



CHAPTER PREVIEW

- What were the main changes in urban life in the nineteenth century?
- How did class and gender reinforce social difference in the nineteenth century?
- How did urbanization affect family life and gender roles?
- What were the most important changes in science and culture?

Everyday Amusements in the Nineteenth-Century City

The excitement and variety of urban life sparkle in this depiction of a public entertainment gala in 1860, sponsored by London's Royal Dramatic College and held in the city's fabulous Crystal Palace. (Fine Art Photographic/Getty Images)

What were the main changes in urban life in the nineteenth century?

Since the Middle Ages, European cities had been centers of government, culture, and large-scale commerce. They had also been congested, dirty, and unhealthy. Beginning in the early nineteenth century, the Industrial Revolution took these unfortunate realities of urban life to unprecedented levels. Rapid city growth worsened long-standing overcrowding, pollution, and unhealthy living conditions. Taming the city posed a major challenge. Only the full-scale efforts of government leaders, city planners, reformers, scientists, and civic-minded citizens would eventually ameliorate the ferocious savagery of the industrial metropolis.

Industry and the Growth of Cities

The main causes of the poor quality of urban life—dense overcrowding, pervasive poverty, and lack of medical knowledge—had existed for centuries. Because the typical city had always been a “walking city,” with no public transportation, great masses of people needed to live in close proximity to shops,

markets, and workplaces. Packed together almost as tightly as possible, people in cities suffered and died from the spread of infectious disease in far greater numbers than their rural counterparts. In the larger towns, more people died each year than were born, on average, and urban populations maintained their numbers only because newcomers continually arrived from rural areas.

The Industrial Revolution exacerbated these deplorable conditions. The steam engine freed industrialists from dependence on the energy of fast-flowing streams and rivers, so that by 1800 there was every incentive to build new factories in urban areas, which had many advantages. Cities had better transportation facilities than the countryside and thus better supplies of coal and raw materials. Cities had many hands wanting work, for they drew people like a magnet, and as a result concentrated the demand for manufactured goods. And it was a great advantage for a producer to have other factories nearby to supply the business’s needs and buy its products. Therefore,



"What Torrents of Filth Come from That Walbrook Sewer!!" This 1832 cartoon by satirist George Cruikshank shows the director of the Southwark Water Works, a main source of London's drinking water, enthroned on an intake valve in the midst of a heavily polluted River Thames. Wearing a chamber pot for a hat and holding a trident with an impaled dog, cat, and rat, he raises a glass of foul liquid to cries of "Give Us Clean Water!" and "It Makes Me Sick!" (Science & Society Picture Library/Getty Images)

TIMELINE

1850	1860	1870	1880	1890	1900
◀ 1848 Cholera epidemic and first public health law in Britain	■ 1858 London's "Great Stink"	1864–1886 Contagious Diseases Act in force in Britain		■ 1890 Max Weber publishes <i>The Protestant Ethic and the Spirit of Capitalism</i>	
ca. 1850–1870 Modernization of Paris		■ 1865 Completion of London sewer system		1890s Electric streetcars introduced in Europe	
■ 1854 Pasteur begins studying fermentation and in 1863 develops pasteurization		■ 1869 Mendeleev creates periodic table		■ 1885 Zola publishes Realist novel <i>Germinal</i>	
	■ 1859 Darwin publishes <i>On the Origin of Species by the Means of Natural Selection</i>		1880–1913 Second Industrial Revolution; birthrate steadily declines in Europe		
ca. 1850–1900 Realism dominant in Western arts and literature					
1850–1914 Condition of working classes improves					

as industry grew, already overcrowded and unhealthy cities expanded rapidly.

Great Britain, the first country to go through the early stages of the Industrial Revolution, faced the challenges of a changing urban environment early on. In the 1820s and 1830s the populations of a number of British cities increased by 40 to 70 percent each decade. The number of people living in cities of 20,000 or more in England and Wales jumped from 1.5 million in 1801 to 6.3 million in 1851 and reached 15.6 million in 1891. Such cities accounted for 17 percent of the total English population in 1801, 35 percent as early as 1851, and fully 54 percent in 1891. Other countries duplicated the English pattern as they industrialized (Map 22.1). (See “Evaluating Written Evidence: First Impressions of the World’s Biggest City,” page 663.) And as we will see in Chapter 24, rapid growth drew migrants from the countryside and across national borders, leaving ever-larger European cities centers of ethnic and religious diversity.

Except on the outskirts, early-nineteenth-century cities in Britain used every scrap of available land. Parks and open areas were almost nonexistent. Developers erected buildings on the smallest possible lots in order to pack the maximum number of people into a given space. Narrow houses were built attached

to one another in long rows. These row houses had neither front nor back yards, and only a narrow alley in back separated one row from the next. Other buildings were built around courtyards completely enclosed on all four sides. Many people lived in tiny apartments or small, overcrowded cellars or attics; entire families often shared a single room.

These highly concentrated urban populations lived in extremely unsanitary and unhealthy conditions. The sad state of urban sewage systems in London and elsewhere epitomized the problem. Before the mid-nineteenth century, human waste was typically deposited in chamber pots and tossed into the street with a warning shout, where rainwater carried it through open canals into local rivers. In densely populated urban areas, open drains and sewers flowed alongside or down the middle of unpaved streets. Waste was often collected through latrines in cesspools, underground pits located beneath living quarters. Cesspool cleaners, or “nightsoilmen,” periodically emptied the pits, carting waste to designated dumpsites where it might be turned into fertilizer.

The rapid growth of cities across the nineteenth century overwhelmed these methods of sewage disposal. In an ironic twist, the popularization of a sanitation improvement—the flush toilet—spelled disaster for the cesspool. With each flush, a large volume of



MAPPING THE PAST

MAP 22.1 European Cities of 100,000 or More, 1800–1900

There were more large cities in Great Britain in 1900 than in all of Europe in 1800.

ANALYZING THE MAP Compare the spatial distribution of cities in 1800 with the distribution in 1900. Where in 1900 are large cities concentrated in clusters? What does their distribution tell us about the scale and location of industrialization in nineteenth-century Europe?

CONNECTIONS In 1800, what characteristics were shared by many large European cities? (For example, how many big cities were capitals or leading ports?) Were any characteristics shared by the large cities in 1900? What does this suggest about the reasons behind this dramatic growth?

water accompanied a small amount of waste, rapidly filling cesspools with liquid. Cesspool pits then leaked, spilling untreated sewage into waterways. As one historian put it, by the 1840s the better-off classes had come to the “shocking realization that millions of English men, women, and children were living in shit.”¹ The results—unbearably odorous—were also deadly. Water polluted with the bacteria that cause cholera and typhoid seeped into drinking supplies, causing mass epidemics across Europe.

London, the largest city in the world at the time, was a perfect example. As the population more than tripled from about 1.3 million in 1825 to 4.2 million in 1875, the sewage problem became catastrophic. Cesspools overflowed, and flush toilets installed in new buildings drained directly into the River Thames, the main source of drinking water for London residents. Over twenty thousand died in the cholera epidemics of 1832 and 1849, and another eleven thousand perished of the same disease in 1854.

First Impressions of the World's Biggest City

In this anonymous, tongue-in-cheek passage, first published as a humorous sketch around 1870, a man from the country describes his first impressions of urban life. At that time London, with over 4 million inhabitants, was the largest city in the world.



A man's first residence in London is a revolution in his life and feelings. He loses at once no small part of his individuality. He was a man before, now he is a "party." No longer known as Mr. Brown, but as (say) No. XXI., he feels as one of many cogs in one of the many wheels of an incessantly wearing, tearing, grinding, system of machinery. His country notions must be modified, and all his life-long ways and takings-for-granted prove crude and questionable. He is hourly reminded "This is not the way in London; that this won't work here," or, "people always expect," and "you'll soon find the difference." . . .

Competition in London is very rife. The cheap five-shilling hatter was soon surprised by a four-and-nine-penny shop opposite. Few London men could live but by a degree of energy which the country dealer little knows. The wear and tear of nerve-power and the discharge of brain-power in London are enormous. The London man lives fast. . . .

Many other things contribute to make our new Londoner feel smaller in his own eyes. The living stream flows by him in the streets; he never saw so many utter strangers to him and to each other before; their very pace and destination are different; there is a walk and business determination distinctly London. In other towns men saunter they know not whither, but nearly every passer-by in London has his point, and is making so resolutely

Outbreaks of cholera also swept across Europe and the globe with stunning frequency in the nineteenth century, killing hundreds of thousands. So many died in Poland that the word *cholera* became an obscene term, still used today as a curse word. As late as 1892, over 8,500 people died of the disease in the German port city of Hamburg.

The environmental costs of rapid urbanization and industrialization were enormous as well, and London again is a good example. Black soot from coal-fired factories and train engines fouled city air. Throughout the nineteenth century the city experienced frequent and severe fogs that could bring economic activity to a complete halt. By 1850 the River Thames, which courses through London, was so polluted that it was essentially biologically dead.

Who or what bore responsibility for these awful conditions? The crucial factors included the

towards it that it seems not more his way than his destination as he is carried on with the current; and of street currents there are two, to the City and from the City, so distinct and persistent, that our friend can't get out of one without being jostled by the other. . . .

Self-dependence is another habit peculiarly of London growth. Men soon discover they have no longer the friend, the relative or the neighbour of their own small town to fall back upon. . . .

No doubt there are warm friendships and intimacies in London as well as in the country, but few and far between. People associate more at arm's length, and give their hand more readily than their heart, and hug themselves within their own domestic circles. You know too little of people to be deeply interested either in them or their fortunes, so you expect nothing and are surprised at nothing. An acquaintance may depart London life, and even this life, or be sold up and disappear, without the same surprise or making the same gap as in a village circle.

EVALUATE THE EVIDENCE

1. What are the main differences, according to the author, between everyday life in the country and everyday life in the city?
2. Does this account of modern city life support or contradict the arguments of the new sociologists, discussed later in the chapter?
3. How would you describe the tone of this portrait of city life? How does the author use humor to engage the reader?

Source: Henry Mayhew et al., "Life in London," in *London Characters and the Humorous Side of London Life* (London: Chatto and Windus, 1881), pp. 277–281.

tremendous pressure of more people and the total absence of public transportation. People simply had to jam themselves together to get to shops and factories on foot. In addition, government in Great Britain, both local and national, only slowly established sanitary facilities and adequate building codes. Finally, most people knew little about germs and basic hygiene. Ordinary folk rarely washed and took dirt for granted, habits that encouraged the spread of infectious disease.

The Advent of the Public Health Movement

Around the middle of the nineteenth century, people's fatalistic acceptance of their overcrowded, unsanitary surroundings began to give way to a growing interest in reform and improvement. Events in London were



Urban Poverty In late-nineteenth-century Rome, poor Italians still lived in ramshackle, unrenovated apartments dating back to the medieval era, as portrayed in this watercolor (circa 1883) by Ettore Roesler Franz. For the families that lived there, the unsanitary street out front served as a space for work and recreation. (By Ettore Roesler Franz [1845–1907]/Gabinetto Comunale delle Stampe, Rome, Italy/De Agostini Picture Library/Bridgeman Images)

again exemplary. British reformers such as Edwin Chadwick, John Snow, and Joseph Bazalgette engaged in a process of collaborative problem solving that fed the beginnings of the British public health movement. Chadwick, one of the commissioners charged with the administration of relief to paupers under Britain's revised Poor Law of 1834, emerged as a powerful voice for reform. Chadwick found inspiration in the ideas of radical philosopher Jeremy Bentham (1748–1832), whose approach to social issues, called **utilitarianism**, had taught that public problems ought to be dealt with on a rational, scientific basis to advance the "greatest good for the greatest number." Applying these principles, Chadwick soon became convinced that disease and death actually caused poverty, because a sick worker was an unemployed worker and orphaned children were poor children. Most important, Chadwick believed that government could help prevent disease by cleaning up the urban environment.

Chadwick collected detailed reports from local Poor Law officials on the "sanitary conditions of the laboring population" and published his hard-hitting findings in 1842. Early reformers, including Chadwick, were seriously handicapped by their adherence to the prevailing miasmic theory of disease—the belief that people contracted disease when they inhaled the bad odors of decay and putrefying excrement. Nonetheless, the mass of widely publicized evidence gathered in his report suggested that disease was related to filthy environmental conditions, which were in turn caused largely by lack of drainage, sewers, and garbage collection. In 1848, with the public health cause strengthened by a cholera epidemic that raged across Britain, Chadwick's report became the basis of Great Britain's first public health law, which created a national health board and gave cities broad authority to build modern sanitation systems.

The English physician John Snow encouraged further reform. Snow had doubts about the miasma theory, which were confirmed in his famous study of the 1854 Broad Street cholera outbreak that killed over six hundred people in central London. After interviewing local residents, Snow determined that the initial victims had been exposed to a drinking water pump built next to an aging cesspool and that the disease had spread from this point. Although he was unaware of germ theory (see "The Bacterial Revolution" ahead), Snow did correctly identify putrid water as the cause and called on urban authorities to take action.

■ **utilitarianism** The idea of Jeremy Bentham that social policies should promote the "greatest good for the greatest number."

■ **"Great Stink"** In the summer of 1858 appalling fumes from the polluted River Thames threatened to shut down London, providing a boost to the emerging public health movement.

■ **germ theory** The idea that disease was caused by the spread of living organisms that could be controlled.

