

*Gawky but  
enthusiastic  
Lambang*

# INDUSTRIALIZING AMERICA

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THE NINETEENTH CENTURY

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## Introduction

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THE YEAR IS 1801. Imagine that foreign guests to the inauguration of Thomas Jefferson, third president of the United States, are handed a guidebook to the young republic. In reading, they learn that the new nation comprises 5.3 million people. The inhabitants of the country have taken title to the lands of an additional 600,000 native peoples—their numbers now greatly depleted from upwards of five million through two centuries of disease and warfare. The new claimants to the continent among themselves also form a relatively heterogeneous lot. Immigrants from England constitute 50 percent of the population and slaves from Africa, 20 percent; there are small but noteworthy communities as well of Germans, Scots, Irish, Dutch, French Huguenots, and Swedes. A few pioneering souls have settled west of a line of mountains that parallels the eastern coastline 150 miles from the shore, but the bulk of the population lives along the Atlantic seaboard.

Despite occupying a narrow band, the citizens of the new country reside in historically distinct regions. In New England small family farms abound, family members producing goods mainly for their direct consumption. A more commercialized and prosperous agriculture marks the Middle Atlantic states, with grain production on large homesteads. In the American South most visible are the huge tobacco, rice, and emerging cotton plantations worked by gangs of slaves and whose product is marketed throughout the Western world. There are also burgeoning seaport cities, such as New York and Philadelphia, where merchants orchestrate the outward and inward flows of agricultural and manufactured goods and artisans ply their trades. By the time of Thomas Jefferson's ascension to the highest office of the land, however, a mere 10 percent of the in-

habitants of the young nation dwell in urban areas. This is a decidedly agrarian and rural society.

The year is now 1901. Imagine that guests to the second inauguration of William McKinley, twenty-fifth president of the United States, are presented with a new gazetteer. The physical boundaries of the country now encompass a vast domain. More than 77 million people live in forty-five states, which stretch from the Atlantic Ocean to the Pacific; during McKinley's first term in office the nation has even come into possession of foreign territories and is a rising world diplomatic and economic power. The Americans are now remarkably heterogeneous. Americans of German and Irish descent far outnumber those who identify with the English roots of the society; there are parts of the country in the Midwest where the population is distinctly Scandinavian; Chinese and Japanese communities dot the Pacific states, and Mexican communities, the Southwest; native Americans, now only 250,000 strong after further defeats and at the nadir in their population history, inhabit reservation lands largely in western states; and as President McKinley is delivering his second inaugural address, millions of newcomers with strange languages and customs from southern and eastern Europe are streaming into the cities of the East. Regional differentiation still marks the country, but there are now many more regions: there is logging in the Northwest, large-scale fruit and vegetable farming in California, mining in the mountain states, ranching in the Southwest, corn and wheat growing in the central prairies, dairying in the Upper Midwest, cotton still dominating in the South, prosperous mixed farming in the Ohio Valley, and industry in the Northeast.

A map in the gazetteer denotes these regions, and the unknowing viewer might mistakenly conclude that the nation remains primarily agrarian and rural; regions do tend to be defined and symbolized on maps by what the land bears. Agriculture indeed does remain critical. As the modern guidebook would indicate, more than 40 percent of the American people still work on farms in 1901, and this greatly affects the politics of the day. American farm goods amount to one-fourth of the country's gross national product, and they continue to be prime income producers in the world market economy. But that is not what the gazetteer would emphasize. The key story in 1901 is that of American industry, for as William McKinley accepts the accolades of the crowd in Washington, D.C., the United States stands as the world's leading industrial nation, manufacturer of one-third of the world's industrial output. One in four Americans now hold jobs in industry, and another 25 percent work in white-collar and service-sector jobs attendant to and spawned by industrial production. This new activity, of course, does not transpire in the

countryside. Commerce bred cities, and now increased commerce from industry and industry itself spur sizable urban growth. At the turn of the twentieth century, 40 percent of the American people live in cities, and 20 percent in truly large cities with populations of more than 100,000 people. In 1901, the United States is a thriving industrial and urban nation.

This book is concerned with the great social and economic transformations that occurred in this country over the course of the nineteenth century between the ages of Jefferson and McKinley. When and where change occurred and the pace of change will be of prime importance, but the great issue will be the "why" of change. What caused America to be so fundamentally transformed?

Words may prove more of a hindrance than a help in our search for explanations, obscuring more than they enlighten. Scholars and non-scholars alike tend to invoke simple terms or phrases that seemingly explain why change occurred; usually these words just describe what happened rather than why it happened. Take the word used in the title of this book, *industrialization*. Why did the United States transform itself in the nineteenth century? A quick and common response would be, "Because the nation industrialized." Again, that possibly describes what happened, but the term has limited explanatory value. Why did the nation industrialize?

Even as a descriptive term, *industrialization* is faulty. *Industrialization* variously refers to the general shift from agriculture to manufacture, the rapid and widespread adoption of mechanical means of production and inanimate forms of energy, the spread of the wage labor system, and the coming of large factories. To say that the nation industrialized implies that these changes happened uniformly and evenly and constituted the key development of the times. The easy invocation of the term misses too much—that throughout the nineteenth century, for example, American farmers vastly expanded the agricultural base of the nation and that agriculture continued to represent an essential building block of the economy; that whole areas of the country remained relatively untouched by industrialization; that even in industrialized regions, the process unfolded sporadically and without pattern. Home production and craft and small and medium-sized shop work persisted alongside and were stimulated by the mammoth new factories and plants. Office and service employment emerged and expanded as well. The nation did industrialize, but the term does not fully capture the complexity or even the essence of change.

