective Union blockade of the South, combined with a shortage of fighting men, made the Confederate cause desperate by the end of 1864. The final push of Union troops under General Ulysses S. Grant forced General Robert E. Lee’s Confederate Army to surrender on April 9, 1865. Although problems lay ahead, the Union victory confirmed that the United States would be “one nation, indivisible.”

The Emergence of a Canadian Nation

North of the United States, the process of nation building was also making progress. By the Treaty of Paris in 1763, Canada—or New France, as it was called—passed into the hands of the British. By 1800, most Canadians favored more autonomy, although the colonists disagreed on the form this autonomy should take. Upper Canada (now Ontario) was predominantly English-speaking, whereas Lower Canada (now Quebec) was dominated by French Canadians. A dramatic increase in immigration to Canada from Great Britain (almost one million immigrants between 1815 and 1850) also fueled the desire for self-government.

In 1837, a number of Canadian groups rose in rebellion against British authority. Rebels in Lower Canada demanded separation from Britain, creation of a republic, universal male suffrage, and freedom of the press. Although the rebellions were crushed by the following year, the British government now began to seek ways to satisfy some of the Canadian demands. The American Civil War proved to be a turning point. Fearful of American designs on Canada during the war and eager to reduce the costs of
Industrialization on the Continent

The transformation of textile production from hand looms to power looms had largely been completed in Britain by the 1850s (for cotton) and 1860s (for wool). On the Continent, the period from 1850 to 1870 witnessed increased mechanization of the cotton and textile industries, although Continental countries still remained behind Britain. By 1870, hand looms had virtually disappeared in Britain, whereas in France there were still 200,000 of them, along with 80,000 power looms. Nevertheless, this period of industrial expansion on the Continent was fueled not so much by textiles as by the growth of railroads. Between 1850 and 1870, European railroad track mileage increased from 14,500 to almost 70,000. The railroads, in turn, stimulated growth in both the iron and coal industries.

Between 1850 and 1870, Continental iron industries made the transition from charcoal iron smelting to coke blast smelting. Despite the dramatic increases in the production of pig iron, the Continental countries had not yet come close to surpassing British iron production. In 1870, the British iron industry produced half the world’s pig iron—four times as much as Germany and five times as much as France. In the middle decades of the nineteenth century, the textile, mining, and metallurgical industries on the Continent also rapidly converted to the use of the steam engine.

An important factor in the expansion of markets was the elimination of barriers to international trade. Essential international waterways were opened up by the elimination of restrictive tolls. The Danube River in 1857 and the Rhine in 1861, for example, were declared freeways for all ships. The negotiation of trade treaties in the 1860s reduced or eliminated protective tariffs throughout much of western Europe.

Governments also played a role in first allowing and then encouraging the formation of joint-stock investment banks. These banks were crucial to Continental industrial development because they mobilized enormous capital resources for investment. In the 1850s and 1860s, they were very important in the promotion of railroad construction, although railroads were not always a safe investment. During a trip to Spain to examine possibilities for railroad construction, the locomotive manufacturer George Stephenson reported, “I have been a month in the country, but have not seen during the whole of that time enough people of the right sort to fill a single train.” His misgivings proved to be well founded. In 1864, the Spanish banking system, which depended largely on investments in railway shares, collapsed.
Before 1870, capitalist factory owners remained largely free to hire labor on their own terms based on market forces. Although workers formed trade unions in an effort to fight for improved working conditions and reasonable wages, the unions tended to represent only a small part of the industrial working class and proved largely ineffective. Real change for the industrial proletariat would come only with the development of socialist parties and socialist trade unions. These emerged after 1870, but the theory that made them possible had already been developed by midcentury in the work of Karl Marx.

**Marx and Marxism**

The beginnings of Marxism can be traced to the 1848 publication of *The Communist Manifesto*, a short treatise written by two Germans, Karl Marx (1818–1883) and Friedrich Engels (1820–1895). Marx was born into a relatively prosperous middle-class family in Trier in western Germany. He descended from a long line of rabbis, although his father, a lawyer, had become a Protestant to keep his job. Marx enrolled at the University of Bonn in 1835, but his carefree student ways soon led his father to send him to the more serious-minded University of Berlin, where he encountered the ideas of the German philosopher Georg Wilhelm Friedrich Hegel. After receiving a Ph.D. in philosophy, Marx planned to teach at a university. Unable to obtain a position because of his professed atheism, Marx decided on a career in journalism and eventually became the editor of a liberal bourgeois newspaper in Cologne in 1842. After the newspaper was suppressed because of his radical views, Marx moved to Paris. There he met Friedrich Engels, who became his lifelong friend and financial patron.

Engels, the son of a wealthy German cotton manufacturer, had worked in Britain at one of his father’s factories in Manchester. There he had acquired a firsthand knowledge of what he came to call the “wage slavery” of the British working classes, which he detailed in *The Conditions of the Working Class in England*, a damning
indictment of industrial life written in 1844. Engels would contribute his knowledge of actual working conditions as well as monetary assistance to the financially strapped Marx.

In 1847, Marx and Engels joined a tiny group of primarily German socialist revolutionaries known as the Communist League. By this time, both Marx and Engels were enthusiastic advocates of the radical working-class movement and agreed to draft a statement of their ideas for the league. The resulting Communist Manifesto, published in German in January 1848, appeared on the eve of the revolutions of 1848. One would think from the opening lines of the preface that the pamphlet alone had caused this revolutionary upheaval: “A spectre is haunting Europe—the spectre of Communism. All the Powers of Old Europe have entered into a holy alliance to exorcise this spectre: Pope and Czar, Metternich and Guizot, French Radicals and German police spies.” In fact, The Communist Manifesto was known to only a few of Marx’s friends. Although its closing words—“The proletarians have nothing to lose but their chains. They have a world to win. WORKING MEN OF ALL COUNTRIES, UNITE!”—were clearly intended to rouse the working classes to action, they passed unnoticed in 1848. The work, however, became one of the most influential political treatises in modern European history.