The work of these and other early public health reformers remained controversial; many scientists clung to the miasma theory, and the London city government moved only haltingly to implement reforms. The famous “Great Stink” of the summer of 1858, when fumes from the River Thames closed Parliament and threatened to shut down the city, underscored the urgent need for change.

In response, between 1858 and 1865 the London Metropolitan Board of Works, led by engineer Joseph Bazalgette, built a massive network of new sewers. Bazalgette and his construction crews enclosed open waste canals and drained private toilets into underground channels that combined flows of rainwater and human waste. London’s massive interception sewers now emptied sewage into irrigation fields and treatment plants rather than directly into the Thames. Inspired by London’s example, urban engineers across Europe and North America built their own sewers and treatment plants, which limited the dumping of raw waste into local rivers, lakes, or seas.

The public health movement won dedicated supporters in the United States, France, and Germany from the 1850s on. Governments accepted at least limited responsibility for the health of all citizens, and their programs broke decisively with the age-old fatalism of urban populations. By the 1860s and 1870s European cities were making real progress toward adequate water supplies and sewer systems. Though factories and coal stoves continued to pump black smoke into the air and pollution remained a serious problem, city dwellers started to reap the reward of better health, and death rates began to decline (Figure 22.1).

The Bacterial Revolution

Improved sanitation in cities promoted a better quality of life and some improvements in health care, but effective control of communicable disease required a great leap forward in medical knowledge and biological theory. Although keen observation by doctors and public health officials pinpointed the role of filth and bad drinking water in the transmission of disease, thus weakening the miasmatic idea, they had little idea of how the process actually made people sick.

The breakthrough arrived when the French chemist Louis Pasteur developed the **germ theory** of disease, which finally convinced city officials to institute thorough public sanitation programs. Pasteur (pas-TUHR) (1822–1895), who began studying fermentation for brewers in 1854, used a microscope to develop a simple test that brewers could use to monitor the fermentation process and avoid spoilage. He found that fermentation depended on the growth of living organisms and that the activity of these organisms could be

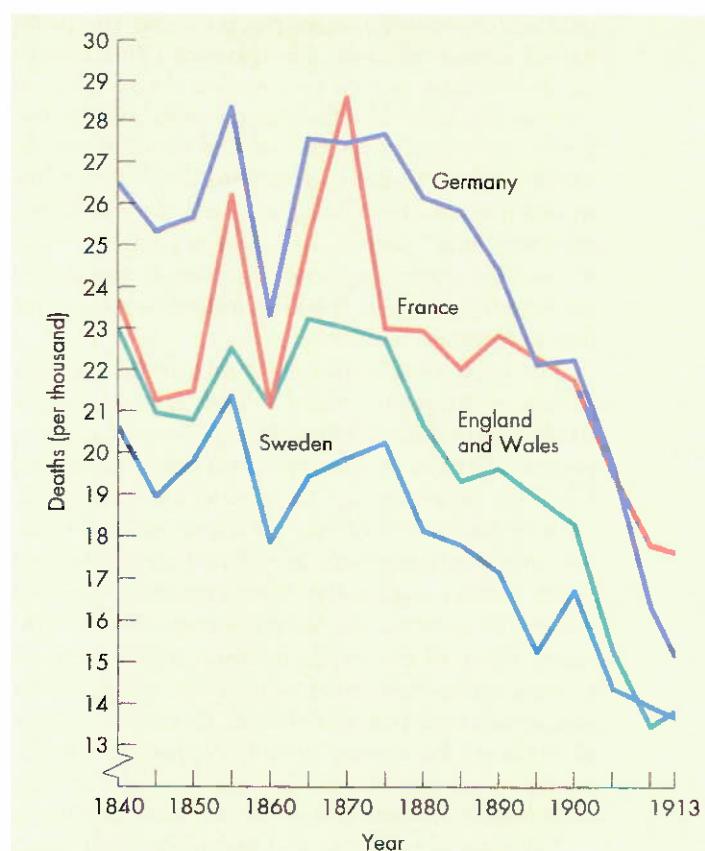


FIGURE 22.1 The Decline of Death Rates in England and Wales, Germany, France, and Sweden, 1840–1913

A rising standard of living, improvements in public health, and better medical knowledge all contributed to the dramatic decline of death rates in the nineteenth century.

suppressed by heating the beverage—a process that came to be called pasteurization, which he first implemented in the early 1860s. The breathtaking implication of this discovery was that specific diseases were caused by specific living organisms—germs—and that those organisms could be controlled.

By 1870 the work of Pasteur and others had demonstrated the general connection between germs and disease. When, in the middle of the 1870s, German country doctor Robert Koch (kawkh) and his coworkers developed pure cultures of harmful bacteria and described their life cycles, the dam broke. Over the next twenty years, researchers—mainly Germans—identified the organisms responsible for disease after disease. These discoveries led to the development of effective vaccines, though some infections resisted treatment until scientists developed antibiotics in the middle of the next century.

Acceptance of germ theory brought about dramatic improvements in the deadly environment of hospitals and operating rooms. In 1865, when Pasteur showed that the air was full of bacteria, English surgeon Joseph Lister (1827–1912) immediately grasped the

connection between aerial bacteria and the problem of wound infection. He reasoned that a chemical disinfectant applied to a wound dressing would “destroy the life of the floating particles” (or germs). Lister’s antiseptic principle worked wonders. In the 1880s German surgeons developed the more sophisticated practice of sterilizing not only the wound but also everything—hands, instruments, clothing—that entered the operating room. The simple practice of washing hands before birthing procedures saved the lives of countless mothers.

The professionalization of public health and the spread of Western medical knowledge around the world went hand in hand, in a process that often (but not always) overlapped with colonialism and Christian missions. By the close of the nineteenth century, medicine had become a key tool of Protestant missionary methods, as well as a means through which Western nations like Britain could demonstrate interest in and care for their colonial subjects. Providing much of the energy for these trends were the growing ranks of educated women who sought career and service opportunities abroad. As medical education opened for women in both England and India, medical work provided British women with fulfilling careers and social networks of like-minded individuals.

The bacterial revolution and the public health movement saved millions of lives, particularly after about 1880. Mortality rates began to decline dramatically in European countries (see Figure 22.1) as the awful death sentences of the past—cholera, diphtheria, typhoid, typhus, yellow fever—became vanishing diseases. City dwellers in Europe especially benefited from these developments. By 1910 a great silent revolution had occurred: the death rates for people of all ages in Western urban areas were generally no greater than those for people in rural areas, and sometimes they were lower.

Improvements in Urban Planning

More effective planning was also an important key to unlocking a better quality of urban life. France took the lead during the rule of Napoleon III (r. 1848–1870), who used government action to promote the welfare of his subjects. Napoleon III believed that rebuilding much of Paris would provide employment, improve living conditions, limit the outbreak of cholera epidemics—and testify to the power and glory of his empire. He hired Baron Georges Haussmann (HOWS-muhn) (1809–1884), an aggressive, impatient Alsatian, to modernize the city. An authoritarian manager and capable city planner, Haussmann bulldozed both buildings and opposition. In twenty years Paris was completely transformed (Map 22.2).

The Paris of 1850 was a labyrinth of narrow, dark streets, the results of desperate overcrowding and a lack of effective planning. More than one-third of

the city’s 1 million inhabitants lived in a central district not twice the size of New York’s Central Park. Residents faced terrible conditions and extremely high death rates. The entire metropolis had few open spaces and only two public parks.

For two decades Haussmann and his fellow planners proceeded on many fronts. With a bold energy that often shocked their contemporaries, they razed old buildings in order to cut broad, straight, tree-lined boulevards through the center of the city as well as in new quarters rising on the outskirts (see Map 22.2). These boulevards, designed in part to prevent the easy construction and defense of barricades by revolutionary crowds, permitted traffic to flow freely and afforded impressive vistas. Their creation demolished some of the worst slums. New streets stimulated the construction of better housing, especially for the middle classes. Planners created small neighborhood parks and open spaces throughout the city and developed two very large parks suitable for all kinds of holiday activities—one on the affluent west side and one on the poor east side. The city improved its sewers, and a system of aqueducts more than doubled the city’s supply of clean, fresh water.

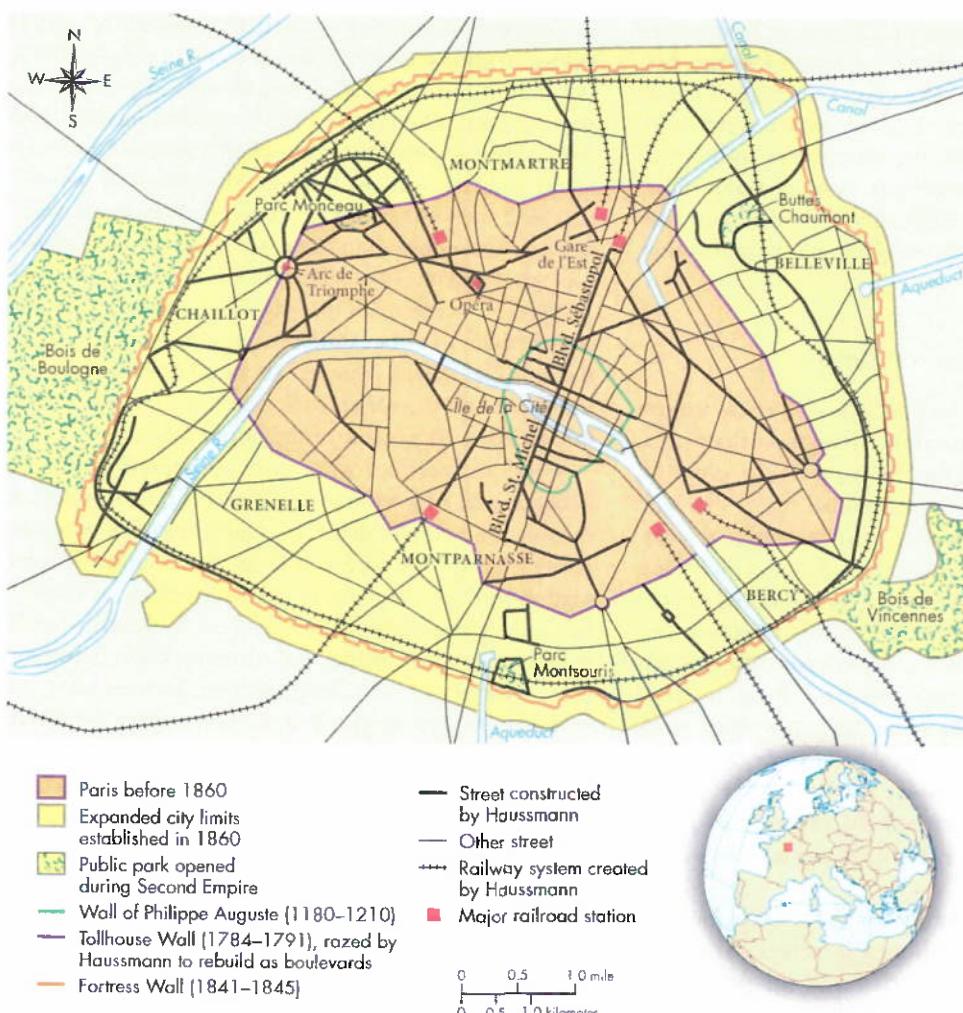
Rebuilding Paris stimulated urban reform throughout Europe, particularly after 1870. Aided by the technological breakthroughs that made improved urban planning and living possible—structural engineering, the use of iron and steel in city buildings, the arrival of electricity, the establishment of urban police forces—public authorities in city after city mounted a coordinated attack on many of the problems of the urban environment.

Urban planners in cities such as Vienna and Cologne followed the Parisian example of tearing down old walled fortifications and replacing them with broad, circular boulevards on which they erected office buildings, town halls, theaters, opera houses, and museums. These ring roads and the new boulevards that radiated outward from the city center eased movement and encouraged urban expansion (see Map 22.2).

Public Transportation

The development of mass public transportation often accompanied urban planning. In the 1870s many European cities authorized private companies to operate horse-drawn streetcars, which had been developed in the United States, to carry riders along the growing number of major thoroughfares. Then in the 1890s European countries adopted another revolutionary American transit innovation, a streetcar that ran along iron tracks on the power of electricity.

Electric streetcars were cheaper, faster, more dependable, cleaner, and more comfortable than their horse-drawn counterparts. Workers, shoppers, and schoolchildren hopped on board during the workweek. On weekends and holidays, streetcars carried urban



MAP 22.2 The Modernization of Paris, ca. 1850–1870

The addition of broad boulevards, large parks, and grand train stations transformed Paris. The cutting of the new north-south axis — known as the Boulevard Saint-Michel — was one of Haussmann's most controversial projects. His plan razed much of Paris's medieval core and filled the île de la Cité with massive government buildings. Note the addition of new streets and light rail systems (the basis of the current Parisian subway system, the "metro") that encircle the city core, emblematic of the public transportation revolution that enhanced living conditions in nineteenth-century European cities.

dwellers on happy outings to parks and the countryside, to racetracks and music halls. In 1886 the horse-drawn streetcars of Austria-Hungary, France, Germany, and Great Britain carried about 900 million riders per year. By 1910 electric streetcar systems in those four countries were carrying 6.7 billion riders annually.²

Mass transit encouraged the development of decent housing. The new boulevards and horse-drawn streetcars facilitated a middle-class move to better and more spacious housing in the 1860s and 1870s; after 1890 electric streetcars meant people of even modest means

could access new, improved housing. Though still densely populated, cities expanded and became less congested. In England in 1901, only 9 percent of the urban population was overcrowded in terms of the official definition of more than two persons per room. On the continent, many city governments in the early twentieth century built electric streetcar and light rail systems to provide transportation for the growing number of workers who lived in the new public and private housing developments built beyond the city limits. Suburban commuting was born.