*Urbanization* is a similarly flawed term. Greater numbers of Americans came to reside in cities, but that is only a part of the story. *Commer-*

*cialization* is perhaps a more useful term. Why did the United States change so dramatically between the presidential administrations of Jefferson and McKinley? Because the nation “commercialized,” or somewhat differently and less elegantly, became “capitalistic.” The fundamental thought here is that America became an unfettered market society: that all production and consumption became totally oriented toward selling and buying in the marketplace and that everything—goods, land, labor, even time—became valued accordingly by the calculus of supply and demand and the cash nexus. Market activity drove change; increased market activity even caused industrialization (and urbanization, for that matter).

Pointing to the expansion of the market as the key engine of change provides a more inclusive view than invoking “industrialization,” but the impulse to find a word or phrase that encapsulates developments is equally problematic here. On the lighter side, we are stuck with cumbersome phrases: “industrializing America” has to give way to “the rise of American market society” or “commercializing America.” The issue of description versus explanation seems less grievous, but as with our use of *industrialization*, the question still can be raised, why did the society become market-oriented? The real trouble, however, lies with the descriptive merits of the notion. The explanation that the great economic and social transformations of the nineteenth century in the United States were due to the emergence of the market is based on the premise that America before 1800 was premarket or precapitalistic. That assumption does not quite jibe with the historical record. Stressing the role of the market also overlooks the persistence of nonmarket activities, behaviors, and beliefs into the late nineteenth century in different parts of the country and among various groups within the population. A more important consideration is whether the simple descriptive “market society” is sufficient? Did America evolve into a particular kind of market society? And does the term help us in understanding concomitant political developments?

The chapters in this text are linked by an overall perspective, but one that cannot be conveniently reduced to a simple word or phrase. Instead, we shall examine a more comprehensive way of understanding the great economic and social changes that occurred in this country between 1800 and 1900 than is affordable with such notions as “industrialization” and “commercialization.” To state the view taken here as succinctly as possible: developments in the nineteenth century were marked by America’s passing first from a mercantile to an unregulated and then to a corporately and state-administered market society.

In greater detail, the argument is as follows: By the turn of the nineteenth century, the Europeans who had settled in the country were hardly

a premodern people who had been untouched by market activity. The country began as an outpost of the British mercantile system: the colonies existed simultaneously to build the wealth of the British nation and the power of the British crown. This very mercantilism, however, unleashed forces—physical dispersion, aggressive commercial activity, individualistic behavior—that spelled the doom of that system, and the American Revolution put a belated and formal end to mercantilism. The subsequent path of the new nation was open; America could become neomercantilist with state-driven economic expansion, an unregulated and uninhibited market society, or a more self-regulated yeoman producer republic. For a good hundred years after the American Revolution, politics would be marked by conflict over these vying visions and possibilities. During this time, the undoing of mercantilism gave way to fuller market activity; likewise, continuing antimercantilist sentiment and the democratic institutions established in the late eighteenth century limited government interventions in the economy and fostered a competitive, pluralistic politics. Such forces as population expansion, immigration, and westward settlement promoted (in more important ways) unregulated market activity and political pluralism. The spread of the market spurred industrial development (and urbanization), but neither the growth of market activity nor industrialization occurred evenly or within a vacuum; both processes were shaped by ongoing political dialogues on the future course of the republic. Unbridled market activity created economic and social instabilities and unrest; and by the late nineteenth century all groups within the society—businessmen, farmers, workers, professionals, government officials—began separately to organize and engage in associational activity aimed at the undoing of the competitive economic and political order. The appearance of large-scale corporations in the late nineteenth century represented a greater threat to the ideals of Americans than the earlier emergence of markets. A convergence of efforts at stabilization brought a reformed America by the first decades of the twentieth century.

In this overarching perspective, industrialization is treated as first a product and then an agent of change; industrial development was spawned by increased market activity, but in turn, industrialization both spurred more market activity and created social problems which demanded superintendence of politics and the economy. In this view, change between 1801 and 1901 is thus portrayed not as change from a nonmarket to a market-based America, but rather from an ordered to an unregulated and then ✓ administered market society. As will be shown, Americans in the nineteenth century remained divided not over the market *per se*, but rather, over the kind of market society they wanted, and relatedly, over the nature of social relations and power arrangements within their communities.

As with other general conceptions, the view informing the pages to follow misses a great deal—the United States is too large and its people too diverse for one perspective to incorporate all experience. The portrait provided here will be painted with a broad brush to cover the larger story, but will also be limned with a pointed stylus to highlight the details, the exceptions, and the varying histories of men and women, whites and blacks, native-born and immigrants, the well-off and the left-behind, and people of different regions. A sweeping perspective and narrative also tends to depersonalize the flow of history: vague forces—such as the market, population expansion, and technology—are at work pushing developments. This text, despite the grand themes, will try to put people at center stage—acting with great impact, within limits, with unintended consequences, in opposition to one another, and wittingly or unwittingly in concert.

The discussion to this point is undeniably but perhaps unavoidably abstract. Enough abstraction. Now to the story of the great transformations of American society in the nineteenth century (which will offer evidence of the larger perspective). The first chapter provides an extended survey of social and economic life at the time of Thomas Jefferson's inauguration and treats a revealing contemporary dialogue on manufacture. The second chapter charts the nation's first steps toward industrialization, emphasizing various paths taken and the unevenness of development; various arguments on the causes of industrial expansion will be assessed. Chapter 3 looks at the varied responses of Americans to the changes wrought by early industrialization, and Chapter 4 examines the role of government in economic affairs prior to and during the Civil War. The fifth chapter describes the building of a vast American industrial heartland in the last decades of the nineteenth century, raising questions of continuity and change. Chapter 6 analyzes the rise of the large-scale corporation during the period, and the last chapter deals with the explosive reactions of Americans to the presence of the corporation in the midst of their republic. The building of a new political economic order at the turn of the twentieth century is described briefly at the end of Chapter 7. We begin now in the late eighteenth century.