According to Engels, Marx’s ideas were partly a synthesis of French and German thought. The French provided Marx with ample documentation for his assertion that a revolution could totally restructure society. They also provided him with several examples of socialism. From the German idealistic philosophers such as Hegel, Marx took the idea of dialectic: everything evolves, and all change in history is the result of conflicts between antagonistic elements. Marx was particularly impressed by Hegel, but he disagreed with Hegel’s belief that history is determined by ideas manifesting themselves in historical forces. Instead, said Marx, the course of history is determined by material forces.

**IDEAS OF THE COMMUNIST MANIFESTO** Marx and Engels began the Manifesto with the statement that “the history of all hitherto existing society is the history of class struggles.” Throughout history, oppressed and oppressor have “stood in constant opposition to one another.” In an earlier struggle, the feudal classes of the Middle Ages were forced to accede to the emerging middle class or bourgeoisie. As the bourgeoisie took control in turn, its ideas became the dominant views of the era, and government became its instrument. Marx and Engels declared, “The executive of the modern State is but a committee for managing the common affairs of the whole bourgeoisie.” In other words, the government of the state reflected and defended the interests of the industrial middle class and its allies.

Although bourgeois society had emerged victorious out of the ruins of feudalism, Marx and Engels insisted that it had not triumphed completely. Now once again the members of the bourgeoisie were antagonists in an emerging class struggle, but this time they faced the proletariat, or the industrial working class. The struggle would be fierce, but eventually, so Marx and Engels predicted, the workers would overthrow their bourgeois masters. After this victory, the proletariat would form a dictatorship to reorganize the means of production. Then a classless society would emerge, and the state—itself an instrument of the bourgeoisie—would wither away since it no longer represented the interests of a particular class. Class struggles would then be over (see the box on p. 693).

Marx believed that the emergence of a classless society would lead to progress in science, technology, and industry and to greater wealth for all. After the failure of the revolutions of 1848, Marx went to London, where he spent the rest of his life. He continued his writing on political economy, especially his famous work, Das Kapital (Capital), only one volume of which he completed. After his death, the remaining volumes were edited by his friend Engels.

**ORGANIZING THE WORKING CLASS** One of the reasons Das Kapital was not finished was Marx’s own preoccupation with organizing the working-class movement. In The Communist Manifesto, Marx had defined the communists as “the most advanced and resolute section of the working-class parties of every country.” Their advantage was their ability to understand “the line of march, the conditions, and the ultimate general results of the proletarian movement.” Marx saw his role in this light and participated enthusiastically in the activities of the International Working Men’s Association. Formed in 1864 by British and French trade unionists, this “First International” served as an umbrella organization for working-class interests. Marx was the dominant personality on the organization’s General Council and devoted much time to its activities. Internal dissension within the ranks soon damaged the organization, and it failed in 1872. Although it would be revived in 1889, the fate of socialism by that time was in the hands of national socialist parties.

**Science and Culture in an Age of Realism**

**Q** **F**ocus **Q**uestion: How did the belief that the world should be viewed realistically manifest itself in science, art, and literature in the second half of the nineteenth century?

Between 1850 and 1870, two major intellectual developments are evident: the growth of scientific knowledge, with its rapidly increasing impact on the Western worldview, and the shift from Romanticism and its focus on the
The Classless Society

In *The Communist Manifesto*, Karl Marx and Friedrich Engels projected the creation of a classless society as the end product of the struggle between the bourgeoisie and the proletariat. In this selection, they discuss the steps by which that classless society would be reached.

**Karl Marx and Friedrich Engels, *The Communist Manifesto***

We have seen . . . that the first step in the revolution by the working class is to raise the proletariat to the position of ruling class. . . . The proletariat will use its political supremacy to wrest, by degrees, all capital from the bourgeoisie, to centralize all instruments of production in the hands of the State, i.e., of the proletariat organized as the ruling class; and to increase the total of productive forces as rapidly as possible.

Of course, in the beginning, this cannot be effected except by means of despotic inroads on the rights of property, and on the conditions of bourgeois production; by means of measures, therefore, which appear economically insufficient and untenable, but which, in the course of the movement, outstrip themselves, necessitate further inroads upon the old social order, and are unavoidable as a means of entirely revolutionizing the mode of production.

These measures will of course be different in different countries.

Nevertheless, in the most advanced countries, the following will be pretty generally applicable:

1. Abolition of property in land and application of all rents of land to public purposes.
2. A heavy progressive or graduated income tax.
3. Abolition of all right of inheritance . . .
4. Centralization of credit in the hands of the State, by means of a national bank with State capital and an exclusive monopoly.
5. Centralization of the means of communication and transport in the hands of the State.
6. Extension of factories and instruments of production owned by the State . . .
7. Extension of factories and instruments of production owned by the State . . .
8. Equal liability of all to labor. Establishment of industrial armies, especially for agriculture.
9. Combination of agriculture with manufacturing industries; gradual abolition of the distinction between town and country, by a more equable distribution of the population over the country.

When, in the course of development, class distinctions have disappeared, and all production has been concentrated in the whole nation, the public power will lose its political character. Political power, properly so called, is merely the organized power of one class for oppressing another. If the proletariat during its contest with the bourgeoisie is compelled, by the force of circumstances, to organize itself as a class, if, by means of a revolution, it makes itself the ruling class, and, as such, sweeps away by force the old conditions of production, then it will, along with these conditions, have swept away the conditions for the existence of class antagonisms and of classes generally, and will thereby have abolished its own supremacy as a class.

In place of the old bourgeois society, with its classes and class antagonisms, we shall have an association, in which the free development of each is the condition for the free development of all.

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Q. How did Marx and Engels define the proletariat? The bourgeoisie? Why did Marxists come to believe that this distinction was paramount for understanding history? What steps did Marx and Engels believe would lead to a classless society? Considering that Marx criticized early socialists as utopian and regarded his own socialism as scientific, do you think that his socialism was also utopian? Why or why not?

inner world of reality to Realism and its turning toward the outer, material world.