How did class and gender reinforce social difference in the nineteenth century?

In the *Communist Manifesto*, Karl Marx predicted that modern capitalist society would be split into "two great hostile camps": the wealthy, powerful bourgeoisie and the impoverished, miserable proletariat.

Like Marx, historians see modern class society as a product of the nineteenth century, which built on, but also transformed, earlier social distinctions based on orders and estates. But society did not split into

two sharply defined opposing classes, as Marx predicted. To the contrary, as the quality of urban life improved across Europe, the class structure became more complex and diverse. The gap between rich and poor remained enormous, but there were numerous gradations between the extremes. And all along these social hierarchies, gender differences between men and women had a major impact on the way class status was lived and perceived.

The Distribution of Income

By 1850 at the latest, real wages—that is, wages received by workers adjusted for changes in the prices they paid—were rising for the mass of the population, and they continued to do so until 1914. The real wages of British male workers, for example, almost doubled between 1850 and 1906. Similar increases occurred in continental countries as industrial development quickened after 1850. This represented a major step forward in the centuries-old battle against poverty, reinforcing efforts to improve many aspects of human existence. At the same time, as women (and children) entered the industrial workforce, a lasting income gap emerged. Women worked in less desirable, poorly paid jobs, rarely held supervisory positions, and received less pay than men even when they did the same work.

Greater economic rewards for the average person hardly eliminated hardship and poverty, nor did it shrink the gaps between the rich and the poor. The aristocracy—with imposing wealth, unrivaled social prestige, and substantial political influence—retained its position at the very top of the social ladder, followed closely by a new rich elite, composed mainly of the most successful business families from banking, industry, and large-scale commerce. In fact, the prominent families of the commercial elite tended to marry into the old aristocracy, to form a new upper class of at most 5 percent of the population.

Much of the aristocracy welcomed this development. Having experienced a sharp decline in its relative income in the course of industrialization, the landed aristocracy eagerly allied with big business and was often delighted to trade titles, country homes, and snobbish elegance for good, hard cash. Some of the best bargains were made through marriages to American heiresses. Wealthy aristocrats also increasingly exploited their agricultural and mineral resources as if they were business people.

Income inequality was closely linked to social status. In almost every advanced country around 1900, the richest 5 percent of all households in the population received about a third of all national income, and the richest 20 percent of households received from 50 to 60 percent of it. As a result, the lower 80 percent received only 40 to 50 percent of all income—far less per household than the two richest groups. Moreover, the bottom 30 percent of all households received 10 percent or less of all income. To understand the full significance of these statistics, one must realize that the middle classes were much smaller than they are today. Across the nineteenth century they accounted for less than 20 percent of the population.

Class differences were also “gendered”; that is, being a man or a woman had a significant impact on earnings and employment. In wealthy families, women rarely had to seek paid work. As the nineteenth century progressed, women in the middle classes fought for and increasingly found work in professions such as teaching, social work, and nursing. Poorer women took a variety of jobs, ranging from factory labor to domestic service; single poor women were generally at the bottom of all income earners.

The great gap between rich and poor endured, in part, because industrial and urban development made society more diverse and classes less unified. There developed an almost unlimited range of jobs, skills, and earnings; one group or subclass blended into another in a complex, confusing hierarchy. Between the tiny elite of the very rich and the sizable mass of the dreadfully poor lived a range of subclasses, each filled with individuals struggling to rise or at least to hold their own in the social order. (See “Evaluating Visual Evidence: Apartment Living in Paris,” page 669.) In this atmosphere of competition and hierarchy, neither the “middle class” nor the “working class” actually acted as a single unified force. It makes more sense to speak of the “middle classes” and “working classes.”

The People and Occupations of the Middle Classes

By the beginning of the twentieth century, the variations within the urban middle classes were striking. Below the top tier whose riches were based on land and title, the larger, much less wealthy, and increasingly diversified middle classes engaged in occupations requiring mental, rather than physical, skill. This group engaged in a wide range of occupations.

As industry and technology expanded, a number of skilled trades and occupations underwent a process historians call **professionalization**. Attorneys, university professors, architects, chemists, accountants, and surveyors, to name only a few, established criteria for training and certification, including

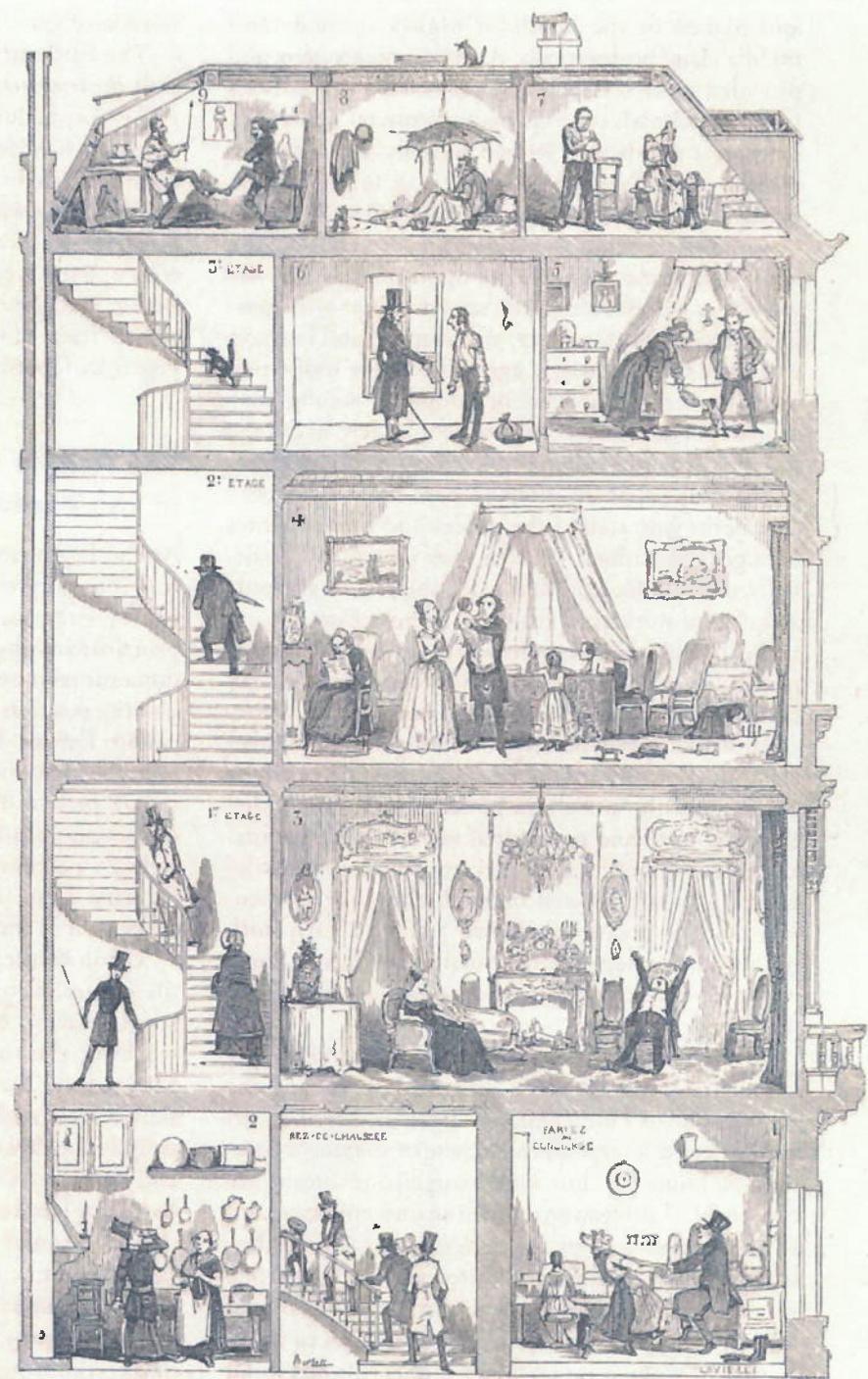
■ **professionalization** The process in which members of skilled trades and occupations established criteria for training and certification and banded together in professional organizations to defend their interests.

Apartment Living in Paris

Although Marx had predicted that modern society would lead to the development of two great, unequal classes, by 1850, society in developed parts of Europe was divided in diverse ways by the intersection of class and gender. Although the gap between rich and poor was firmly in place, subtle distinctions of income and status split Europeans into a number of new social groups. This satirical cartoon shows a cutaway view of a city apartment in Europe around 1850. The artist has taken great care to present a detailed, stereotypical view of the residents, but his drawing also reflects the typical organization of apartment living space in modern cities across the continent. On the ground floor lived servants and the building supervisor. Moving up the stairs, floor by floor, we travel the distance between extreme wealth and wretched poverty.

EVALUATE THE EVIDENCE

1. Take a close look at the inhabitants of each floor, at their possessions and behaviors. Can you determine the class and/or status of the residents? How does gender play a role in constructing class?
2. Who owns what? Can an analysis of household goods help reveal the class status of the various residents?
3. How is social status coded in living space? Who, for example, lives on the top two floors, and why do you think they would be up there?



(By Charles Albert Arnoux [1820–1883]/from *Tableau de Paris*, 1852/akg-images)

advanced degrees, and banded together in organizations to promote and defend their interests. The new professions were almost entirely dominated by men, and their specialized knowledge—and professional credentials—bolstered wages and social standing. Professionalization furthermore limited the ability of amateurs and outsiders, and in most cases women who mostly lacked access to higher education, from working in the field. Engineering and medicine, for example, emerged as full-fledged professions with considerable power, prestige, and privilege. Dentistry was taken out of the hands of working-class barbers and placed in the hands of highly trained (and middle-class) professionals. As governments grew and provided more services, and very large corporations (such as railroads or arms manufacturers) controlled ever-larger numbers of human and physical resources, middle-class male professionals also found jobs as managers in large public and private institutions.

Industrialization expanded and diversified the lower middle class as well, and opportunities grew for women as well as men in the service sector—the proliferating jobs in commerce, government, and business that were neither strictly agricultural nor industrial. The number of independent, property-owning male shopkeepers and small business people grew, as did the number of white-collar employees—a mixed group of traveling salesmen, bookkeepers, store managers, and clerks who staffed the offices and branch stores of large corporations. Women took jobs as shop assistants, department store sales staff, and low-level typists and clerical workers in fast-growing businesses.

Both male and female white-collar employees owned little property and often earned no more than better-paid skilled or semiskilled workers. Yet white-collar workers were fiercely committed to the middle-class ideal of upward social mobility. The business clothes and the soft clean hands that accompanied low-level retail and managerial work became important status symbols that set this group above those who earned a living through manual labor. For women, white-collar positions offered a way to earn both money and independence outside the home, loosening former restrictions on employment and social mobility.

Many middle-class women accepted the ideologies of “separate spheres” (see “Separate Spheres and the Importance of Homemaking” later in this chapter) and preferred to expend their energies shaping a comfortable home life, but some struggled to break into the world of professional training and employment. In the second half of the nineteenth century they made important although limited gains. One avenue women used to break into the world of professional training and employment was charity and social work: privileged women increasingly found volunteer and

paid work in public poor houses, prisons, schools, and hospitals, where their supposedly “natural” inclinations for motherly nurturing might help alleviate the plight of the poor.

Women also sought access to higher education. With the great expansion of public education and health systems, many entered teaching or nursing schools, and women came to predominate in these low-paid professions. By 1911 in England, for example, 77,000 women worked as nurses and 183,298 women were employed as teachers, about 73 percent of the total.³ Nursing and teaching, like social work, were considered appropriate for women’s “natural” talents.

The battle to enter new, modern universities and earn professional degrees was more difficult, but by 1900 most major European universities had accepted at least a handful of female students. Women such as the Polish-French scientist Marie Curie, whose pathbreaking work on radioactivity earned a Nobel Prize, or the German physician Franziska Tiburtius, who opened a clinic for women factory workers in Berlin, made pioneering inroads into professions previously reserved for men. (See “Individuals in Society: Franziska Tiburtius,” page 671.)

The People and Occupations of the Working Classes

At the beginning of the twentieth century, about four out of five people belonged to the working classes—that is, people whose livelihoods depended primarily on physical labor and who did not employ domestic servants. Many of them were still small land-owning peasants and hired farm hands, especially in eastern Europe. In western and central Europe, however, the typical worker had left the land. By 1900 less than 8 percent of the people in Great Britain worked in agriculture, and in rapidly industrializing Germany only 25 percent were employed in agriculture and forestry. Even in less industrialized France, under 50 percent of the population worked the land.