## Paths

### *The Unevenness of Early Industrial Development*

GRIM AND GREY: those are terms that come to mind when we visualize the nineteenth-century industrial city. Mill buildings dominate the vision, smoke spilling from their stacks, clouding the sky, blackening all surfaces. Masses of faceless men, women, and children are also filing through factory gates—it is six o'clock in the morning—taking their places in industry; working twelve hours a day, six days a week; servants to the machinery, feeding and tending it with relentless, repetitive motions; exposed to interminable heat and noise and constant physical danger; paid a pittance for their labors; stumbling home at workday's end to crowded tenements and dismal flats, families barely making ends meet. This is an apocalyptic view, of sudden and complete transformation: the industrial revolution.

The image reflects the reality only in small part. Complexity and diversity marked the whole process of industrialization. The growth of manufacture occurred in different countries, regions within countries, and trades in a remarkably uneven fashion; the timing and pace of change varied widely, as did choices of technology and managerial arrangements. Industrialization destroyed certain skills and occupations but created others; the process similarly generated both small- and large-scale enterprise. In the United States, agricultural expansion, not contraction, accompanied industrial development; professional, clerical, and service-sector employment grew alongside. No blanket history is thus affordable. The complex character of industrial development can be illustrated by first examining four different paths traveled toward industrialization in nineteenth-century America.

## Industrialization in the Countryside: The Mill Village

The notice in the newspaper caught Samuel Slater's eye. In 1787, he was just finishing his apprenticeship as a management trainee in a cotton mill in the village of Milford in Derbyshire, England. The news article attracted his attention because of his recently acquired knowledge in new water-powered cotton textile technologies. He read with interest that one John Hague had been awarded an extraordinary prize of £100 from the Pennsylvania Society for the Encouragement of Manufacture and the Useful Arts for building a successful water-driven carding machine, a device that straightened cotton fibers for spinning quickly and on a high-volume basis. This was probably the same John Hague who had left Derbyshire a decade earlier to find his fortunes in the New World. Slater undoubtedly had heard of other reports of Americans who sought and purchased the services of anyone from Britain who had been privy to pioneering developments in manufacture. The article on Hague convinced Slater that great opportunities existed for him across the Atlantic, and he made quick plans to set sail. He had to take care, however. He disguised himself as a farm laborer before boarding a ship to New York City. Had British customs officials suspected his training and knowledge in industry, he would not have been allowed to embark. (Obviously, the British system of barring emigration by skilled workers had cracks.) Slater thus reached the United States in 1789, and he would soon play a notable role in America's industrial history.

Samuel Slater is the best known of several scores of British skilled mechanics and mill managers who transferred the secrets of the new industrial age to the United States. Americans would greatly benefit from England's early start in manufacture, and the first generations of American manufacturers, particularly in textile production, would rely heavily on British immigrants who brought information and drawings or models of carding devices, spinning frames, power looms, and cloth printing machines. The British textile machine shop of the late eighteenth century functioned as the key site of development; from these bustling places came in quick succession the inventions that ushered in industrialization. A few figures—Richard Arkwright, most notably—served as the chief sources of inspiration and design, but the process was remarkably collaborative, with teams of skilled mechanics devising, constructing, and perfecting the new machinery. These workers and their contributions have passed into obscurity. Yet their place in invention cannot be ignored, and some of these English artisans would also serve in the diffusion of technology to the United States. American industrialization cannot be owed

to the British: the great majority of British immigrants arrived with little industrial experience, the relatively few who did could not possibly have met the total need for expertise required by expanding production, and circumstances in America necessitated technological modifications and innovations not contemplated or followed in England. Still, in the early period of American industrial development, English artisans contributed vital knowledge and helped launch a process.

Samuel Slater made sure that his contribution would not be lost to the historical record. Not only would he add to technological development in the United States, but he also would chart a particular path to industrialization in this country. Upon his arrival in America, Slater found employment in a New York City spinning jenny factory. In the then fairly small world of American manufacture, Slater heard of the problems faced by a prominent Providence, Rhode Island, merchant, Moses Brown, in establishing a textile works. Slater wrote to Brown offering to build and manage a spinning mill with Brown's money in return for a hefty percentage of the profits. With the dearth of his kind of expertise, Slater could drive a hard bargain. Brown accepted Slater's conditions, and thus began a collaboration that would see the building of dozens of cotton mills throughout Rhode Island and southeastern Massachusetts, including the construction of Slater's Pawtucket, Rhode Island, mill in 1793, commonly designated as the first successful mechanized spinning operation in the country (the operative word here is "successful").

Slater acted as an agent of technological transfer, but he also helped forge a particular kind of production system. He faced a singular problem in establishing textile manufactories; he could construct buildings and machines but not staff them. Agriculture drew all available labor in the vicinity of his mills. Slater first tried to operate his works with orphans and poor children who had become wards of their town governments, and later with apprentices, but to no avail. He then moved to attract and hire whole families. He entered into contracts with male heads of households. Wives and children would work in the mills; fathers would be offered jobs in supervision, construction, farming on lands purchased by Slater and the Browns, or in full- or part-time weaving in cottages provided by the company. Slater used the patriarchal authority system of the New England household to his own advantage, with the male heads responsible for maintaining their part of the contract—that is, to supply disciplined labor.

Necessity—the scarcity of labor and an abundance of land—forced Slater to rely on a family system of production, but experience and intention played a role, too. Derbyshire mills had operated in the same fashion, and Slater transferred this knowledge to the New England coun-

tryside. Slater also chose to build model, harmonious communities about his mills; attracting labor figured in this decision, but so did Slater's particular belief system (and his English experience). The mill villages he helped found typically included the mill at creek or river's edge; scattered cottages for families of workers; a commons and main street with school house, church, and stores; and artisan shops. Fields also about the village were worked normally on a leased basis.