**A New Age of Science**

By the mid-nineteenth century, science was having an ever-greater impact on European life. The Scientific Revolution of the sixteenth and seventeenth centuries had fundamentally transformed the Western worldview and led to a modern, rational approach to the study of the natural world. Even in the eighteenth century, however, these intellectual developments had remained the preserve of an educated elite and resulted in few practical benefits. Moreover, the technical advances of the early Industrial Revolution had depended little on pure science and much more on the practical experiments of technologically oriented amateur inventors. Advances in industrial technology, however, fed an interest in basic scientific research, which in the 1830s and afterward resulted in a rash of basic scientific discoveries that were soon converted into technological improvements that affected everybody.
The development of the steam engine was important in encouraging scientists to work out its theoretical foundations, a preoccupation that led to thermodynamics, the science of the relationship between heat and mechanical energy. The laws of thermodynamics were at the core of nineteenth-century physics. In biology, the Frenchman Louis Pasteur (LWEE pas-TOOR) formulated the germ theory of disease, which had enormous practical applications in the development of modern scientific medical practices (see “A Revolution in Health Care” later in this chapter). In chemistry, in the 1860s, the Russian Dmitri Mendeleev (di-MEE-tree men-duh-LAY-ef) (1834–1907) classified all the material elements then known on the basis of their atomic weights and provided the systematic foundation for the periodic law. The Englishman Michael Faraday (1791–1867) discovered the phenomenon of electromagnetic induction and put together a primitive generator that laid the foundation for the use of electricity, although economically efficient generators were not built until the 1870s.

The steadily increasing and often dramatic material gains generated by science and technology led to a growing faith in the benefits of science. The popularity of scientific and technological achievement produced a widespread acceptance of the scientific method, based on observation, experiment, and logical analysis, as the only path to objective truth and objective reality. This in turn undermined the faith of many people in religious revelation and truth. It is no accident that the nineteenth century was an age of increasing secularization, particularly evident in the growth of materialism, the belief that everything mental, spiritual, or ideal was simply a result of physical forces. Truth was to be found in the concrete material existence of human beings and not, as the Romantics imagined, in revelations gained by feeling or intuitive flashes. The importance of materialism was strikingly evident in the most important scientific event of the nineteenth century, the development of the theory of organic evolution according to natural selection. On the theories of Charles Darwin could be built a picture of humans as material beings that were simply part of the natural world.

Charles Darwin and the Theory of Organic Evolution

Charles Darwin (1809–1882), like many of the great scientists of the nineteenth century, was a scientific amateur. Born into an upper-middle-class family, he studied theology at Cambridge University while pursuing an intense side interest in geology and biology. In 1831, at the age of twenty-two, his hobby became his vocation when he accepted an appointment as a naturalist to study animals and plants on an official Royal Navy scientific expedition aboard the H.M.S. Beagle. Its purpose was to survey and study the landmasses of South America and the South Pacific. Darwin’s specific job was to study the structure of various forms of plant and animal life. He was able to observe animals on islands virtually untouched by external influence and compare them with animals on the mainland. As a result, Darwin came to discard the notion of a special creation and to believe that animals evolved over time and in response to their environment. When he returned to Britain, he eventually formulated an explanation for evolution in the principle of natural selection, a theory that he presented in 1859 in his celebrated book, On the Origin of Species by Means of Natural Selection.

THE THEORY OF EVOLUTION

The basic idea of Darwin’s book was that all plants and animals had evolved over a long period of time from earlier and simpler forms of life, a principle known as organic evolution. Darwin was important in explaining how this natural process worked. He took the first step from Thomas Malthus’s theory of population: “in every species, ‘many more individuals of each species are born than can possibly survive.’” This results in a “struggle for existence.” Darwin believed that “as more individuals are produced than can possibly survive, there must in every case be a struggle for existence, either one individual with another of the same species, or with the individuals of distinct species, or with the physical conditions of life.” Those who succeeded in this struggle for existence had adapted better to their environment, a process made possible by the appearance of “variants.” Chance variations that occurred in the process of inheritance enabled some organisms to be more adaptable to the environment than others, a process that Darwin called natural selection: “Owing to this struggle [for existence], variations, however slight, . . . if they be in any degree profitable to the individuals of a species, in their infinitely complex relations to other organic beings and to their physical conditions of life, will tend to the preservation of such individuals, and will generally be inherited by the offspring.” Those that were naturally selected for survival (“survival of the fit”) survived. The unfit did not and became extinct. The fit who survived propagated and passed on the variations that enabled them to survive until, from Darwin’s point of view, a new separate species emerged.

In On the Origin of Species, Darwin discussed plant and animal species only. He was not concerned with humans themselves and only later applied his theory of natural selection to humans. In The Descent of Man, published in 1871, he argued for the animal origins of human beings: “man is the co-descendant with other mammals of a common progenitor.” Humans were not an exception to the rule governing other species (see the box on p. 695).

Darwin’s ideas were highly controversial at first. Some people fretted that Darwin’s theory made human beings ordinary products of nature rather than unique beings. Others were disturbed by the implications of life as a struggle for survival, of “nature red to tooth and claw.” Was there a place in the Darwinian world for moral values? For those who believed in a rational order in the
Darwin published his theory of organic evolution in 1859, followed twelve years later by *The Descent of Man*, in which he argued that human beings, like other animals, evolved from lower forms of life. The theory provoked a firestorm of criticism, especially from the clergy. One critic described Darwin's theory as a "brutal philosophy"—to wit, there is no God, and the ape is our Adam.