Urban workers were as heterogeneous as the middle classes. Economic development and increased specialization expanded the traditional range of working-class skills, earnings, and experiences. Meanwhile, the sharp distinction between highly skilled artisans and unskilled manual workers gradually broke down. To be sure, highly skilled printers and masons as well as unskilled dockworkers and common laborers continued to exist. But between these extremes there appeared ever more semi-skilled groups, including trained factory workers. Skilled, semiskilled, and unskilled workers developed divergent lifestyles and cultural values, and unlike the homemakers in middle-class families,

INDIVIDUALS IN SOCIETY

Franziska Tiburtius

Why did a small number of women in the late nineteenth century brave great odds and embark on professional careers? And how did a few of them manage to reach their objectives? The career and personal reflections of Franziska Tiburtius (tigh-bur-TEE-uhs), a pioneer in German medicine, suggest that talent, determination, and economic necessity were critical ingredients to both the attempt and the success.*

Like many women of her time who studied and pursued professional careers, Franziska Tiburtius (1843–1927) was born into a property-owning family of modest means. The youngest of nine children growing up on a small estate in north-eastern Germany, the sensitive child wilted under a harsh governess but flowered with a caring teacher and became an excellent student. Graduating at sixteen and needing to support herself, Tiburtius had few opportunities. A young woman from a “proper” background could work as a governess or teacher without losing her respectability and spoiling her matrimonial prospects, but that was about it. She tried both avenues. Working for six years as a governess in a noble family and no doubt learning that poverty was often one’s fate in this genteel profession, she then turned to teaching. Called home from her studies in Britain in 1871 to care for her brother, who had contracted typhus as a field doctor in the Franco-Prussian War, she found her calling. She decided to become a medical doctor.

Supported by her family, Tiburtius’s decision was truly audacious. In all Europe, only the University of Zurich accepted female students. Moreover, if it became known that she had studied medicine and failed, she would probably never get a job as a teacher. No parent would entrust a daughter to an emancipated radical who had carved up dead bodies. Although the male students at the university sometimes harassed the female ones with crude pranks, Tiburtius thrived. The revolution of the microscope and the discovery of microorganisms thrilled Tiburtius, and she was fascinated by her studies. She became close friends with a fellow female student from Germany, Emilie Lehmus, with whom she would form a lifelong partnership in medicine.

Graduating at age thirty-three in 1876, Tiburtius went to stay with her doctor brother in Berlin. Though well qualified to practice, she was blocked by pervasive discrimination. Not permitted to take the state medical exams, she could practice only as an unregulated (and unprofessional) “natural healer.” But after persistent fighting with the bureaucrats, she was able to display her diploma and practice as “Franziska Tiburtius, M.D., University of Zurich.”

Soon Tiburtius and Lehmus realized their dream and opened a clinic. Subsidized by a wealthy industrialist, they



Franziska Tiburtius, pioneering woman physician in Berlin.
(1915 photograph/akg-images)

focused on treating women factory workers. The clinic filled a great need and was soon treating many patients. A room with beds for extremely sick women was later expanded into a second clinic.

Tiburtius and Lehmus became famous. For fifteen years, they were the only female doctors in all of Berlin and inspired a new generation of women. Though they added the wealthy to their thriving practice, they always concentrated on the poor, providing them with subsidized and up-to-date treatment. Talented, determined, and working with her partner, Tiburtius experienced fully the joys of personal achievement and useful service. Above all, she overcame the tremendous barriers raised up against women seeking higher education and professional careers, providing an inspiring model for those who dared to follow.

QUESTIONS FOR ANALYSIS

1. Analyze Franziska Tiburtius’s life. What lessons do you draw from it? How do you account for her bold action and success?
2. In what ways was Tiburtius’s career related to improvements in health in urban society and to the expansion of the professions?

*This portrait draws on Conrads Lück, *Frauen: Neun Lebensschicksale* (Reutlingen: Ensslin & Laiblin, n.d.), pp. 153–185.

many working-class women had to find paid employment to keep their families afloat, furthering the great diversity at the lower levels of society. These differences contributed to a keen sense of social status and hierarchy within the working classes, undermining the class unity predicted by Marx.

Highly skilled male workers—about 15 percent of the working classes—were later termed the **labor aristocracy**. They earned only about two-thirds of the income of the bottom ranks of the servant-keeping classes, but that was fully double the earnings of unskilled workers. The most “aristocratic” of these highly skilled workers were construction bosses and factory foremen, who had risen from the ranks and were fiercely proud of their achievement. The labor aristocracy also included members of the traditional highly skilled handicraft trades that had not been mechanized or placed in factories, like cabinetmakers, jewelers, and printers.

While the labor aristocracy enjoyed its exalted position, maintaining that status was by no means certain. Gradually, as factory production eliminated more and more crafts, lower-paid, semiskilled factory workers replaced many skilled artisans. Traditional wood-carvers and watchmakers virtually disappeared, for example, as the making of furniture and time-pieces now took place in factories. At the same time, industrialization opened new opportunities for new kinds of highly skilled workers, such as shipbuilders and railway locomotive engineers. Thus the labor elite remained in a state of flux, as individuals and whole crafts moved up and down the social scale.

To maintain their precarious standing, the upper working class adopted distinctive values and strait-laced, almost puritanical behavior. Like the middle classes, the labor aristocracy believed firmly in middle-class morality and economic improvement. They saved money regularly, worried about their children’s education, and valued good housing. Wives seldom sought employment outside the home. They practiced self-discipline and stern morality and generally frowned on heavy drinking and sexual permissiveness, believing that they set a model for the rest of the working classes. As one German skilled worker somberly warned, “The path to the brothel leads through the tavern” and from there to drastic decline or total ruin.⁴

Below the labor aristocracy stood the enormously complex world of hard work, composed of both semiskilled and unskilled workers, men and women. Established male construction workers—carpenters, bricklayers, pipe fitters—stood near the top of the semiskilled hierarchy, often flirting with (or sliding back from) the labor elite. A large number of the semiskilled were factory workers, who earned highly

variable but relatively good wages. These workers included substantial numbers of unmarried women, who began to play an increasingly important role in the industrial labor force.

Below the semiskilled workers, a larger group of unskilled workers included day laborers, mostly men, such as longshoremen, wagon-driving teamsters, and “helpers” of all kinds. Many of these people had real skills and performed valuable services, but they were unorganized and divided, united only by the common fate of meager earnings and poor living conditions. The same lack of unity characterized male and female street vendors and market people—these self-employed members of the lower working classes competed savagely with each other and with established shopkeepers of the lower middle class.

Working-class women labored in factories and as street vendors, but by far the largest number of unskilled women worked as domestic servants, whose numbers grew steadily in the nineteenth century. In Great Britain, for example, one out of every seven employed persons in 1911 was a domestic servant. The great majority were women; indeed, one out of every three girls in Britain between the ages of fifteen and twenty worked as a domestic servant. Throughout Europe, many female domestics in the cities were recent migrants from rural areas. As in earlier times, domestic service meant hard work at low pay with limited personal independence and the danger of sexual exploitation. For the full-time general maid in a lower-middle-class family, an unending routine of babysitting, shopping, cooking, and cleaning defined a lengthy working day. In the wealthiest households, the serving girl was at the bottom of a rigid hierarchy of status-conscious butlers and housekeepers.

Nonetheless, domestic service had real attractions for young women from rural areas who had few specialized skills. Marriage prospects were better, or at least more varied, in the city than back home. And though wages were low, they were higher and more regular than in hard agricultural work—which was being replaced by mechanization, at any rate. Finally, as one London observer noted, young girls and other migrants from the countryside were drawn to the city by “the contagion of numbers, the sense of something going on, the theaters and the music halls, the brightly lighted streets and busy crowds—all, in short, that makes the difference between the Mile End fair on a Saturday night, and a dark and muddy country lane, with no glimmer of gas and with nothing to do.”⁵

Some young domestics made the successful transition to working-class wife and mother. Yet with an unskilled or unemployed husband, a growing family,

and limited household income, many working-class wives had to join the broad ranks of working women in the **sweated industries**. These industries expanded rapidly after 1850 and resembled the old putting-out and cottage industries of earlier times. The women normally worked at home and were paid by the piece, not by the hour. They and their young children who helped them earned pitiful wages and lacked any job security. Women decorated dishes or embroidered linens, took in laundry for washing and ironing, or made clothing, especially after the advent of the sewing machine. An army of poor women, usually working at home, accounted for many of the inexpensive ready-made clothes displayed on department store racks and in tiny shops.

Prostitution

In the late nineteenth century prostitution was legal in much of Europe, offering another means of employment for lower-class women hard pressed to find better paying jobs in domestic service or factories. In Italy, France, Great Britain, and much of Germany, the state licensed brothels and registered individual prostitutes, and they were a ubiquitous public presence. In Paris, 155,000 women were registered as prostitutes between 1871 and 1903, and 750,000 others were suspected of prostitution in the same years. In Berlin, in 1909 alone, the authorities registered over 40,000 prostitutes. The totals are probably low, since most women in the sex trade tried to avoid government regulation.

In streets, dance halls, and pubs across Europe, working-class women used prostitution as a source of second income or as a way to weather a period of joblessness, in a working environment with few other options. Their clients were generally lower-class men, soldiers, and sailors, though middle- and upper-class men looking to “sow wild oats” also paid for sexual encounters. In some places, particularly Germany, visits to prostitutes were rites of passage formalized in the culture of student fraternities. Prostitution offered women some measure of financial independence, but the work was dangerous. Violence and rape, police harassment, and venereal disease were commonplace hazards.

Prostitutes clearly transgressed middle-class ideals of feminine respectability, but among the working classes prostitution was tolerated as more or less acceptable work of a temporary nature. Like domestic service, prostitution was a stage of life, not permanent employment. After working as prostitutes in their youth, many women went on to marry and build homes and families.

As middle-class family values became increasingly prominent after the 1860s, prostitution

generated great concern among social reformers. The prostitute—immoral, lascivious, and unhealthy in middle-class eyes—served as the dark mirror image of the respectable middle-class woman. Authorities blamed prostitutes for spreading crime and disease, particularly syphilis. Before the discovery of penicillin, syphilis was indeed a widespread and terrifying affliction. Its painful symptoms led to physical and mental disorder and often death. Medical treatment was expensive, painful, and slow. It required access to regular health care and was, for the most part, ineffective.

As general concerns with public health gained recognition, state and city authorities across Europe subjected prostitutes to increased surveillance. Under the British Contagious Diseases Acts, in force between 1864 and 1886, special plainclothes policemen required women identified as “common prostitutes” to undergo biweekly medical exams. If they showed signs of venereal disease, they were interned in a “lock hospital” and forced to undergo treatment; when the outward signs of disease went away, they were released.

The Contagious Diseases Acts were controversial from the start. A determined middle-class feminist campaign against the policy, led by feminist Josephine Butler and the Ladies National Association, loudly proclaimed that the acts physically abused poor women, violated their constitutional rights, and legitimized male vice. Under pressure, Parliament repealed the laws in 1886. Yet heavy-handed government regulation had devastated the informality of working-class prostitution. Now branded as “registered girls,” prostitutes experienced new forms of public humiliation. Having been registered made it difficult to return to respectable employment, and the trade was increasingly controlled by male pimps rather than by the women themselves. Prostitution had never been safe, but it had been more or less accepted, at least among the working classes. Prostitutes were now stigmatized as social and sexual outsiders.

The Leisure Pursuits of the Working Classes

Notwithstanding hard physical labor and lack of wealth, the urban working classes sought fun and

■ **labor aristocracy** The highly skilled workers, such as factory foremen and construction bosses, who made up about 15 percent of the working classes from about 1850 to 1914.

■ **sweated industries** Poorly paid handicraft production, often carried out by married women paid by the piece and working at home.



Moulin Rouge A group of barmaids perform the French cancan in 1895 at the Moulin Rouge, a famous Parisian cabaret/nightclub, while a live orchestra plays in the balcony above. The cancan was a fast and provocative dance that involved rapid dips and turns, as well as high kicks that revealed the performers' legs and frilly underwear. The new industrial society made leisure time available to more and more people of all classes, and mixed-couple entertainment including dance balls, theater performance, and dining out became increasingly popular. (Photo © Dazy René/Bridgeman Images)

recreation, and they found both. Across Europe, drinking remained the favorite leisure-time activity of working-class men. For many middle-class moralists, as well as moralizing historians since, love of drink was the curse of the modern age—a sign of social dislocation and popular suffering. One English slum dweller recalled that “drunkenness was by far the commonest cause of dispute and misery in working class homes. On account of it one saw many a decent family drift down through poverty into total want.”⁶

Generally, however, heavy problem drinking declined in the late nineteenth century as it became less socially acceptable. This decline reflected in part the moral leadership of the labor aristocracy. Drinking also became more publicly acceptable. Cafés and pubs became increasingly bright, friendly places. Working-class political activities, both moderate and radical, were also concentrated in taverns and pubs. Moreover, social drinking in public places by married couples and sweethearts became an accepted and widespread practice for the first time. This greater participation by women undoubtedly helped civilize the world of drink and hard liquor.

The two other leisure-time passions of working-class culture were sports and music halls. “Cruel

sports,” such as bullbaiting and cockfighting, still popular in the middle of the century, had greatly declined throughout Europe by the 1880s. Commercialized spectator sports filled their place; horse racing and soccer were the most popular. Working people gambled on sports events, and a desire to decipher racing forms provided a powerful incentive toward literacy. Music halls and vaudeville theaters were enormously popular throughout Europe. In 1900 London had more than fifty such halls and theaters. Music hall audiences included men and women, which may account for the fact that drunkenness, premarital sex, marital difficulties, and mothers-in-law were all favorite themes of broad jokes and bittersweet songs.