An aura of stability held in Slater's communities. Family values and dynamics, religious teachings, schooling, and managerial rules contributed to the creation of order. Yet, tension and change marked the mill villages as well. Slater was in constant conflict with his investors, who did not care for his paternalist schemes; farmers surrounding the villages vigorously objected to the damming of riverways and diversions of water to power the mills; fathers could discipline their charges, but also serve as their representatives and demand new concessions; families constantly just up and left; formal work stoppages occurred. By the 1830s and 1840s, newcomers unconnected to Slater's operations had begun to open enterprises; and a growing labor market of immigrant and native-born young people who no longer found opportunity in New England's declining agricultural lands allowed Slater and his followers to begin to hire on a simple daily wage basis. Competition, too, from large-scale producers of threads, yarn, and cloth spelled an end to several mills and the communities they sustained.

Numerous circumstances could force the disintegration of the incorporated mill village, yet the form prevailed, spread, and persisted. From the northern wilderness of Maine to the hamlet of Rockdale in southeastern Pennsylvania, along creeks and narrow rivers, sprang up hundreds of mill communities during the first half of the nineteenth century—more than 400 by 1820—some actually founded by former employees of Slater. They shared many characteristics. Prominent local families sponsored development. The services of immigrant and native-born artisans were utilized in the design and construction of buildings and machines. Scientific and technological breakthroughs were followed and greatly discussed. Whole families of workers were employed, although widows and children composed sizable proportions of these communities. Women and children worked directly in the mills, adult men in handloom weaving in cottages and in ancillary positions. Mill village manufacturers concentrated in spinning and the weaving of cloth on an outwork basis. Mill village textile businesses generally survived through sales in local or specialized markets; eventually, many would succumb to competition from large-scale producers. Attempts to found stable communities only partially succeeded: workers bowed out of church services, children

skipped schooling, and the benevolent order in general required too much energy to sustain. Families also stayed for short periods, and wage laborers, many of them immigrant, eventually took their place.

As the mill villages of the Northeast began to disappear or lose their singular character in the last decades of the nineteenth century, they began to make their appearance in other sections of the country, particularly in the South. The family labor system of production remained a basic component of American industrialization; so, too, did attempts to create ordered industrial communities in the American countryside. Labor scarcity generally served as the prime motivator in the settlement and employment of whole families in rural industry, but the shared values and expectations of manufacturers and the families lured to the mills contributed to developments. Another kind of enclosed industrial village would also appear in the mid- and late-nineteenth century, particularly in mining and lumbering areas—the notorious company town. Marked by coercive labor practices, little benevolence, and the employment of individuals, not families, these outposts were a far cry from the communities established by Samuel Slater.

The classic mill village of the nineteenth century is normally and rightly associated with textiles. In fact, for all intents and purposes the so-called “industrial revolution” of the late eighteenth and early nineteenth centuries was a revolution in textile production. With the possible exception of the steam engine—whose invention was stimulated by the need to pump water from the deep shafts of coal mines—the great inventions of the times were textile machines. The factory, too, emerged as an institution in the period basically to house carding, spinning, and weaving machines. The new textile industry also served as the base for further manufacturing development—the chemical industry emerged to meet the needs of textile producers for bleaches and dyes; the machine and tool industries arose as similar offshoots. Textiles dominated events in the early period—the next technological surge would be related to transportation developments—yet, progress in the manufacture of other goods did occur in the early era and also in the countryside.

The resources of the lands and forests of the New World had provided for the growth of industry during the colonial period. Sawmills and grain mills dotted the countryside along falling waterways, and the early nineteenth century witnessed both expansion in production and improvements in milling technology. Oliver Evans' multistoried, fully automated flour mill, developed in the late 1780s alongside the Red Clay Creek in Delaware, represented one of the most spectacular leaps of invention (and imagination) of the whole early industrial period. Rural ironworks, taking advantage of rich iron ore deposits and the vast woodlands of the

American countryside, continued to increase the nation's contribution to world iron production; logs burned in special ways provided the charcoal fuel for the rural iron furnaces. Paper mills, requiring enormous quantities of water, were similarly located in the hinterland, and a major expansion in paper manufacture would occur in the 1820s with the adoption of the Fourdrinier machine, which fully mechanized the papermaking process. Production of lumber, grain, iron, and paper thus progressed in the countryside and, in the cases of iron and paper, often in the context of the mill village, though with individual laborers as well as family groups.

Industrialization is usually identified with cities—as it was by critics of manufacture such as Benjamin Franklin and Thomas Jefferson—yet industrialization in the United States (and England and elsewhere) began and continued in the countryside. Falling water to power the new machines made rural areas the site of initial and further manufacturing development; other resources of the land and forest played their role as well in the location of early industry. A special form of organization of production also appeared and proliferated in the countryside: the mill village with the family system of labor. Manufacture in administered rural communities on the basis of the employment of whole families represented one essential path toward industrialization.

### Full-Scale Industrialization: The One-Industry City

Francis Cabot Lowell did not rely on British immigrant artisans to provide him with information on the latest developments in textile technology. He went to England to see for himself. In 1810, Lowell, an established Boston merchant and Harvard College mathematics graduate, left his home for a two-year stay in Britain. He traveled ostensibly for health reasons, but also in search of new investment opportunities. The strain and uncertainties of commerce had taken a toll on his physical well-being, and investment in manufacture appeared more stable and less involving. Lowell visited several textile mills, showing a keen interest in new power looms, and he took mental notes. When he left England in 1812, custom officials searched his luggage, in vain, to find incriminating writing or drawings.