Charles Darwin, *The Descent of Man*

The main conclusion here arrived at, and now held by many naturalists, who are well competent to form a sound judgment, is that man is descended from some less highly organized form. The grounds upon which this conclusion rests will never be shaken, for the close similarity between man and the lower animals in embryonic development, as well as in innumerable points of structure and constitution, both of high and of the most trifling importance,—the rudiments which he retains, and the abnormal reversions to which he is occasionally liable,—are facts which cannot be disputed. They have long been known, but until recently they told us nothing with respect to the origin of man. Now when viewed by the light of our knowledge of the whole organic world, their meaning is unmistakable. The great principle of evolution stands up clear and firm, when these groups of facts are considered in connection with others, such as the mutual affinities of the members of the same group, their geographical distribution in past and present times, and their geological succession. It is incredible that all these facts should speak falsely. He who is not content to look, like a savage, at the phenomena of nature as disconnected, cannot any longer believe that man is the work of a separate act of creation. He will be forced to admit that the close resemblance of the embryo of man to that, for instance, of a dog—the construction of his skull, limbs and whole frame on the same plan with that of other mammals, independently of the uses to which the parts may be put—the occasional reappearance of various structures, for instance of several muscles, which man does not normally possess...and a crowd of analogous facts—all point in the plainest manner to the conclusion that man is the co-descendant with other mammals of a common progenitor. . . .

Man may be excused for feeling some pride at having risen, though not through his own exertions, to the very summit of the organic scale; and the fact of his having thus risen, instead of having been aboriginally placed there, may give him hope for a still higher destiny in the distant future. But we are not here concerned with hopes or fears, only with the truth as far as our reason permits us to discover it; and I have given the evidence to the best of my ability. We must, however, acknowledge, as it seems to me, that man with all his noble qualities, with sympathy which feels for the most debased, with benevolence which extends not only to other men but to the humblest living creature, with his god-like intellect which has penetrated into the movements and constitution of the solar system—with all these exalted powers—Man still bears in his bodily frame the indelible stamp of his lowly origin.

**Q** What was Darwin’s basic argument in *The Descent of Man*? Why did so many object to it? What forces in nineteenth-century European society do you think came together to stimulate Darwin’s thinking and publications on this subject?

**PASTEUR AND GERMS** The major breakthrough toward a scientific medicine occurred with the discovery of microorganisms, or germs, as the agents causing disease. The germ theory of disease was largely the work of Louis Pasteur (1822–1895). Pasteur was not a doctor but a chemist who approached medical problems in a scientific fashion. In 1857, Pasteur went to Paris as director of scientific studies at the Ecole Normale, where experiments he conducted proved that microorganisms of various kinds were responsible for the process of fermentation, thereby launching the science of bacteriology.

Government and private industry soon perceived the inherent practical value of Pasteur’s work. His examination of a disease threatening the wine industry led to the development in 1863 of a process—subsequently known as *pasteurization*—for heating a product to destroy the organisms causing spoilage. In 1877, Pasteur turned his attention to human diseases. His desire to do more than...
simply identify disease-producing organisms led him in 1885 to a preventive vaccination against rabies. In the 1890s, the principle of vaccination was extended to diphtheria, typhoid fever, cholera, and plague, creating a modern immunological science.

The work of Pasteur and the others who followed him in isolating the specific bacteriological causes of numerous diseases had a far-reaching impact. By providing a rational means of treating and preventing infectious diseases, they transformed the medical world. Both the practice of surgery and public health experienced a renaissance.

**NEW SURGICAL PRACTICES** Surgeons had already achieved a new professionalism by the end of the eighteenth century (see Chapter 17), but the discovery of germs and the introduction of anesthesia created a new environment for surgical operations. Surgeons had traditionally set broken bones, treated wounds, and amputated limbs, usually as a result of injuries in war. One major obstacle to more successful surgery was the inevitable postoperative infection, which was especially rampant in hospitals.

Joseph Lister (1827–1912), who developed the aseptic principle, was one of the first people to deal with this problem. Following the work of Pasteur, Lister perceived that bacteria might enter a wound and cause infection. His use of carbolic acid, a newly discovered disinfectant, proved remarkably effective in eliminating infections during surgery. Lister’s discoveries dramatically transformed surgery wards as patients no longer succumbed regularly to what was called “hospital gangrene.”

The second great barrier to large-scale surgery stemmed from the inability to lessen the pain of the patient. Alcohol and opiates had been used for centuries during surgical operations, but even their use did not allow unhurried operative maneuvers. After experiments with numerous agents, sulfuric ether was first used successfully in an operation at the Massachusetts General Hospital in 1846 (see the box on p. 697). Within a year, chloroform began to rival ether as an anesthetic agent.

**NEW PUBLIC HEALTH MEASURES** Although the great discoveries of bacteriology came after the emergence of the first public health movement, they significantly furthered its development. Based on the principle of preventive rather than curative medicine, the urban public health movement of the 1840s and 1850s was largely a response to the cholera epidemic (see Chapter 23). One medical man, in fact, called cholera “our best ally” in furthering public hygiene. The prebacteriological hygiene movement focused on providing clean water, adequate sewage disposal, and less crowded housing conditions. Bacterial discoveries led to greater emphasis on preventive measures, such as the pasteurization of milk, improved purification of water supplies, immunization against disease, and control of waterborne diseases. The public health movement also resulted in the government’s hiring medical doctors not just to treat people but to deal with issues of public health as well.

**NEW MEDICAL SCHOOLS** The new scientific developments also had an important impact on the training of doctors for professional careers in health care. Although there were a few medical schools at the beginning of the nineteenth century, most medical instruction was still done by a system of apprenticeship. In the course of the nineteenth century, virtually every Western country founded new medical schools, but attempts to impose uniform standards on them through certifying bodies met considerable resistance. Entrance requirements were virtually nonexistent, and degrees were granted after several months of lectures. Professional organizations founded around midcentury, such as the British Medical Association in 1832, the American Medical Association in 1847, and the German Doctors’ Society in 1872, attempted to elevate professional standards but achieved little until the end of the century. The establishment of the Johns Hopkins University School of Medicine in 1893, with its four-year graded curriculum, clinical training for advanced students, and use of laboratories for teaching purposes, provided a new model for medical training that finally became standard practice in the twentieth century.
Anesthesia and Modern Surgery

Modern scientific medicine became established in the nineteenth century. Important to the emergence of modern surgery was the development of anesthetic agents that would block the patient’s pain and enable surgeons to complete their surgery without the haste that had characterized earlier operations. This document is an eyewitness account of the first successful use of ether anesthesia, which took place at the Massachusetts General Hospital in 1846.