Faith and Religion

In more serious moments, religion continued to provide working people with solace and meaning. The eighteenth-century vitality of popular religion in Catholic countries and the Protestant rejuvenation exemplified by German Pietism and English Methodism (see “What role did religion play in



Rat Catching Although antivivisectionist reform groups successfully pressured city and state authorities to ban many forms of cruelty to animals, the sport of "ratting" continued to attract working- and middle-class crowds in England well into the nineteenth century. In this 1852 painting, an all-male crowd at the Blue Anchor Tavern on the outskirts of London lays bets on Tine, a trained Manchester terrier, as he tries to kill two hundred rats in a single hour. Because they saw rats as verminous pests that brought filth and disease into Europe's rapidly growing cities, the authorities tolerated rat killing for sport, a pastime that was a throwback to the inhumane bullbaiting and cock-fighting popular in the early modern era (see "Leisure and Recreation" in Chapter 18). (Museum of London, UK/Bridgeman Images)

eighteenth-century society?" in Chapter 18) carried over into the nineteenth century. Indeed, many historians see the early nineteenth century as an age of religious revival. The second half of the century likewise saw an upswing in popular faith, embodied in the new religions and institutions that emerged: Theosophy, Seventh-Day Adventism, spiritualism, Christian Science, the Salvation Army. Religious revivals were a working-class sensation, and many grew attached to the fervid Marian devotions, in which prayers called on Jesus's mother Mary to intercede with God on behalf of the believer. In addition, the first mosques were being built in Britain and western Europe, and Jewish migration from eastern Europe was fast diversifying established Jewish populations.

Yet historians also recognize that by the last few decades of the nineteenth century, both church attendance and church donations had declined in most European countries, particularly in big cities. And it seems clear that this decline was greater for the urban working classes than for their rural counterparts or for the middle classes.

Why did working-class church attendance decline? On one hand, the construction of churches failed to keep up with the rapid growth of the urban population, especially in new working-class neighborhoods. On the other, throughout the nineteenth century workers saw Catholic and Protestant churches as conservative institutions that defended status quo

politics, hierarchical social order, and middle-class morality. Socialist political parties, in particular, attacked organized religion as a pillar of bourgeois society; as the working classes became more politically conscious, they tended to see established churches as allied with their political opponents. In addition, religion underwent a process historians call "feminization": in the working and middle classes alike, women were more pious and attended service more regularly than men. Urban workingmen in particular developed vaguely antichurch attitudes, even though they might remain neutral or positive toward God and religion itself.

The pattern was different in the United States, where most nineteenth-century churches also preached social conservatism. But because church and state had always been separate and because a host of denominations and even different religions competed for members, working people identified churches much less with the political and social status quo. Instead, individual churches in the United States were often closely identified with an ethnic group rather than a social class, and churches thrived, in part, as a means of asserting ethnic identity. This same process occurred in Europe if the church or synagogue had never been linked to the state and served as a focus for ethnic cohesion. Irish Catholic churches in Protestant Britain, Catholic churches in partitioned Polish lands, and Jewish synagogues in Russia were prominent examples.

How did urbanization affect family life and gender roles?

Buffeted by the results of industrialization and urbanization, the nineteenth-century middle classes invented a distinctive middle-class lifestyle that set them off from peasants, workers, and the aristocracy. New ideas about marriage, family, homemaking, and child rearing would have a profound impact on family life in the century to come. Leading a middle-class lifestyle was prohibitively expensive for workers and peasants, and middle-class family values at first had little relevance for their lives. Yet as the nineteenth century drew to a close, the middle-class lifestyle increasingly became the norm for all classes.

Lifestyles of the Middle Classes

Despite growing occupational diversity and conflicting interests, lifestyle preferences loosely united the European middle classes. Shared tastes for food, housing, clothes, and behavior helped define the middle classes as a group apart from the average worker, who could hardly afford such delicacies. The employment of at least one full-time maid to cook and clean was the clearest sign that a family had crossed the cultural divide separating the working classes from the “servant-keeping classes.” The greater a family’s income, the greater the number of servants it employed.

Unlike the working classes, the middle classes had the money to eat well, and they spent a substantial portion of their household budget on food and entertainment. They consumed meat in abundance: a well-off family might spend 10 percent of its annual income on meat and fully 25 percent on food and drink. The dinner party—a favored social occasion—boosted spending.

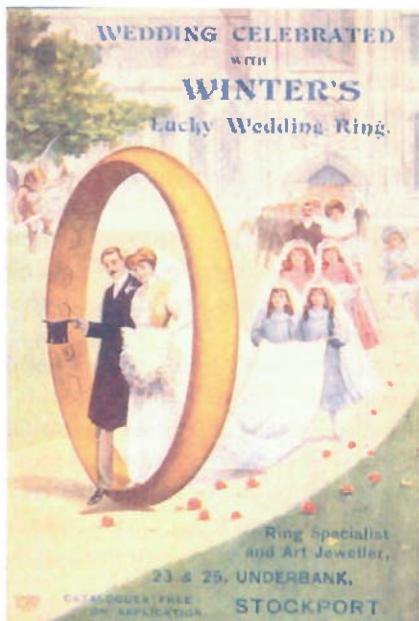
Well fed and well served, the middle classes were also well housed by 1900. And, just as the aristocracy had long divided the year between palatial country estates and lavish townhouses during “the season,” so the upper middle class purchased country homes or built beach houses for weekend and summer use.

The middle classes paid great attention to outward appearances, especially their clothes. The factory, the sewing machine, and the department store had all helped reduce the cost and expand the variety of clothing. Private coaches and carriages, expensive items in the city, further testified to rising social status. Middle-class families could devote more time to “culture” and leisure pursuits than less wealthy or well-established families could, including books, music, and travel. The long Realist novel, the heroic operas of Wagner and Verdi, the diligent striving of the dutiful daughter at the piano, and the packaged

A Corner of the Table (1904)

With photographic precision, the French artist Paul-Émile Chabas (1869–1937) captured the elegance and intimacy of a sumptuous dinner party. Throughout Europe, members of the upper middle class and aristocracy enjoyed dinners like this with eight or nine separate courses, beginning with appetizers and ending with coffee and liqueurs. (Musée des Beaux-Arts, Tourcoing, France/Bridgeman Images)





Courtship and Marriage Around 1900 The emotional bonds of companionate marriage that crystallized across the nineteenth century were reflected and reinforced in any number of contemporary images, from elegant paintings to common advertisements. This advertising postcard (left) for a jeweler's "Lucky Wedding Ring" captured the pomp and circumstance of the modern wedding, with the bride in her white dress and groom in formal wear. A host of flower girls and guests parade behind the couple as they pass through a fanciful enlargement of the ring that represents their special bond, while cupid up above blesses the couple's union. The stereoscopic card from 1902 (right) captures the gender roles played by men and women at the key moment of the marriage proposal. Both sources testify to the ongoing commercialization of love and affection around 1900. (postcard: Amoret Tanner Collection/Shutterstock; stereoscopic card: Library of Congress, Prints and Photographs Division, Washington, D.C./LC-USZ62-63305)

tour to a foreign country were all sources of middle-class pleasure.

In addition to their material tastes, the middle classes generally agreed upon a strict code of manners and morality. They stressed hard work, self-discipline, and personal achievement. Reformers denounced drunkenness and gambling as vices and celebrated sexual purity and fidelity as virtues, especially for women. A stern sense of Christian morals, preached tirelessly by religious leaders, educators, and politicians, reaffirmed these values. Those who fell into vice, crime, or poverty were held responsible for their own circumstances. The middle-class individual was supposed to know right from wrong and act accordingly.

Middle-Class Marriage and Courtship Rituals

Rather than marry for convenience, or for economic or social reasons—as was still common among workers, peasants, and aristocrats—by the 1850s the middle-class couple was supposed to follow an idealized model: they met, courted, fell deeply in love, and

joined for life because of a shared emotional bond. Of course, economic considerations in marriage by no means disappeared. But an entire culture of romantic love—popularized in advice manuals, novels and stories, and art, and practiced in courtship rituals, weddings, and married life—now surrounded the middle-class couple. The growing popularity among all classes toward the end of the nineteenth century of what historians call **companionate marriage** underscores the impact of historical change on human emotions and behaviors.

Strict guidelines for courtship and engagement enshrined in the concept of falling in love ensured that middle-class individuals would make an appropriate match. Young couples were seldom alone before they became engaged, and individuals rarely paired off with someone from an inappropriate class background. In the straight-laced "Victorian Era"—named for the long reign of the British queen Victoria (1837–1901)—premarital sex was taboo for women, though men might experiment, a double standard that

■ **companionate marriage** Marriage based on romantic love and middle-class family values that became increasingly dominant in the second half of the nineteenth century.

revealed the value the middle classes placed on sexual morality and especially women's virginity before marriage.

Engagement also followed a complicated set of norms and rituals. Secret engagements led to public announcements, and then the couple could appear together, though with chaperones in potentially delicate situations. Couples might walk arm in arm, but custom placed strict limits on physical intimacy.

Marriage had its own set of informal rules. Usually a middle-class man could marry only if he could support a wife, children, and a servant, which meant he had to be well established in his career and fairly prosperous. Some middle-class men never married because they could not afford it. These customs created special difficulties for young middle-class women, who could rarely pursue an independent career or acquire a home without a husband. The system encouraged mixed-age marriages. A new husband was typically much older than his young wife, who usually had no career and entered marriage directly out of her parents' home or perhaps a girl's finishing school. She would have had little experience with the realities of adult life.

Cultural codes of the day insisted that love meant something different to men and women. Trained to fall passionately in love with "Mr. Right," young women equated marriage with emotional intensity. Men, on the other hand, were supposed to "find a wife": they took a more active but dispassionate role in courtship. Since women generally were quite young, the man was encouraged to see himself as the protector of a young and fragile creature, and the typical middle-class marriage was more similar to a child-parent relationship than a partnership of equals, a situation expertly portrayed in Henrik Ibsen's famous Realist play *A Doll's House* (1879). The inequality of marriage was codified in European legal systems that, with rare exceptions, placed property ownership in the hands of the husband.

Middle- and Working-Class Sexuality

A double standard in sexual relations paralleled the gender inequalities built into middle-class standards of love and marriage. Middle-class moralists of all stripes cast men as aggressively sexual creatures, while women—the "angels in the house"—were supposed to be pure and chaste and act as a brake on male desire. Contemporary science legitimized this double standard. According to late-nineteenth-century physicians, men, easily aroused by the sight of a wrist or ankle, fell prey to their raging biological drives, while respectable women were supposedly uninterested in sex by nature.

Middle-class moralists assumed that men would enter marriage with some sexual experience, though this was unthinkable for a middle-class woman. When middle-class men did seek premarital sex, middle-class women were off limits. Instead, bourgeois men took advantage of their class status and sought lower-class women, domestic servants, or prostitutes. If a young middle-class woman had experimented with or even was suspected of having had premarital sex, her chances for an acceptable marriage fell dramatically.

The sexual standards of the working classes stood in marked contrast to these norms in the early nineteenth century, but that changed over time. Premarital sex for both men and women was common and more acceptable among workers. In the first half of the nineteenth century, among the lower classes, about one-third of the births in many large European cities occurred outside of wedlock.

The second half of the century saw the reversal of this high rate of illegitimacy: in western, northern, and central Europe, more babies were born to married mothers. Young, unmarried workers were probably engaging in just as much sexual activity as their parents and grandparents, who had created the illegitimacy explosion of 1750 to 1850 (see "New Patterns of Marriage and Illegitimacy" in Chapter 18). But in the later part of the nineteenth century, pregnancy for a young single woman, which a couple might see as the natural consequence of a serious relationship, led increasingly to marriage and the establishment of a two-parent household. Indeed, one in three working-class women was pregnant when she married.

This important development reflected the spread of middle-class ideals of family respectability among the working classes, as well as their gradual economic improvement. Romantic love held working-class families together, and marriage was less of an economic challenge. The urban working-class couple of the late nineteenth century thus became more stable, and that stability strengthened the family as an institution.

Separate Spheres and the Importance of Homemaking

After 1850 the work of wives became increasingly distinct and separate from that of their husbands in all classes. The preindustrial pattern among both peasants and cottage workers, in which husbands and wives both worked and shared basic household duties, became less and less common. In wealthier homes, this change was particularly dramatic. The good middle-class family man earned the wages to support the household; the public world of work, education, and politics was



Christmas and the Sentimental Pleasures of the Middle-Class Home A prosperous and productive German couple celebrate Christmas with their many children around a tree decorated with lit candles, something of a new fad in wealthy households in 1875. As this print suggests, holiday rituals evoked the familial feelings of love and affection that grounded private life in the late nineteenth century. How do the children's gifts reflect the notions of separate spheres that organized family life? (bpk Bildagentur/Photo: Dietmar Katz/Art Resource, NY)

male space. Respectable middle-class women did not work outside the home and rarely even traveled alone in public. Working-class women, including servants and prostitutes, were more visible in public places, but if a middle-class woman went out without a male escort, she might be accused of low morals or character. Thus many historians have stressed that the societal ideal in nineteenth-century Europe became a strict division of labor by gender within rigidly constructed **separate spheres**: the “private sphere,” where the woman acted as wife, mother, and homemaker, and the “public sphere,” where the “breadwinner” husband acted as wage earner and family provider.

For the middle classes, the private single-family home, a symbol of middle-class status and a sanctuary from the callous outside world of competitive capitalism, was central to the notion of separate spheres. At the heart of the middle-class home stood the woman: notions of femininity, motherhood, and family life came together in the ideal of domestic space. Middle-class homes grew to include separate sleeping rooms for parents and each family member—unheard of among the lower classes—as well as a special drawing room (or parlor), used to entertain guests. Plump sofas, bric-a-brac, and souvenirs graced domestic interiors; curtains of heavy red velvet and colorful silks draped doors and windows. Such ostentatious displays were far too expensive for the working classes.