Lowell returned to Boston bent on constructing an integrated spinning and weaving mill that would produce an affordable broadcloth with state-of-the-art machinery. With the assistance of a close friend, Nathan Appleton, a member of another venerable Boston merchant family, Low-

ell founded a corporation, received a charter from the Massachusetts state legislature, and raised from among other elite families of the area \$400,000 to launch his venture (ten times the capital invested by the Browns and Slater in their individual mills).

Lowell and Appleton chose a site for their mill in Waltham, Massachusetts. Lowell may have held the secrets of the power loom in his mind, but he required the services of a brilliant mechanic, Paul Moody, to see its actual construction. The problem of attracting a labor force also concerned Lowell. A teeming and seething industrial city on the order of Manchester, England, had to be avoided; relying on displaced farm families, in the way that Slater had, seemed impracticable given the large staffing needs of his planned spinning and weaving factory. Lowell and Appleton decided on another strategy: to employ young, unmarried women from respectable New England farm families. The women would be provided safe lodging in company-owned boardinghouses overseen by matrons, good cash wages, and wholesome recreational activities. In 1814, the Waltham mill of the Boston Manufacturing Company commenced operations and quickly met all hopes and expectations of investors. Another mill building was erected, and soon the water power available at the location was exhausted. Lowell and his associates then made plans to build a larger industrial works at a site twenty-five miles north of Boston at the grand falls of the Merrimack River. Lowell himself would not live to see the awesome industrial city fashioned there from the 1820s to the 1850s that would bear his name.

Nathan Appleton gathered the financial support of approximately eighty Boston men of wealth and standing for the ambitious undertaking, raising more than \$8 million over fifteen years' time. Land was cleared, canals dug to channel water from the Merrimack, and sites leased alongside for the building of mills. Progress ensued. By 1835, twenty-two mills lined the canals of Lowell; by 1855, there were fifty-two, employing 8,800 women and 4,400 men and producing 2.25 million yards of cloth each week. An imposing industrial city had emerged in the wilderness; and travelers from Europe, such as Charles Dickens, flocked to Lowell in the decades of its development to see this now-famed example of American ingenuity and enterprise.

Lowell represented a grand leap in business financial practices, the organizing of production, the application of technology, and the employment of labor. The sheer amount of funds raised for this private endeavor dazzled the contemporary mind. The use of the corporate form of ownership was also unprecedented. Family ownership and partnerships constituted and remained the norm throughout the nineteenth century in commerce and manufacture; firms typically developed and expanded through

the investment of family savings, the plowing-back of profits, and the taking on of partners, not with the sale of securities.

The consolidation of production also had no analogue. Under the roofs of Lowell mills, cotton was cleaned, carded, spun, woven, and finished. The four-story factory buildings of the city encapsulated the revolution in integrated manufacturing. Cotton was often prepared for spinning on the top floor of these buildings and spun on the third; bobbins of thread were then taken to the second floor for weaving in power looms; finishing, printing, and packaging occurred on the main floor. The only part of the process not integrated was sales; Lowell mill owners relied on commission sales agents to distribute their bolts of cloth.

The flow of production in the Lowell mills dazzled the visitor, but so did the use of water-powered machinery, particularly the looms. English inventors had perfected power weaving machines in the first decades of the century, but it was Yankee manufacturers who adopted the machinery in a wholesale way that astounded the British. Only a few noted, however, that a surplus population of cheaply employed handloom weavers in Britain made innovation with machinery, the substitution of capital for labor, a less pressing matter there than for producers of cloth in labor-scarce New England.

Finally, beyond the great departures in business practices and technology manifest in Lowell, the city also offered an extraordinary human story. The Yankee farm girls tending the machinery of the new mills, their boarding in company dormitories, the publication of their own literary magazine, the *Lowell Offering*, and the general attention to their moral well-being, drew great interest. The majority of these recruits came from middling, respectable farm families and stayed for but short times in employment, as Francis Cabot Lowell had hoped; but they often came for their own reasons—to escape their families and not just to serve as extra-income producers—and they eventually proved to be thorns in the sides of management. The Lowell boardinghouses, conceived as proper and safe environments for these defenseless maidens, became bases for their own political and trade union organization.

Lowell is often rendered as the epitome of American industrialization: corporate ownership; large-scale, fully integrated mechanized production; manufacture of a standardized good; the use of a cheap labor source. The Boston investors who established Lowell replicated the model in other parts of New England—in such places as Chicopee, Massachusetts, though not always on as grand a scale—yet the Lowell system remained exceptional, just one route to industrialization in the United States. The fanfare over Lowell blinded perception of developments elsewhere. Even among

other examples of large-scale industry in the early age of manufacture, Lowell is not representative. A case in point here is another monument of American industry that emerged in New England at the time, Lynn Massachusetts, a famed center of shoe production.

In 1870, Lynn looked liked Lowell: large factories, mechanized production of a standardized product (in this case, shoes), and the employment of a wage-earning labor force of men, women, and children. The structural similarities, however, belied a vastly different history. Lowell emerged out of the proverbial thin air—an American phenomenon. Lynn constituted an evolving story, a progression toward full-scale industrialization common to Europe.

In the late eighteenth century, the area in and around the community of Lynn became a center for shoe production, but on the basis of the domestic outwork system. Farm families received raw materials from merchants, and through a division of labor in the household, shoes were produced in slack times; women sewed the uppers, and men shaped the soles and eventually fastened or lasted heels and soles to the uppers. As demand increased, merchants provided more work, and shoemaking became a full-time pursuit. Typically, Lynn shoemakers built small workshops—so-called “ten-footers”—near their homes and even began to hire apprentices and journeymen. Women continued to stitch uppers in the home without direct compensation.