The First Public Demonstration of Ether Anesthesia, October 16, 1846

The day arrived; the time appointed was noted on the dial, when the patient was led into the operating-room, and Dr. Warren and a board of the most eminent surgeons in the State were gathered around the sufferer. “All is ready—the stillness oppressive.” It had been announced “that a test of some preparation was to be made for which the astonishing claim had been made that it would render the person operated upon free from pain.” These are the words of Dr. Warren that broke the stillness.

Those present were incredulous, and, as Dr. Morton had not arrived at the time appointed and fifteen minutes had passed, Dr. Warren said, with significant meaning, “I presume he is otherwise engaged.” This was followed with a “derisive laugh,” and Dr. Warren grasped his knife and was about to proceed with the operation. At that moment Dr. Morton entered a side door, when Dr. Warren turned to those present and said, “Gentlemen, this is no humbug.”

Here the most sublime scene ever witnessed in the operating-room was presented, when the patient placed himself voluntarily upon the table, which was to become the altar of future fame. Not that he did so for the purpose of advancing the science of medicine, nor for the good of his fellow-men, for the act itself was purely a personal and selfish one. He was about to assist in solving a new and important problem of therapeutics, whose benefits were to be given to the whole civilized world, yet wholly unconscious of the sublimity of the occasion or the art he was taking.

That was a supreme moment for a most wonderful discovery, and, had the patient died upon the operation, science would have waited long to discover the hypnotic effects of some other remedy of equal potency and safety, and it may be properly questioned whether chloroform would have come into use as it has at the present time.

The heroic bravery of the man who voluntarily placed himself upon the table, a subject for the surgeon’s knife, should be recorded and his name enrolled upon parchment, which should be hung upon the walls of the surgical amphitheater in which the operation was performed. His name was Gilbert Abbott.

The operation was for a congenital tumor on the left side of the neck, extending along the jaw to the maxillary gland and into the mouth, embracing a margin of the tongue. The operation was successful; and when the patient recovered he declared he had suffered no pain. Dr. Warren turned to those present and said, “Gentlemen, this is no humbug.”

Q In what ways does this account demonstrate the impact that modern science had made on Western society by the middle of the nineteenth century? What forces conjoined to encourage the practical application and refinement of new scientific discoveries?

WOMEN AND MEDICAL SCHOOLS During most of the nineteenth century, medical schools in Europe and the United States were closed to female students. When Harriet Hunt applied to Harvard Medical School, the male students drew up resolutions that prevented her admission:

Resolved, that no woman of true delicacy would be willing in the presence of men to listen to the discussion of subjects that necessarily come under consideration of the students of medicine.

Resolved, that we object to having the company of any female forced upon us, who is disposed to unsex herself, and to sacrifice her modesty by appearing with men in the lecture room.11

Elizabeth Blackwell (1821–1910) achieved the first major breakthrough for women in medicine. Although she had been admitted to the Geneva College of Medicine in New York by mistake, Blackwell’s perseverance and intelligence won her the respect of her fellow male students. She received her M.D. degree in 1849 and eventually established a clinic in New York City.

European women experienced difficulties similar to Blackwell’s. In Britain, Elizabeth Garret and Sophia Jex-Blake had to struggle for years before they were finally admitted to the practice of medicine. The unwillingness of medical schools to open their doors to women led to the formation of separate medical schools for women. The Female Medical College of Pennsylvania, established in 1850, was the first in the United States, and the London School of Medicine for Women was founded in 1874. But even after graduation from such institutions, women faced obstacles when they tried to practice as doctors. Many
were denied licenses, and hospitals often closed their doors to them. In Britain, Parliament finally capitulated to pressure and passed a bill in 1876 giving women the right to take qualifying examinations. Soon women were entering medical schools in ever-larger numbers. By the 1890s, universities in Great Britain, Sweden, Denmark, Norway, Finland, Russia, and Belgium were admitting women to medical training and practice. Germany and Austria did not do so until after 1900. Even then, medical associations refused to accept women as equals in the medical profession. Women were not given full membership in the American Medical Association until 1915.

Science and the Study of Society

The importance of science in the nineteenth century perhaps made it inevitable that a scientific approach would be applied to the realm of human activity. The attempt to apply the methods of science systematically to the study of society was perhaps most evident in the work of the Frenchman Auguste Comte (ow-GOOST KOHNT) (1798–1857). His major work, System of Positive Philosophy, was published between 1837 and 1842 but had its real impact after 1850.

Comte created a system of “positive knowledge” based on a hierarchy of all the sciences. Mathematics was the foundation on which the physical sciences, earth sciences, and biological sciences were built. At the top was sociology, the science of human society, which for Comte incorporated economics, anthropology, history, and social psychology. Comte saw sociology’s task as a difficult one. The discovery of the general laws of society would have to be based on the collection and analysis of data on humans and their social environment. Although his schemes were often complex and dense, Comte played an important role in the growing popularity of science and materialism in the mid-nineteenth century.

Realism in Literature

The belief that the world should be viewed realistically, frequently expressed after 1850, was closely related to the materialistic outlook. The term Realism was first employed in 1850 to describe a new style of painting and soon spread to literature.

The literary Realists of the mid-nineteenth century were distinguished by their deliberate rejection of Romanticism. The literary Realists wanted to deal with ordinary characters from real life rather than Romantic heroes in unusual settings. They also sought to avoid flowery and sentimental language by using careful observation and accurate description, an approach that led them to eschew poetry in favor of prose and the novel. Realists often combined their interest in everyday life with a searching examination of social questions.