Middle-class women were spared the masculine burdens of the outside working world, and lower-class servants ensured that they had free time to turn the private sphere into a domestic refuge of love and privacy. Numerous middle-class housekeeping

manuals made the wife’s responsibilities quite clear, as this Swedish handbook from 1889 suggests: “A man who spends most of his day away from the family, who has to work outside the home, counts on finding a restful and refreshing atmosphere when he returns home, and sometimes even a little merriment or a surprise. . . . It is his wife’s duty to ensure that he is not disappointed in his expectation. She must do her utmost to make his stay at home as pleasant as possible; she can thus continue to keep her influence over him and retain his affection undiminished.”⁷

By 1900 working-class families had adopted many middle-class values, but they did not have the means to fully realize the ideal of separate spheres. Women were the primary homemakers, and, as in the upper classes, men did little or no domestic labor. But as we have seen, many working-class women also worked, to contribute to family income. While middle-class family life centered on an ample daily meal, working-class women struggled to put sufficient food on the table. Working women could create a homelike environment that at least resembled that of the middle class—cleaning house, collecting trinkets, and decorating domestic interiors—but working men often preferred to spend time in the local pub with workmates, rather than come home for dinner. Indeed, alcoholism and domestic violence afflicted many working-class families, even as they struggled to build relationships based on romantic love.

Historians have often criticized the middle-class ideal of separate spheres because it restricted women’s educational and employment opportunities, and the

■ separate spheres The nineteenth-century gendered division of labor and lifestyles that cast men as breadwinners and women as homemakers.

women's rights movement that emerged in the late nineteenth century certainly challenged the way that this social norm limited possibilities for women's self-expression and independence. In recent years, however, some scholars have been rethinking gender roles within the long-term development of consumer behavior and household economies. In the era of industrialization, these scholars suggest, the "breadwinner-homemaker" household that developed from about 1850 onward was rational consumer behavior that improved the lives of all family members, especially in the working classes.⁸

According to this view, the all-too-real limits on women's activity enforced by the notion of separate spheres had some benefits as well. When husbands specialized in earning an adequate cash income—the "family wage" that labor unions demanded—and wives specialized in managing the home, the working-class wife could produce desirable benefits that could not be bought in a market, such as improved health and better eating habits. For example, higher wages from the breadwinner could buy more raw food, but only the homemaker's careful selection, processing, and cooking would allow the family to benefit from increased spending on food. Although it was unpaid, running an urban household was a complicated, demanding, and valuable task. Twice-a-day food shopping, careful economizing, and fighting the growing crusade against dirt—not to mention child rearing—constituted a full-time occupation. Working yet another job for wages outside the home had limited appeal for most married women unless the earnings were essential for family survival. The homemaker's managerial skills, however, enabled the working-class couple to maximize their personal well-being.

The woman's guidance of the household went hand in hand with the increased pride in the home and family and the emotional importance attached to them in working- and middle-class families alike. According to one historian, by 1900 the English song "Home, Sweet Home" had become "almost a second national anthem."⁹ Domesticity and family ties were now central to the lives of millions of people of all classes.

Child Rearing

Another striking sign of deepening emotional ties within the family was a growing emphasis on the love and concern that mothers gave their babies. Early emotional bonding and a willingness to make real sacrifices for the welfare of the infant became increasingly important among the comfortable classes by the end of the eighteenth century, though the ordinary mother of modest means adopted new attitudes only as the nineteenth century progressed.

The surge of maternal feeling was shaped by and reflected in a wave of specialized books on child rearing and infant hygiene, such as French family reformer Gustav Droz's phenomenally successful *Papa, Mama, and Baby*, which went through 121 editions between 1866 and 1884. Droz urged fathers to become affectionate toward their children and pitied those "who do not know how to roll around on the carpet, play at being a horse and a great wolf, and undress their baby."¹⁰ Following expert advice, mothers increasingly breast-fed their infants, rather than paying wet nurses to do so. Another sign, from France, of increased parental affection is that fewer illegitimate babies were abandoned as foundlings after about 1850. Moreover, the practice of swaddling—wrapping babies in clothes or blankets so tightly they could not move—fell from favor. Instead, ordinary mothers allowed their babies freedom of movement and delighted in their spontaneity.

The loving care lavished on infants was matched by greater concern for older children and adolescents. They, too, were bound in the strong emotional ties of a more intimate and protective family. For one thing, European women began to limit the number of children they bore in order to care adequately for those they had (Figure 22.2). By the end of the nineteenth century,

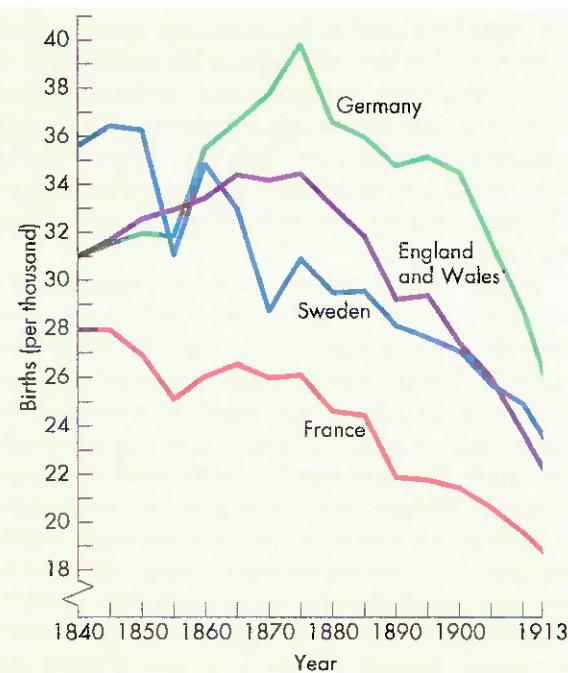


FIGURE 22.2 The Decline of Birthrates in England and Wales, France, Germany, and Sweden, 1840–1913

Women had fewer babies for a variety of reasons, including the fact that their children were increasingly less likely to die before reaching adulthood. How do these numbers compare with those in Figure 22.1? What does that comparison reveal about demographic trends in the nineteenth century?

the birthrate was declining across Europe, and it continued to do so until after World War II. The Englishwoman who married in the 1860s, for example, had an average of about six children; her daughter marrying in the 1890s had only four; and her granddaughter marrying in the 1920s had only two or possibly three.

The most important reason for this revolutionary reduction in family size, in which the comfortable and well-educated classes took the lead, was parents' desire to improve their economic and social position and that of their children. Children were no longer an economic asset in the late nineteenth century. By having fewer youngsters, parents could give those they had valuable advantages, from music lessons and summer vacations to long, expensive university educations. Thus the growing use in the late nineteenth century of a variety of contraceptive methods—the rhythm method, the withdrawal method, and mechanical devices, including after the 1840s condoms and diaphragms made of vulcanized rubber—reflected increased concern for children.

In middle-class households, parents expended considerable effort to ensure that they raised their children according to prevailing family values. Indeed, many parents, especially in the middle classes, probably became too concerned about their children, unwittingly subjecting them to an emotional pressure cooker. Professional family experts, including teachers, doctors, and reformers like Droz, produced a vast popular literature on child rearing that encouraged parents to focus on developing their children's self-control, self-fulfillment, and sense of Christian morality. Family specialists recommended against corporal punishment—still common in worker and peasant households—but even though they typically escaped beatings, the children of the wealthy grew up under constant observation and discipline, a style of

parenting designed to teach the self-control necessary for adult success. Parents carefully monitored their children's sexual behavior, and masturbation—according to one expert “the most shameful and terrible of all vices”—was of particular concern.¹¹

Attempts to repress the child's sexuality generated unhealthy tension, often made worse by the rigid division of gender roles within the family. At work all day, the father could be a stranger to his offspring; his world of business was far removed from the maternal world of spontaneous affection. Although fathers became more overtly loving during this period, the man of the house often set demanding rules, expecting the child to succeed where he himself had failed and making his approval conditional on achievement. This kind of distance was especially the case in the wealthiest families, in which domestic servants, nannies, and tutors did much of the work of child rearing. Many wealthy parents saw their children only over dinner, or on special occasions like birthdays or holidays.

The children of the working classes probably had more avenues of escape from such tensions than did those of the middle classes. Unlike their middle-class counterparts, who remained economically dependent on their families until a long education was finished or a proper marriage secured, working-class boys and girls went to work when they reached adolescence. Earning wages on their own, by the time they were sixteen or seventeen they could bargain with their parents for greater independence. If they were unsuccessful in these negotiations, they could and did leave home to live cheaply as paying lodgers in other working-class homes. Not until the twentieth century would middle-class youths be equally free to break away from the family when emotional ties became oppressive.

What were the most important changes in science and culture?

Major changes in Western intellectual life accompanied the emergence of urban society. Breakthroughs in the sciences, especially chemistry, physics, and electricity, profoundly influenced the Western worldview and spurred the creation of new products and whole industries. The natural and social sciences were also established as highly respected fields of study. In addition, between about the 1840s and the 1890s Western arts and literature underwent a shift from soaring Romanticism to tough-minded Realism, which reflected the joys and burdens of everyday life in the emerging urban society.

The Triumph of Science in Industry

As the pace of scientific advancements quickened and resulted in greater practical benefits, science exercised growing influence on human thought. The intellectual achievements of the Scientific Revolution had resulted in few such benefits, and theoretical knowledge had also played a relatively small role in the Industrial Revolution in England. But breakthroughs in industrial technology in the late eighteenth century enormously stimulated basic scientific inquiry, as researchers sought to explain how such things as steam

engines and blast furnaces actually worked. The result was an explosive growth of fundamental scientific discoveries from the 1830s onward. In contrast to earlier periods, these theoretical discoveries were increasingly transformed into material improvements for the general population.

A perfect example of the translation of better scientific knowledge into practical human benefits was the work of Louis Pasteur and his followers in biology and the medical sciences (see “The Bacterial Revolution”). Another was the development of the branch of physics known as **thermodynamics**. Building on Isaac Newton’s laws of mechanics and on studies of steam engines, thermodynamics investigated the relationship between heat and mechanical energy. The law of conservation of energy held that different forms of energy—such as heat, electricity, and magnetism—could be converted but neither created nor destroyed. By midcentury, physicists had formulated the fundamental laws of thermodynamics, which were then applied to mechanical engineering, chemical processes, and many other fields.

The study and application of chemistry and electricity—fields in which science was put in the service of industry—likewise progressed rapidly. Chemists devised ways of measuring the atomic weight of different elements, and in 1869 the Russian chemist Dmitri Mendeleev (mehn-duh-LAY-uhf) (1834–1907) codified the rules of chemistry in the periodic law and the periodic table. Chemistry was subdivided into many specialized branches, including organic chemistry—the study of the compounds of carbon. Applying theoretical insights gleaned from this new field, researchers in large German chemical companies discovered ways of transforming the dirty, useless coal tar that accumulated in coke ovens into beautiful, expensive synthetic dyes for the world of fashion. German production of synthetic dyes soared, and by 1900 German chemical companies controlled 90 percent of world production.

Electricity, a scientific curiosity in 1800, was totally transformed by a century of technological advancement. It became a commercial form of energy, first used in communications (the telegraph, which spurred quick international communication with the laying of underwater cables), then in electrochemistry (refining aluminum, for example), and finally in central power generation (for lighting, transportation, and industrial motors). (See “Thinking Like a Historian: The Promise of Electricity,” page 684.) And by 1890 the internal combustion engine fueled by petroleum was an emerging competitor to steam and electricity alike.

The successful application of scientific research in the fast-growing electrical and organic chemical

industries between 1880 and 1913 provided a model for other uses. Systematic “R&D”—research and development—was born in the late nineteenth century. Above all, the burst of industrial creativity and technological innovation, often called the **Second Industrial Revolution**, promoted the strong economic growth in the last third of the nineteenth century that drove the urban reforms and the rising standard of living considered in this chapter.

The triumph of science and technology had three other significant consequences. First, though ordinary citizens continued to lack detailed scientific knowledge, everyday experience and innumerable articles in newspapers and magazines impressed the importance of science on the popular mind. Second, as science became more prominent in popular thinking, the philosophical implications of science formulated in the Enlightenment spread to broad sections of the population. Natural processes appeared to be determined by rigid laws, leaving little room for either divine intervention or human will. Yet scientific and technical advances had also fed the Enlightenment’s optimistic faith in human progress, which now appeared endless and automatic to growing numbers of people. Third, the methods of science acquired unrivaled prestige after 1850. For many, the union of practical experiment and abstract theory was the only reliable route to truth and objective reality. The “unscientific” intuitions of poets and the revelations of saints seemed hopelessly inferior.

Darwin and Natural Selection

Scientific research also progressed rapidly outside of the world of industry and technology, sometimes putting forth direct challenges to traditional religious beliefs. In geology, for example, Charles Lyell (1797–1875) effectively discredited the long-standing view that the earth’s surface had been formed by short-lived cataclysms, such as biblical floods and earthquakes. Instead, according to Lyell’s principle of uniformitarianism, the same geological processes that are at work today slowly formed the earth’s surface over an immensely long time. Similarly, the evolutionary view of biological development, first proposed by the Greek Anaximander in the sixth century B.C.E., re-emerged in a more modern form in the work of French naturalist Jean-Baptiste Lamarck (1744–1829). Lamarck asserted that all forms of life had arisen through a long process of continuous adjustment to the environment, a dramatic challenge to the belief in divine creation of species.