In the 1830s, a centralization in production occurred. Merchants and enterprising shoemakers faced with great demand recruited labor to large workshops, where manufacture could be better supervised and made more efficient. The ten-footers began to disappear, though not entirely. Women in households—not just in Lynn but in a widening arc through the New England countryside—now received direct orders to stitch uppers from central shop owners. Paid a piece-rate price, their work became less connected to the general family labor system, and their new status led to a separate protest and organizing movement on their part to guarantee a just reward for their labors.

The 1840s witnessed further concentration in production. Central shops expanded into factory buildings. Employers began hiring women directly to sew inside the new manufactories, though outwork on a sizable scale persisted. A final stage of development was reached in the 1850s and 1860s with adoption of sewing machines and other mechanical devices for shoemaking. Lynn thereby provides a classic version of industrialization: from home production to domestic outwork, centralization and increased division of labor, factory building, and last, mechanization. Here, machines appeared as a final stage in the capitalist reorganization of production; in Lowell, mechanization led the way. Lynn and Lowell

differed in one other aspect. In Lynn's mechanized factories, tools and the product remained in the hands and command of the cutters, stitchers, and lasters; these workers did not serve as simple machine tenders as in Lowell's textile mills. Not coincidentally, artisanal traditions persisted in Lynn and sustained worker protest in a more notable way through the nineteenth century. Lowell and Lynn can be grouped together as examples of full-scale industrialization, of one-industry cities as well, of a different path from the mill village, yet their distinct histories deserve emphasis and reinforce the notion of the very unevenness of industrial development.

### Specialization: The Diversified Manufacturing Center

Lowell and Lynn provided visible evidence to mid-nineteenth-century foreign visitors of American prowess in manufacture. For the traveler to the nation's major urban centers—New York City and Philadelphia, in particular—the view of industrial development was less clear. Government reports indicated that these burgeoning cities were locations for the country's greatest industrial output. But from whence did this production flow? The metropolitan skyline revealed factory buildings here and there, but nothing on the order of the Lowell mills.

A deliberate reconnaissance would find production flowing everywhere: in cellars and attics, tenement flats, artisan shops, and a proliferation of indistinguishable small and medium-sized manufactories. Getting a handle on the swirl of enterprise required peeling away at layers of activity. Lowell, and even Lynn, offered more straightforward pictures.

Describing industrial growth in America's mid-nineteenth-century metropolitan centers is difficult. There are no famous figures (a Slater or Lowell), no prime-moving trades (textiles), and no singular inventions to anchor the story. Thousands of separate endeavors have to be told. Three tales of enterprise from the city of Philadelphia serve here to represent and illustrate the complex and diverse character of industrialization in the metropolis.

Samuel Wetherill was born in 1739. In his teens, he was apprenticed as a house carpenter, and later as a journeyman, he participated in the building of Philadelphia's first textile mill. In 1784, he changed occupations and opened a retail store, where he sold imported iron ware, window glass, tools, and paint pigments. At this time, Wetherill joined with Tench Coxe and other Philadelphians of standing in becoming a public advocate of domestic manufacture. In his own business, he also moved

toward manufacture by beginning to grind lead and mix it with oil and colors to produce paint.

In 1804, Wetherill built a separate facility to increase his output of paint. Growing demand for paint with increased housing construction and Wetherill's staunch support for ending the new nation's reliance on imported goods served as the impetus for this greater move toward manufacture. Six years later he built a larger facility, and his business in paint prospered with the curtailing of imports at the time of the War of 1812. To ensure an adequate supply of raw materials, Wetherill purchased a so-called pig lead farm outside of the city.

Wetherill's heirs continued to expand paint production; in the 1840s, his sons oversaw the construction of a large paint factory that employed seventy-five workers. They also closed their father's retail store to concentrate in manufacture. Until 1933, the Wetherill family continued to produce a paint that locally earned a reputation as a product of the highest quality. The enterprise founded by Samuel Wetherill in the late eighteenth century in many ways epitomizes enterprise in the American city; it was a small-to-medium-sized family-owned and -operated firm that survived through the production of a specialized good. Samuel Wetherill's passage from merchant to industrialist, however, is less characteristic.

William J. Young provides an example of the more typical artisan-turned-manufacturer of the early industrial period. Young is typical in another odd way. He was born in 1800, but existing documents make it unclear as to whether in Scotland or in Philadelphia soon after his parents migrated there. In one person he represents both the native-born and immigrant enterprising craftsman, figures inherent in the story of urban industrialization.

At the age of thirteen, Young was apprenticed to Thomas Whitney to learn, as his indenture noted, "The Trade or Mystery of a Mathematical Instrument Maker." Whitney taught the young man the precious craft of fashioning surveying devices, and Young was fortunate eventually to inherit his master's business in 1825 on Whitney's death.

With western land speculation and development, the time was ripe for the production of mapping instruments. American surveyors had relied on primitive homemade or imported European measuring tools. During the 1830s, Young patented a number of improved devices and received critical orders from new railroad companies, and soon his surveying gauges were earning prizes and acclaim as the finest manufactured in the country. By the 1850s, his shop was producing more than 150 instruments a year.

Despite increased orders, Young throughout his life operated his busi-

ness as a sole proprietor and according to strict craft standards. His workforce, never numbering more than twenty, included apprentices and a core of highly skilled machinists (whom Young paid dearly, as there was great incentive for them to leave and become independent instrument makers). Instruments fashioned in Young's shop were made to order and crafted by individual workmen; in the face of competition from assembly-line producers, Young and eventually his heirs resisted engaging in even small-batch orders. Young also became active in radical politics in Philadelphia, serving as an officer in the Working Men's Party in the early 1830s. There is little surviving testimony from either William Young or Samuel Wetherill to warrant anything more than speculation, but within these two figures can be seen different strands of postmercantilist belief, with Wetherill supportive of a dynamic manufacturing republic and Young of the small producer's democracy.