The leading novelist of the 1850s and 1860s, the Frenchman Gustave Flaubert (goo-STAHV floh-BAYR) (1821–1880), perfected the Realist novel. His Madame Bovary (1857) was a straightforward description of barren and sordid small-town life in France. Emma Bovary, a woman of some vitality, is trapped in a marriage to a drab provincial doctor. Impelled by the images of romantic love she has read about in novels, she seeks the same thing for herself in adulterous affairs. Unfulfilled, she is ultimately driven to suicide, unrepentant to the end for her lifestyle. Flaubert’s contempt for bourgeois society was evident in his portrayal of middle-class hypocrisy and smugness.

William Thackeray (1811–1863) wrote Britain’s prototypical Realist novel, Vanity Fair: A Novel Without a Hero, in 1848. Thackeray deliberately flouted the Romantic conventions. A novel, Thackeray said, should “convey as strongly as possible the sentiment of reality as opposed to a tragedy or poem, which may be heroic.” Perhaps the greatest of the Victorian novelists was Charles Dickens (1812–1870), whose realistic novels focusing on the lower and middle classes in Britain’s early industrial age became extraordinarily successful. His descriptions of the urban poor and the brutalization of human life were vividly realistic (see the box on p. 700).

Realism in Art

In the first half of the nineteenth century, Romanticism in art had been paralleled by the classical school of painting, but both were superseded by the new mood of the mid-nineteenth century. In art, too, Realism became dominant after 1850, although Romanticism was by no means dead. Among the most important characteristics of Realism were a desire to depict the everyday life of ordinary people, be they peasants, workers, or prostitutes; an attempt at photographic realism; and an interest in the natural environment. The French became leaders in Realist painting.

COURBET Gustave Courbet (goo-STAHV koor-BAY) (1819–1877) was the most famous artist of the Realist school. In fact, the word Realism was first coined in 1850 to describe one of his paintings. Courbet reveled in a realistic portrayal of everyday life. His subjects were factory workers, peasants, and the wives of saloon keepers. “I have never seen either angels or goddesses, so I am not interested in painting them,” he exclaimed. One of his famous works, The Stonebreakers, painted in 1849, shows two road workers engaged in the deadening work of breaking stones to build a road. This representation of human misery was a scandal to those who objected to his “cult of ugliness.” To Courbet, no subject was too ordinary, too harsh, or too ugly to interest him.

MILLET Jean-François Millet (ZHAHNH-frahnh-SWAH mi-YEH) (1814–1875) was preoccupied with scenes from rural life, especially peasants laboring in the fields, although his Realism still contained an element of Romantic sentimentality. In The Gleaners, his most famous work, three peasant women gather grain in a field, a centuries-old practice that for Millet showed the symbiotic relationship between humans and nature. Millet made landscape and
Jean-François Millet, *The Gleaners.*

Jean-François Millet, another prominent French Realist painter, took a special interest in the daily activities of French peasants, although he tended to transform his peasants into heroic figures who dominated their environment. In *The Gleaners,* for example, the three peasant women engaged in the backbreaking work of gathering grain left after the harvest still appear as powerful figures, symbolizing the union of humans with the earth.

Gustave Courbet, *The Stonebreakers.*

Realism, largely developed by French painters, aimed at a lifelike portrayal of the daily activities of ordinary people. Gustave Courbet was the most famous of the Realist artists. As is evident in *The Stonebreakers,* he sought to portray things as they really appear. He shows an old road builder and his young assistant in their tattered clothes, engrossed in their dreary work of breaking stones to construct a road. The use of browns and grays helps communicate the drudgery of their task.
Realism: Charles Dickens and an Image of Hell on Earth

Charles Dickens was one of Britain’s greatest novelists. Though he realistically portrayed the material, social, and psychological milieu of his time, an element of Romanticism still pervaded his novels. This is evident in this selection from The Old Curiosity Shop in which his description of the English mill town of Birmingham takes on the imagery of Dante’s Hell.

Charles Dickens, The Old Curiosity Shop

A long suburb of red brick houses,—some with patches of garden ground, where coal-dust and factory smoke darkened the shrinking leaves, and coarse rank flowers; and where the struggling vegetation sickened and sank under the hot breath of kiln and furnace, making them by its presence seem yet more blighting and unwholesome than in the town itself,—a long, flat, straggling suburb passed, they came by slow degrees upon a cheerless region, where not a blade of grass was seen to grow; where not a bud put forth its promise in the spring; where nothing green could live but on the surface of the stagnant pools, which here and there lay idly sweltering by the black roadside.

Advancing more and more into the shadow of this mournful place, its dark depressing influence stole upon their spirits, and filled them with a dismal gloom. On every side, and as far as the eye could see into the heavy distance, tall chimneys, crowding on each other, and presenting that endless repetition of the same dull, ugly form, which is the horror of oppressive dreams, poured out their plague of smoke, obscured the light, and made foul the melancholy air. On mounds of ashes by the wayside, sheltered only by a few rough boards, or rotten pent-house roofs, strange engines spun and writhed like tortured creatures; clanking their iron chains, shrieking in their rapid whirl from time to time as though in torment unendurable, and making the ground tremble with their agonies. Dismantled houses here and there appeared, tottering to the earth, propped up by fragments of others that had fallen down, unroofed, windowless, blackened, desolate, but yet inhabited. Men, women, children, wan in their looks and ragged in attire, tended the engines, fed their tributary fires, begged upon the road, or scowled half-naked from the doorless houses. Then came more of the wrathful monsters, whose like they almost seemed to be in their wildness and their untamed air, screeching and turning to the right and left, with the same interminable perspective of brick towers, never ceasing in their black vomit, blasting all things living or inanimate, shutting out the face of day, and closing in on all these horrors with a dense dark cloud.