Lamarck’s work was flawed—he believed that the characteristics parents acquired in the course of their lives could be inherited by their children—and

was not accepted, but it helped prepare the way for Charles Darwin (1809–1882), the most influential of all nineteenth-century evolutionary thinkers. As the official naturalist on a five-year scientific voyage to Latin America and the South Pacific beginning in 1831, Darwin carefully collected specimens of the different animal species he encountered on the voyage. Back in England, convinced by fossil evidence and by his friend Lyell that the earth and life on it were immensely ancient, Darwin came to doubt the general belief in a special divine creation of each species of animal. Instead, he concluded, all life had gradually evolved from a common ancestral origin in an unending “struggle for survival.” After long hesitation, Darwin published his research, which immediately attracted wide attention.

Darwin’s great originality lay in suggesting precisely how biological evolution might have occurred. His theory of **evolution** is summarized in the title of his work *On the Origin of Species by the Means of Natural Selection* (1859). Decisively influenced by the gloomy assertions of Thomas Malthus (MAL-thuhs) that populations naturally grow faster than their food supplies (see “Industry and Population” in Chapter 20), Darwin argued that chance differences among the individual members of a given species help some survive while others die. Thus the variations that prove useful in the struggle for survival are selected naturally, and they gradually spread to the entire species through reproduction.

Darwin’s controversial theory had a powerful and many-sided influence on European thought and the European middle classes. Because his ideas seemed to suggest that evolution moved along without God’s intervention, and that humans were simply one species among many others, some conservatives accused Darwin of anti-Christian beliefs and mocked him for suggesting that humans descended from apes. Others hailed Darwin as the great scientist par excellence, the “Newton of biology,” who had revealed once again the powers of objective science.

Some thinkers went a step further and applied Darwin’s theory of biological evolution to human affairs. English philosopher Herbert Spencer (1820–1903) saw the human race as driven forward to ever-greater specialization and progress by a brutal economic struggle that determined the “survival of the fittest.” The poor were the ill-fated weak; the prosperous were the chosen strong. Spencer’s **Social Darwinism** gained adherents among nationalists, who viewed global competition between countries as a grand struggle for survival, as well as among imperialists, who used Social Darwinist ideas to justify the “natural” rule of the supposedly more civilized West over its colonial subjects and territories.

The Modern University and the Social Sciences

By the 1880s major universities across Europe had been modernized, enlarged, and professionalized. Education now emphasized controlled research projects in newly established clinics and laboratories; advanced students conducted independent research in seminar settings. An increasingly diversified professoriate established many of the academic departments still found in today’s universities, from anthropology to zoology.

Faculty devoted to the newly instituted human or social sciences took their place alongside the hard sciences. Using critical methods often borrowed from natural science, social scientists studied massive sets of numerical data that governments had begun to collect on everything from birthrates to crime and from population to prostitution. Like Karl Marx, they were fascinated by the rise of capitalism and modernity; unlike Marx, they preferred to understand rather than revolutionize society.

Sociology, the critical analysis of contemporary or historical social groups, emerged as a leading social science. Perhaps the most prominent and influential late-nineteenth-century sociologist was the German Max Weber (1864–1920). In his most famous book, *The Protestant Ethic and the Spirit of Capitalism* (1890), Weber argued that the rise of capitalism was directly linked to Protestantism in northern Europe. Pointing to the early and successful modernization of countries like the Netherlands and England, he concluded that Protestantism gave religious approval to hard work, saving, and investing—the foundations for capitalist development—because Protestant belief saw worldly success as a sign of God’s approval.

This famous argument seriously challenged the basic ideas of Marxism: ideas, for Weber, were just as

■ **thermodynamics** A branch of physics built on Newton’s laws of mechanics that investigated the relationship between heat and mechanical energy.

■ **Second Industrial Revolution** The burst of technological innovation and science-driven industrialization that promoted strong economic growth in the last third of the nineteenth century.

■ **evolution** Darwin’s theory that chance differences among the individual members of a given species that prove useful in the struggle for survival are selected naturally, and they gradually spread to the entire species through reproduction.

■ **Social Darwinism** A body of thought drawn from the ideas of Charles Darwin that applied the theory of biological evolution to human affairs and saw the human race as driven by an unending economic struggle that would determine the survival of the fittest.

THINKING LIKE A HISTORIAN

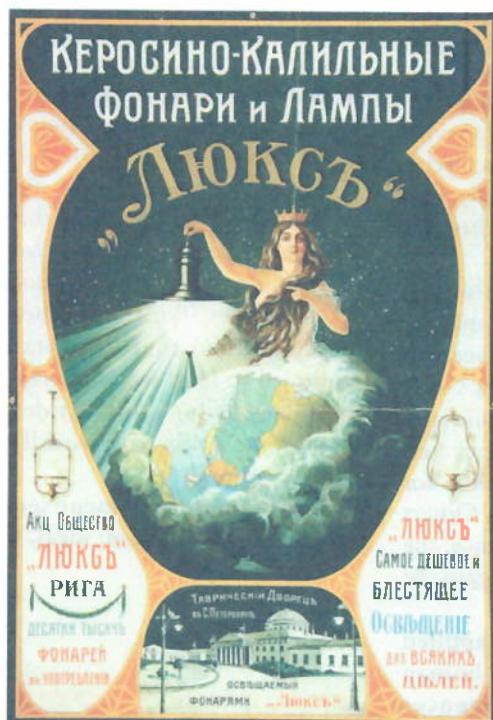
The Promise of Electricity

The commercialization and widespread use of electricity around 1900 made possible a broad spectrum of new technologies in the late nineteenth century, including telephones and telegraphs; radio; electric lights in public and private space; electric railroads, trams, and subways; electrochemistry and electrometallurgy; power plants, generators, and batteries; and electric motors and machines. How did the arrival of electricity change people's lives?

- 1 **The Palace of Electricity, 1900 Universal Exhibition, Paris.** The ever-popular world fairs and expositions organized around the turn of the century typically included brightly lit pavilions dedicated to the wonders of electricity. At the top of the Palace of Electricity in Paris, the "Electric Fairy" held up a torch powered by 50,000 volts.



(From "Le Bon Marché" shop catalogue, 1900/Private Collection/Archives Charmet/Bridgeman Images)



(Russian Master State History Museum, Moscow, Russia/Fine Art Images/SuperStock/Getty Images)

- 2 **"Luks'—The Least Expensive and Brightest Lighting for All Occasions," ca. 1900.** This Russian poster advertising lighting systems from the Luks' (Deluxe) lighting company in Riga promotes "kerosene and incandescent lights and bulbs" and so marks a transitional period, when lighting companies encouraged consumers to switch from gas to electricity. The poster portrays a princess of light holding an electric bulb that illuminates first the Russian Empire and then the rest of the globe. The small scene at the bottom shows the historic Tauride Palace in St. Petersburg and suggests the revolutionary effect of electric light in public spaces.

ANALYZING THE EVIDENCE

- How did the commercialization of electricity reflect and/or contribute to the late-nineteenth-century faith in progress, rationalism, and reform?
- What sort of research and development model did it take to electrify Europe? What sort of business model? How were the two connected?
- Even in 1900, it was hard to predict that electricity would be more popular than gas or coal as a source for energy use at home or in the workplace. In Sources 1, 2, and 3, how do electricity's boosters strive to popularize the residential and commercial use of electricity?

3 "Electrical Progress in Great Britain During 1909." An American journal for electricians offered glowing approval of the electrification of Great Britain. Along with the United States, Britain was a world leader in electrification around 1900; other European nations were not far behind.

The most noticeable and at the same time the most hopeful, feature of the year 1909 in the United Kingdom, has been the great progress made in bringing electricity within the compass of the "small man." This movement, which means so much for the future of all electrical industry, has occupied the close attention of a large proportion of the electricity works managers and engineers and of most manufacturing and importing businesses. . . .

[T]he forward movement [of the filament lamp] is now in full swing. The wire lamp is everywhere working wonders in reducing the cost of electric lighting on existing installations and that fact together with the very strong support that is being given by other influences, is making it easier to get electrical applications adopted in many places where it seemed impossible before. . . .

[The London power companies] are now jointly using the daily press in an advertising campaign so conducted as to command the attention of all who read, educating them as to the rightful claims of electricity. One of the companies has opened a model "Electric Home" in its area, fitted throughout with electric lighting, heating, and small power. The house is occupied by a tenant who is under special arrangement to admit the public between certain hours every day, to demonstrate to them the manifold domestic applications of electricity and their convenience and cleanliness. Neither coal nor gas is used for any purpose whatsoever in the house. . . . This popularizing work is still very necessary indeed, for really the public does not know yet much that it ought to know. . . .

[The report then describes a number of technological advances, including newly built electric-generating plants, electric-powered steel mills, and the use of electric motors in a variety of industrial applications.]



4 "General Map of Large-Scale World Telegraph Communications, 1901/03." After some equipment failures, British and U.S. engineers successfully completed the first transatlantic telegraph cable, fired by electric current, in 1858. By 1900 telegraph cables circled the globe.
(Boston Public Library, Boston, Massachusetts, USA/Bridgeman Images)

5 Electric trams and lines in Piazza del Duomo, Milan, Italy, ca. 1900. Electric streetcar and subway systems made quick travel through urban spaces accessible and inexpensive. In Milan, the tracks and streetcars, and the installation of electric streetlights, strike a modern contrast to the Gothic cathedral and Neoclassical triumphal arch that frame the central square.



(DEA Picture Library/Getty Images)

PUTTING IT ALL TOGETHER

Using the sources above, along with what you have learned in class, in Chapter 22, and in the sections on the Industrial Revolution in Chapter 17, write a short essay that describes the effects of electrification on European society. Was electricity a fundamental driving force in the history of Western society?

important as economics or class struggle in the rise of capitalism. Yet like Marx, Weber felt that people were alienated from their own humanity, trapped in what he called the “iron cage” of capitalist relations. Modern industrial society, according to Weber, had turned people into “specialists without spirit, hedonists without heart.” An ambitious scholar, Weber wrote extensively on capitalist rationalization, modern bureaucracy, industrialization and agriculture, and the forms of political leadership.

In France, the prolific sociologist Émile Durkheim (1858–1917) earned an international reputation for his wide-ranging work. His study of the psychic and social basis of religion, *The Elementary Forms of Religious Life* (1912), remains a classic of social-scientific thought. In his pioneering work of quantitative sociology, *Suicide* (1897), Durkheim concluded that ever-higher suicide rates were caused by widespread feelings of what he called anomie, or rootlessness. Because modern society had stripped life of all sense of tradition, purpose, and belonging, Durkheim believed, anomie was inescapable; only an entirely new moral order might offer some relief.

Other sociologists contributed to the critique of modern society. The German Ferdinand Tönnies (1855–1936) argued that with industrialization Western civilization had undergone a fundamental transformation from “community” to “society.” Rationalized self-interest had replaced traditional values, and selfish individualism had replaced generous communal support, leading to intensified alienation and a cold bureaucratic age. In *The Crowd* (1895), French sociologist Gustav Le Bon (1841–1931) wrote that alienated individuals were prone to gathering in mass crowds, where they lost control over their emotions and actions. According to the deeply conservative Le Bon, a strong, charismatic leader could easily manipulate the crowd’s collective psyche and turn the servile mass into a violent and dangerous revolutionary mob.

The new sociologists cast a bleak light on urban industrial society. While they acknowledged some benefits of rationalization and modernization, they bemoaned the accompanying loss of community and tradition. In some ways, their diagnosis of the modern individual as an isolated atom suffering from anomie and desperately seeking human connection was chillingly prescient: the powerful Communist and Fascist movements that swept through Europe after World War I appeared to generate popular support precisely by offering ordinary people a renewed sense of social belonging.

Realism in Art and Literature

In art and literature, the key themes of **Realism** emerged around 1850 and continued to dominate Western culture until the 1890s. Deeply influenced by the social changes that had accompanied rapid industrialization, Realist artists and writers believed that artistic works should depict ordinary life exactly as it was. They forsook the grand historical subjects favored by academy artists as well as the personal, emotional viewpoint of the Romantics for strict, supposedly factual objectivity. The controversial and shocking Realists observed and recorded the world around them—often to expose the sordid reality of modern life.

Emphatically rejecting the Romantic search for the exotic and the sublime, Realism (or “Naturalism,” as it was often called) energetically pursued the typical and the commonplace. Beginning with a dissection of the middle classes, from which most of them sprang, many Realists eventually focused on the working classes, especially the urban working classes, which had been largely ignored in imaginative literature before this time. The Realists exposed unexplored and taboo subjects, including labor strikes, violence, sexuality, and alcoholism, and portrayed slums and factories. Shocked middle-class critics denounced Realism as ugly sensationalism wrapped in pseudoscientific declarations and crude language—even as the movement attracted middle-class readers who were fascinated by the sensationalist view “from below.”

The Realist movement began in France, where Romanticism had never been completely dominant. Artists like Gustave Courbet, Jean-François Millet, and Honoré Daumier painted scenes of laboring workers and peasants in somber colors and simple compositions, exemplified in Courbet’s 1849 painting *Burial at Ornans*. Horrified critics rejected this painting because it depicted ordinary people in everyday life and entirely challenged established preferences for heroic compositions.