William H. Horstmann provides a bona fide example of immigrant enterprise. A native of Cassel, Germany, Horstmann emigrated to Philadelphia in the first decade of the nineteenth century. He arrived in America with both talents and resources. He was a highly skilled, French-trained silk weaver who enjoyed the financial support of wealthy Philadelphia relatives.

In 1815, using capital advanced by family members, Horstmann established a small shop. With the help of other German-born weavers and younger American-born journeymen and apprentices, his shop turned out high-quality silk labels, ribbons, and threads. To avoid competition with foreign imports, Horstmann deliberately specialized in custom products rather than engaging in the production of broad silk cloths.

In 1824, Horstmann introduced to his shop and to the country the revolutionary Jacquard loom, a loom whose movements were controlled in an automated fashion by hole-punch cards. Production and work relations at Horstmann's changed immediately. Horstmann soon replaced his apprentices and journeymen with unskilled machine tenders, largely from Philadelphia's German community; he did retain a core of artisan weavers who continued to work on handlooms to produce the more ornate products.

Following the introduction of the new technology, Horstmann's company prospered, but still through the production of specialty goods. From his expanding shop came silk tassels, lace, fine threads, flags, and banners, among a host of items. The firm soon outgrew its original quarters, and in 1854, Horstmann's sons opened a five-story factory building near the center of Philadelphia; they employed now between 400 and 500 workers, who continued to manufacture fancy silk products. Horstmann's operated on a far larger scale than was typical in the

mid-nineteenth-century American metropolis—in 1860, manufacturing firms in Philadelphia averaged a mere eight employees—yet, in specialization of production, the company joined its neighbors.

Take the enterprises of Samuel Wetherill, William Young, William Horstmann, and the thousands of others that operated in cities such as New York, Philadelphia, and Newark at mid-nineteenth century, and they do add up to a whole. At least four characteristics are apparent in metropolitan industrialization. The first is product diversity. Instead of one kind of item, an amazing array of goods poured from workshops of the city: paints and varnishes, fine instruments, fancy cloth, hats and caps, plain garments, tailored wear, tools, machines, saws, lumber, furniture, rugs, chemicals, drugs, glass, jewelry, books, bricks and tiles, and more.

A diversity of work settings is a complementary feature. The goods produced in the mid-nineteenth-century American city issued from a variety of sites. Urban workers toiled in factory buildings, operating water-powered, but in some instances, steam-powered machinery; in smaller manufactories with hand- and foot-driven machines; in artisans' shops where craft practices and standards persisted; and in sweatshops and homes. Workplaces constantly changed, too. A visit to a mill building one year might find one firm operating with a force of machine operatives; the next year the same urban structure might be subdivided into several businesses producing variously on manufactory, craft, or sweatshop bases. Single goods could be manufactured in any number of the city's diverse workplaces—hats and caps, for example, were produced in factories as well craft shops—and, adding to the complexity, single goods might pass through several settings in the complete production process. In textiles, a fiber thus might be combed and carded in a home on an outwork basis, spun in a mill, woven in an artisan shop, and dyed or printed in a small manufactory. The line between mill, shop, and home was hazy.

Specialization—in both operations and products—was a third component of the urban production system. Fully integrated enterprises on the order of the Lowell mills were more the exception than the rule; separate establishments emerged as the pattern. In textiles, for example, independent manufacturers engaged in either spinning or the weaving, dyeing, or printing of cloth. Custom production also marked urban industry. Rather than produce coarse standardized goods, city firms prospered by manufacturing small-batch custom items to the specifications of their many clients; this occurred even in large-scale works such as William Horstmann's silk company.

The small to medium-sized family-owned and -managed business was

a fourth critical feature of metropolitan industrialization. As late as 1880 in a city like Philadelphia, the average industrial worker labored in a unit of approximately twenty employees; the number of large firms on the order of those common to one-industry towns, with 750 or more employed, could be counted on the fingers of one hand. Only a small percentage of companies adopted the corporate form of ownership—proprietorships and partnerships were the norm—and the few corporate entities that emerged in major urban centers were owned privately and founded for legal reasons and the privileges of limited liability rather than for greater capitalization.

Diversified products and work settings, segmented establishments, a high proportion of employment devoted to the production of specialized goods, and the prevalence of the small to medium-sized family-owned and -administered enterprises characterized the mid-nineteenth century urban industrial system. Why did the structure of urban production take this form? Why was it so different from the one-industry mill towns? There is no single or simple answer here. Energy resources is a first consideration. Cities such as New York and Philadelphia lacked major running waterways or waterfalls; this initially precluded the building of large, totally mechanized factories. Urban firms would eventually look to solve their energy needs with steam power, but an adequate supply of labor would support the persistence of hand labor.

Artisanal production also provided the base for the ever-steady increases in urban industry. What is notable in America's major cities in the nineteenth century is not the effort of merchants gathering outworkers into merchant-created centralized shops and manufactories, but the building and expansion of firms by craftsmen-entrepreneurs. The artisans-turned-manufacturers also fortuitously had on hand plentiful supplies of skilled laborers, allowing for the production of fine wares. Cities continued to attract skilled immigrant workers and potential small-scale operators, perpetuating the process.

The advantages of specialized production were a third consideration. Competing with large-scale manufacturers—from New England and eventually elsewhere—would have proven disastrous for urban proprietors. Rather than produce standardized goods, they profited by dealing in local or specialized markets. Their small scale afforded a flexibility that allowed them to shift into new product lines with fashion and market changes; abundant skilled labor further facilitated the process. The urban production system rested on the advantages achieved through specialization rather than the benefits that can accrue through scale.