But night-time in this dreadful spot!—night, when the smoke was changed to fire; when every chimney spurted up its flame; and places, that had been dark vaults all day, now shone red-hot, with figures moving to and fro within their blazing jaws, and calling to one another with hoarse cries,—night, when the noise of every strange machine was aggravated by the darkness; when the people near them looked wilder and more savage; when bands of unemployed laborers paraded in the roads, or clustered by torchlight round their leaders, who told them in stern language of their wrongs, and urged them on by frightful cries and threats; when maddened men, armed with sword and firebrand, spurning the tears and prayers of women who would restrain them, rushed forth on errands of terror and destruction, to work no ruin half so surely as their own—night, when carts came rumbling by, filled with rude coffins (for contagious disease and death had been busy with the living crops); or when orphans cried, and distracted women shrieked and followed in their wake—night, when some called for bread, and some for drink to drown their cares; and some with tears, and some with staggering feet, and so with bloodshot eyes, went brooding home—night, which, unlike the night that Heaven sends on earth, brought with it no peace, nor quiet, nor signs of blessed sleep—who shall tell the terrors of the night to that young wandering child! ☢-

Q What image of Birmingham do you get from this selection by Dickens? Why is it so powerful? What does the passage reveal about Dickens himself and the roles European writers played in the reform of nineteenth-century society?

country life an important subject matter for French artists, but he, too, was criticized by his contemporaries for crude subject matter and unorthodox technique.

Music: The Twilight of Romanticism

The mid-nineteenth century witnessed the development of a new group of musicians known as the New German School. They emphasized emotional content rather than abstract form and championed new methods of using music to express literary or pictorial ideas.

LISZT The Hungarian-born composer Franz Liszt (FRAHNTS LIST) (1811–1886) best exemplifies the achievements of the New German School. A child prodigy, he established himself as an outstanding concert artist by
the age of twelve. Liszt's performances and his dazzling personality made him the most highly esteemed virtuoso of his age. He has been called the greatest pianist of all time and has been credited with introducing the concept of the modern piano recital.

Liszt's compositions consist mainly of piano pieces, although he composed in other genres as well, including sacred music. He invented the term *symphonic poem* to refer to his orchestral works, which did not strictly obey traditional forms and were generally based on a literary or pictorial idea. Under the guidance of Liszt and the New German School, Romantic music reached its peak.

**Wagner** Although Liszt was an influential mentor to a number of young composers, he was most closely associated with his eventual son-in-law Richard Wagner (RIKH-art VAHG-nur) (1813–1883). Building on the advances made by Liszt and the New German School, Wagner ultimately realized the German desire for a truly national opera. Wagner was not only a composer but also a propagandist and writer in support of his unique conception of dramatic music. Called both the culmination of the Romantic era and the beginning of the avant-garde, Wagner's music may be described as a monumental development in classical music.

Believing that opera is the best form of artistic expression, Wagner transformed opera into "music drama" through his Gesamtkunstwerk (guh-ZAHMT-koonst-vayrk) ("total art work"), a musical composition for the theater in which music, acting, dance, poetry, and scenic design are synthesized into a harmonious whole. He abandoned the traditional divisions of opera, which interrupted the dramatic line of the work, and instead used a device called a *leitmotiv*, a recurring musical theme in which the human voice combined with the line of the orchestra instead of rising above it. His operas incorporate literally hundreds of leitmotivs in order to convey the story. For his themes, Wagner looked to myth and epic tales from the past. His most ambitious work was *The Ring of the Nibelung*, a series of four music dramas dealing with the mythical gods of the ancient German epic.

**CHAPTER SUMMARY**

Between 1850 and 1871, the national state became the focus of people's loyalty, and the nations of Europe spent their energies in achieving unification or reform. France attempted to relive its memories of Napoleonic greatness through the election of Louis Napoleon, Napoleon's nephew, as president and later Emperor Napoleon III. Louis Napoleon was one of a new generation of conservative political leaders who were practitioners of *Realpolitik*.

Unification to achieve a national state preoccupied leaders in Italy and Germany. The dreams of Mazzini became a reality when the combined activities of Count Cavour and Giuseppe Garibaldi finally led to the unification of Italy in 1870. Under the guidance of Otto von Bismarck, Prussia engaged in wars with Denmark, Austria, and France before it finally achieved the goal of national unification in 1871.

Reform characterized developments in other Western states. Austria compromised with Hungarian nationalists and created the Dual Monarchy of Austria-Hungary. Russia's defeat in the Crimean War led to reforms under Alexander II, which included the freeing of the Russian serfs. In Great Britain, the pressures of industrialization led to a series of reforms that made the realm of Queen Victoria more democratic. The American Civil War ended with the union of the states preserved and slavery abolished. Canada achieved dominion status from Britain, which included the right to rule itself in domestic affairs.

Political nationalism had emerged during the French revolutionary era and had become a powerful force for change during the first half of the nineteenth century, but its triumph came only after 1850. Associated initially with middle-class liberals, it would have great appeal to the broad masses as well by the end of the century as people created their national "imagined communities." In 1871, however, the political transformations stimulated by the force of nationalism were by no means complete. Significantly large minorities, especially in the multiethnic empires controlled by the Austrians, Turks, and Russians, had not achieved the goal of their own national states. Moreover, the nationalism that had triumphed by 1871 was no longer the nationalism that had been closely identified with liberalism. Liberal nationalists had believed that unified nation-states would preserve individual rights and lead to a greater community of European peoples. Rather than unifying people, however, the new, loud, chauvinistic nationalism of the late nineteenth century divided them as the new national states became embroiled in bitter competition after 1871.
The period between 1850 and 1871 was also characterized by the emergence of Marxian socialism, new advances in science including the laws of thermodynamics, a germ theory of disease, and Darwin’s theory of evolution. In the arts, Realism prevailed, evident in the writers and artists who were only too willing to portray realistically the grim world in which they lived.

CHAPTER TIMELINE

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CHAPTER REVIEW

Upon Reflection

Q To what extent is it true to say that the forces of liberalism and nationalism triumphed in the Austrian Empire, Russia, and Great Britain between 1850 and 1871?

Q Despite Marx’s claim for its scientific basis, can Marxism be viewed primarily as a product of its age? Why or why not?

Q How did Realism differ from Romanticism, and how did Realism reflect the economic and social realities of Europe during the middle decades of the nineteenth century?