Literary Realism also began in France, where Honoré de Balzac, Gustave Flaubert, and Émile Zola became internationally famous novelists. Balzac (1799–1850) spent thirty years writing a vastly ambitious panorama of postrevolutionary French life. Known collectively as *The Human Comedy*, this series of nearly one hundred stories, novels, and essays vividly portrays more than two thousand characters from virtually all sectors of French society. Balzac pictured urban society as grasping, amoral, and brutal. In his novel *Father Goriot* (1835), the hero, a poor student from the provinces, eventually surrenders his idealistic integrity to feverish ambition and society’s pervasive greed.

Realism A literary movement that, in contrast to Romanticism, stressed the depiction of life as it actually was.



Realism in the Arts Realist depictions of gritty everyday life challenged the Romantic emphasis on nature and the emotions, as well as the Neoclassical focus on famous men and grand events. French painter Gustave Courbet's twenty-two-foot-long *Burial at Ornans* (1849) is a famous example of Realism in the arts. It portrays a bleak funeral in the artist's hometown. The painting's rejection of heroic subjects or grand themes shocked contemporary critics. When the organizers of a major exhibition in Paris in 1855 refused to show the work, claiming it was too large and too coarse, Courbet, already a leading figure in the Realist movement, withdrew all his paintings from the exhibition and staged a private exhibition that featured his own work. (Universal History Archive/Universal Images Group/Shutterstock)

Madame Bovary (1857), the masterpiece of Gustave Flaubert (floh-BEHRT) (1821–1880), is far narrower in scope than Balzac's work but is still famous for its psychological insight and critique of middle-class values. Unsuccessfully targeted by government censors as an outrage against public morality and religion, Flaubert's novel tells the story of Emma Bovary, a middle-class housewife who fantasizes about a life of romance and luxury. Her attempts to escape through love affairs and extravagant purchases destroy her family and herself. Without explicitly moralizing, Flaubert portrays the provincial middle class as materialistic and dull, while also taking aim at the influence of romantic novels and theater.

Novelist Émile Zola (1840–1902) was most famous for his seamy, animalistic view of working-class life, expressed in novels such as *Nana* (1880), about the triumphs and tragedy of a high-class prostitute, or *The Earth* (1887), about the brutal life of a family of downtrodden French peasants. But he also wrote gripping, carefully researched stories featuring the stock exchange, the big department store, and the army, as well as urban slums and bloody battles between police and striking coal miners. Like many later Realists, Zola sympathized with socialism, a view evident in his overpowering novel

Germinal (1885). (See “Viewpoints: Émile Zola and Naturalism/Realism in Western Literature,” page 688.)

Realism quickly spread beyond France. In England, Mary Ann Evans (1819–1880), who wrote under the pen name George Eliot, brilliantly achieved a deeply felt, less sensational kind of Realism in her great novel *Middlemarch: A Study of Provincial Life* (1871–1872). The novels of Thomas Hardy (1840–1928), such as *Tess of the D'Urbervilles* (1891) and *The Return of the Native* (1878), depict ordinary men and women frustrated and crushed by social prejudice, sexual puritanism, and bad luck. Russia's Count Leo Tolstoy (1828–1910) combined Realism in description and character development with an atypical moralizing, especially in his later work. In *War and Peace* (1864–1869), a monumental novel set against the background of Napoleon's invasion of Russia in 1812, Tolstoy developed his fatalistic theory of human history, which regards free will as an illusion and the achievements of even the greatest leaders as only the channeling of historical necessity. Yet Tolstoy's central message is one that most of the people discussed in this chapter would have readily accepted: human love, trust, and everyday family ties are life's enduring values.



VIEWPOINTS

Émile Zola and Naturalism/Realism in Western Literature

The famous novels written by the great Realist (or Naturalist) author Émile Zola describe the struggles of ordinary people, but he also wrote manifestos that challenged Romanticism and called for the victory of Realism in the arts. The first selection here—from the preface to one of Zola's plays—casts Realism as an historical inevitability that will sweep aside all remnants of the Romantic worldview. Yet Zola's focus on the underside of everyday life angered conservative cultural critics such as the English literary scholar W. S. Lilly, whose scathing critique of Zola and Naturalism is excerpted below.

From the "Preface" to *Thérèse Raquin* (1873)

[T]he great movement toward truth and experimental science which has since the last century been on the increase in every manifestation of the human intellect . . . was started by the new methods of science; thence, Naturalism revolutionized criticism and history, in submitting man and his works to a system of precise analysis. . . . Then, in turn, art and letters were carried along with the current. . . . [T]he novel, that social and individual study with its extremely loose frame-work, after growing and growing, took up all the activities of man. . . . These are all undeniable facts. We have come to the birth of the true, that is the great, the only force of the century. Everything advances in a literary epoch. Whoever wishes to retreat or turn to one side, will be lost in the general dust. . . .

There should no longer be any school, no more formulas, no standards of any sort; there is only life itself, an immense field where each may study and create as he likes. . . . Of course, the past is dead. We must look to the future, and the future will have to do with the human problems studied in the frame-work of reality. We must cast aside fables of every sort, and delve into the living drama of the two-fold life of the character and its environment, bereft of every nursery tale, historical trapping, and the usual conventional stupidities. The decayed scaffoldings of the [Romantic] drama of yesterday will fall of their own accord. We must clear the ground.

From "The New Naturalism" (1885)

[T]he great aim and object of the New Naturalism, according to M. Zola, is a return to nature. The novelist,

the dramatist, he says, ought to be the photographers of phenomena. Their business is to study the world—to observe, to analyze humanity as they find it. But this is best done in its most vulgar types. The human animal—"la bête humaine," a phrase which our author employs with damnable iteration—is the same in all social varieties and conditions. . . . Everywhere at the bottom there is filth. . . .

[The New Naturalism] is strictly materialistic and frankly professes atheism. . . . Not less decisively does [Zola] cast aside ethical considerations. You have nothing to do with them, he tells his disciples. Sympathy with good or hatred of evil are as much out of place in your work as would be a chemist's anger against nitrogen as inimical to life. . . .

The especial value of the writings of M. Zola and his school seems to me that they are the most popular literary outcome of the doctrine which denies the personality, liberty, and spirituality of man and the objective foundation on which these rest, which empties him of the moral sense, the feeling of the infinite, the aspiration towards the Absolute. . . .

It is beyond question—look at France if you want overwhelming demonstration of it—that the issue of what M. Zola calls the Naturalistic Evolution is the banishing from human life of all that gives it glory and honour.

QUESTIONS FOR ANALYSIS

1. What are the main features of the new literature demanded by Zola?
2. Why does Lilly claim that the New Naturalism destroys the "glory and honor" of human life?
3. How do the style and subject matter of Realism compare and contrast with those of Romanticism?

Sources: Émile Zola, "Preface to *Thérèse Raquin*," trans. Barrett H. Clark, in *European Theories of the Drama*, ed. Barrett H. Clark (Cincinnati: Stewart & Kidd, 1918), pp. 400–401; W. S. Lilly, "The New Naturalism," in *Documents of Modern Literary Realism*, ed. George J. Becker. Republished with permission of Princeton University Press. Copyright © 1963 by Princeton University Press; permission conveyed through Copyright Clearance Center, Inc.

NOTES

1. S. Marcus, "Reading the Illegible," in *The Victorian City: Images and Realities*, ed. H. J. Dyos and Michael Wolff, vol. 1 (London: Routledge & Kegan Paul, 1973), p. 266.
2. J. McKay, *Tramways and Trolleys: The Rise of Urban Mass Transport in Europe* (Princeton, N.J.: Princeton University Press, 1976), p. 81.
3. Bonnie S. Anderson and Judith P. Zinsser, *A History of Their Own: Women in Europe from Prehistory to the Present*, rev. ed., vol. 2 (New York: Oxford University Press, 2000), p. 195.
4. Quoted in R. P. Neuman, "The Sexual Question and Social Democracy in Imperial Germany," *Journal of Social History* 7 (Winter 1974): 276.
5. Quoted in J. A. Banks, "The Contagion of Numbers," in *The Victorian City: Images and Realities*, ed. H. J. Dyos and Michael Wolff, vol. 1 (London: Routledge & Kegan Paul, 1973), p. 112.
6. Quoted in R. Roberts, *The Classic Slum: Salford Life in the First Quarter of the Century* (Manchester, U.K.: University of Manchester Press, 1971), p. 95.
7. Quoted in J. Frykman and O. Löfgren, *Culture Builders: A Historical Anthropology of Middle-Class Life* (New Brunswick, N.J.: Rutgers University Press, 1987), p. 134.
8. See the pioneering work of J. de Vries, *The Industrious Revolution: Consumer Behavior and the Household Economy* (Cambridge: Cambridge University Press, 2008), especially pp. 186–237.
9. Roberts, *The Classic Slum*, p. 35.
10. Quoted in T. Zeldin, *France, 1848–1945*, vol. 1 (Oxford: Clarendon Press, 1973), p. 328.
11. Quoted in Frykman and Löfgren, *Culture Builders*, p. 114.



LOOKING BACK LOOKING AHEAD

When the peoples of northwestern Europe looked out at the economic and social landscape in the early twentieth century, they had good reason to feel that the promise of the Industrial Revolution was being realized. The dark days of urban squalor and brutal working hours had given way after 1850 to a gradual rise in the standard of living for all classes. Scientific discoveries were combined with the applied technology of public health and industrial production to save lives and drive continued economic growth.

Moreover, social and economic advances seemed to be matched by progress in the political sphere. The years following the dramatic failure of the

revolutions of 1848 saw the creation of unified nation-states in Italy and Germany, and after 1870, as we shall see in the following chapter, nationalism and the nation-state reigned in Europe. Although the rise of nationalism created tensions among the European countries, these tensions would not explode until 1914 and the outbreak of the First World War. Instead, the most aggressive and destructive aspects of European nationalism found their initial outlet in the final and most powerful surge of Western overseas expansion. Thus Europe, transformed by industrialization and nationalism, rushed after 1875 to seize territory and build new or greatly expanded authoritarian empires in Asia and Africa.

Make Connections

Think about the larger developments and continuities within and across chapters.

1. What were the most important changes in everyday life from the end of the eighteenth century (Chapter 18) to the end of the nineteenth century? What main causes or agents drove these changes?
2. Did the life of ordinary people improve, stay the same, or even deteriorate over the nineteenth century when compared to the previous century? What role did developments in science, medicine, and urban planning play in this process?
3. How did the emergence of a society divided into working and middle classes affect the workplace, homemaking, and family values and gender roles? Are the values and behaviors associated with the nineteenth-century lower, middle, and upper classes—in all their diversity—still around today? How have they changed?

22 REVIEW & EXPLORE

Identify Key Terms

Identify and explain the significance of each item below.

- | | |
|--------------------------------|---------------------------------------|
| utilitarianism (p. 664) | separate spheres (p. 679) |
| “Great Stink” (p. 665) | thermodynamics (p. 682) |
| germ theory (p. 665) | Second Industrial Revolution (p. 682) |
| professionalization (p. 668) | evolution (p. 683) |
| labor aristocracy (p. 672) | Social Darwinism (p. 683) |
| sweated industries (p. 673) | Realism (p. 686) |
| companionate marriage (p. 677) | |

Review the Main Ideas

Answer the section heading questions from the chapter.

1. What were the main changes in urban life in the nineteenth century? (p. 660)
2. How did class and gender reinforce social difference in the nineteenth century? (p. 667)
3. How did urbanization affect family life and gender roles? (p. 676)
4. What were the most important changes in science and culture? (p. 681)

Suggested Resources

BOOKS

- Barnes, David S. *The Great Stink of Paris and the Nineteenth-Century Struggle Against Filth and Germs*. 2006. An outstanding introduction to sanitary developments and attitudes toward public health.
- Cioc, Mark. *The Rhine: An Eco-Biography, 1815–2000*. 2002. An environmental history focused on the Rhine River, Europe’s most important commercial waterway.
- Coontz, Stephanie. *Marriage, a History: From Obedience to Intimacy, or How Love Conquered Marriage*. 2005. A lively investigation of the historical background to current practice.
- Crook, Tom. *Governing Systems: Modernity and the Making of Public Health in England, 1830–1910*. 2016. This account “from below” emphasizes the impact of public health reform on ordinary lives.
- Davidoff, Leonore, and Catherine Hall. *Family Fortunes: Men and Women of the English Middle Class, 1780–1850*. 1991. A groundbreaking classic that places gender at the center of the construction of middle-class values, lifestyles, and livelihoods.
- De Vries, Jan. *The Industrious Revolution: Consumer Behavior and the Household Economy, 1850 to the Present*. 2008. A major interpretative analysis focusing on married couples and their strategies.
- Johnson, Steven. *The Ghost Map: The Story of London’s Most Terrifying Epidemic—and How It Changed Science, Cities, and the Modern World*. 2007. This entertaining national bestseller explains the way the reaction to the Broad Street cholera outbreak of 1854 transformed public health and urban planning.
- Kelly, Alfred. *The German Worker: Working-Class Autobiographies from the Age of Industrialization*. 1987. A superb collection of firsthand, primary-source accounts of working-class life, with an excellent introduction on German workers in general.
- Lees, Andrew, and Lynn Hollen Lees. *Cities and the Making of Modern Europe, 1750–1914*. 2008. An informative survey of European urbanization from the eighteenth century to World War One.