Key Terms

Zollverein (p. 678)
Realpolitik (p. 679)
Ausgleich (p. 682)
mir (p. 684)
zemstvos (p. 685)
populism (p. 685)
joint-stock investment bank (p. 690)
proletariat (p. 692)
materialism (p. 694)
natural selection (p. 694)
organic evolution (p. 694)
pasteurization (p. 695)
Realism (p. 698)

Suggestions for Further Reading


1. Which of the following best describes the Victorian era in Great Britain?
   (A) Queen Victoria led English society into a time of moral ambiguity and acceptance of newer, less strict moral codes.
   (B) Though Britain lagged behind Europe economically, the people’s love for the queen soothed any dissatisfaction they felt over this imbalance.
   (C) Voting restrictions were greatly reduced, and the working class enjoyed economic prosperity.
   (D) Britain was constantly involved in external conflicts, both with Ireland and on the Continent.
   (E) Britain struggled to redefine its identity without its colonies.

2. Emperor Napoleon III of France achieved all of the following during his reign EXCEPT
   (A) the construction of an extensive railroad network.
   (B) the reconstruction and modernization of Paris.
   (C) industrial expansion that tripled the country’s iron production.
   (D) strong economic growth.
   (E) the creation of a new military organization.

3. The unification both of Germany and of Italy can be best described as
   (A) a campaign completed by liberal leaders.
   (B) a process dominated by conservative military leaders.
   (C) a movement supported by other European monarchs.
   (D) a peaceful process driven by a sense of collective nationalism.
   (E) a slow process that drew the two countries into war with each other.

4. Which of the following took place in the German states in the mid-nineteenth century?
   (A) Austria became much more powerful than Prussia, as its government enjoyed wide popular support and the Habsburgs provided strong leadership to the nation.
   (B) The Zollverein was established as a customs union that stimulated trade under the leadership of the Prussian state.
   (C) The new Prussian monarch, Frederick William IV, became bored with governing, leaving the Prussian state virtually powerless and without any firm direction.
   (D) Many of the German states sought to increase their power by allying with Great Britain.
   (E) Nationalists and liberals made repeated attempts to unify the German states under Bavarian leadership.

5. The Crimean War
   (A) showed that the Ottoman Empire was still a viable threat to central Europe.
   (B) culminated in a new political alliance between Austria and France.
   (C) highlighted the military dominance of Russia.
   (D) marked an end to the peace that had been maintained by the Concert of Europe.
   (E) saw Piedmont emerge as a legitimate threat to the balance of power.

6. The Eastern Question refers to the region of
   (A) Poland.
   (B) the Ottoman Empire.
   (C) Russia.
   (D) the Mediterranean islands.
   (E) the Balkans.

7. The results of the Danish War, the Austro-Prussian War, and the Franco-Prussian War
   (A) demonstrated the advances in European military weaponry and tactics.
   (B) showed that Britain desired to gain more power in western Europe.
   (C) enabled the German states to successfully eliminate foreigners from their lands.
   (D) enabled the Austrians to increase their power within central Europe.
   (E) shifted the balance of power by creating an alliance between Denmark and France.

8. The Ausgleich of 1867
   (A) was championed by Austrian nationalists and resulted in a compromise that added Serbia to the Austrian Empire.
   (B) embodied the desire of the German states to unify.
   (C) sowed further conflict between Austria and Russia.
   (D) helped prevent the multiethnic Austrian Empire from fragmenting into smaller, less powerful states.
   (E) allowed Joseph II of Austria to free the serfs within his empire.

9. “The history of all hitherto existing society is the history of class struggle.” This statement is most closely associated with
   (A) liberalism.
   (B) nationalism.
   (C) Marxism.
   (D) conservatism.
   (E) socialism.
10. Which of the following best describes Otto von Bismarck’s pursuit of German unification?
   (A) He rallied liberal activists in pursuit of a constitution to unify the German people.
   (B) He hoped, above all, to achieve a new peace in Europe by establishing an equal balance of power.
   (C) He practiced realpolitik, recognizing the importance of military and diplomatic action.
   (D) He agitated for a Marxist revolution in Germany.
   (E) He used his powers as the Prussian monarch to increase Prussian central power.

11. Alexander II accomplished all of the following EXCEPT
   (A) creating a system of zemstvos.
   (B) allowing peasants to bring lawsuits before the courts.
   (C) allowing peasants to own property and marry as they chose.
   (D) emancipating the serfs and granting them free land.
   (E) instituting legal reform of the judicial courts.

12. Charles Darwin’s greatest scientific achievement was
   (A) to spread the idea that science and nature are not static but always changing.
   (B) to contribute to the new intellectual movement of Realism.
   (C) to develop a practice known as pasteurization.
   (D) to help contribute to a cure for cholera.
   (E) to apply Marxist principles to science.

13. Which of the following artists is most closely identified with German nationalism?
   (A) Johann Sebastian Bach
   (B) Fyodor Dostoevsky
   (C) Charles Dickens
   (D) Richard Wagner
   (E) Franz Liszt

14. The Realists
   (A) sought to engage the reader in appreciating the simple things in nature and life.
   (B) rarely received much acclaim for their works as they did not seek widespread attention or distribution.
   (C) often highlighted and discussed important social issues, yet did not offer solutions to these problems.
   (D) wanted to glorify human accomplishments and celebrate progress.
   (E) tended to separate their protagonists from the social issues of the day and created a world of innocence for their characters.

15. During the reign of Napoleon III,
   (A) he seized more power and became highly conservative, causing the people of France to quickly regret electing him emperor.
   (B) France enjoyed internal peace and relative prosperity as Louis Napoleon worked to provide liberal reforms to the people.
   (C) the rest of Europe, fearing that he would invade other lands, organized a coalition against France.
   (D) the country's attempts at liberal reform were quickly undone by Louis Napoleon's swing toward conservatism in his later years.
   (E) France remained peaceful, as Napoleon III avoided all wars and concentrated on improving his state.