A final partial explanation for the particular industrial history of America's major nineteenth-century cities lies in the investment behav-

iors of urban elites. The great mercantile families that had accumulated wealth in colonial commerce placed their surplus capital in large-scale ventures: in Lowell mills, but also in further trade, banking, canal and railroad construction, and mining development. They opted out of urban industrial development. This created a capital scarcity, a further limit on the building of large enterprises, but also a vacuum. Aspiring native-born artisans and enterprising immigrant skilled workers filled the void and established the diversified urban manufacturing system and center.

### The Southern Variant: Industrial Slavery

The antebellum South is not identified with industrialization, but rather with the expansion of slave plantation agriculture. Cotton is the story here. Cotton had been grown before the 1800s, but southern economic development through the colonial period had been based on the cultivation of tobacco and rice (as well as indigo and the processing of pine pitch and hemp for naval stores). A leap in southern fortunes occurred in the early nineteenth century with an intense shift toward cotton production. Eli Whitney's invention of the cotton gin—a device patented in 1793 to separate cotton seeds from the cotton fiber, particularly short-staple cotton—traditionally is cited as the prime mover. The cotton gin developed by Whitney and others eliminated a time-consuming and labor-intensive process, thereby making the growing of cotton a profitable pursuit. But the real source of the South's new and prosperous history was the British textile revolution. The South possessed the optimum soil and climate to grow what was now the world's main commodity: the cotton demanded by the new machines. Industrialization in this case generated greater agricultural development.

Cotton production dominated southern history in the first half of the nineteenth century, forcing population dispersion, land speculation and western development in the region, the perpetuation and encasing of slavery, and eventually political conflict between the states. Yet, the period also witnessed manufacturing growth in the South. The South had its advocates of industry, who experimented with textile machines and mills in the late eighteenth century and formed their societies to promote the cause. In the 1830s and 1840s, another set of proselytizers emerged to encourage Southerners to invest in local industry, arguing that the region could ill afford to depend on outsiders, namely Northerners, for needed manufactured goods.

And growth occurred. By 1860, the South accounted for 20 percent of the capital invested in the nation's industries and 15 percent of the coun-

try's manufacturing capacity. Twenty-five percent of the textiles produced in the United States at the time came from southern mills, although this and other statistics have to be put in proper perspective: southern textile factories combined contained fewer spindles than found in the city of Lowell alone. The South lagged behind the North in general; with 36 percent of the American population, the region contributed less than 11 percent of the country's industrial output. Yet, if the South had become a separate nation, it would have then ranked in the top five or six of industrial nations, and not just in textiles, but iron making, mining, milling of grains and timbers, sugar refining, and leather tanning as well. To the South's disadvantage, too, lost from the accounting of production was the vast amount of manufactured goods produced on plantations for direct use.

That the South developed industries at all might have come as a surprise to a contemporary visitor who expected all energies to be directed toward cotton. Equally of note was the antebellum South's system of industrial production, for actually laboring in the region's manufactories were slaves. The choice of labor systems had provoked debate among southern proponents of industrialization. William Gregg, a chief advocate, warned against the use of slaves. Slaves remained too inefficient and undisciplined for industrial work, he argued. Southern manufactures would be better advised to both utilize and improve the labor of the white poor of the region. To that end, Gregg established a mill village on order of Samuel Slater's in Graniteville, South Carolina, in the 1840s, where he employed white families from backwoods areas. William Gregg became the exception, however, for southern industrialists in the antebellum period would rely almost exclusively on slave labor. In the 1850s, between 150,000 and 200,000 slaves, 5 percent of the total number of slaves in the South, toiled in southern textile mills, iron works, tobacco processing plants, hemp factories, sugar refineries, coal mines, salt works, grain and lumber mills, and in construction and on the region's railroads. If the number of slave artisans on plantations—carpenters, blacksmiths, and others—were added to the list, the ranks of the region's slave industrial labor force would be more impressive.

Slaves working in industry often possessed greater skills than field hands on the plantation, yet their labor could be more grueling. Manufacturing firms in the South generally purchased their own slaves; 80 percent of the slaves engaged in manufacture were owned directly, and the other 20 percent were hired, on loan, in effect, from local slave owners. Companies provided clothing, barracklike housing, food, and health care. The industrial regimen led to long hours and constant toil, close supervision, injuries, and no time off; the irregular pattern of agri-

cultural work afforded greater leeway. Industrial slaves rebelled in the face of such exploitation, collectively with work stoppages and sabotage—often led by the skilled workers whose craft sensibilities additionally fired their anger—and individually as runaways. Hired slaves were spared some of the worst brutalities; their owners signed contracts with industrial employers that provided a modicum of protection from severe punishment.

Slavery thus did not preclude manufacture; the South charted its peculiar path to industrialization with the use of bonded labor. A question, though, concerning antebellum developments has occupied scholars: the South witnessed the growth of manufacturing during the first half of the nineteenth century, but why did the region lag so far behind the North? Why was there not greater industrialization in the South during the period? To these questions a variety of answers have been offered.

The very success of agriculture stilled industrial progress. Great profits were to be made in investments in land, slaves, and cotton seed, given the great demand for southern cotton in the world market economy. Few chose to put their money elsewhere. The South also lacked a viable market for manufactured goods; most plantations were self-sufficient or importers of cheap items from the North and abroad, and the white yeomanry were either too poor or resistant to participate in market activity.

Slavery also served as a brake on manufacturing growth. Slaves could never form a large industrial labor force, for slave masters feared concentrations of slaves in industrial sites, particularly in urban areas. The creation of a free wage-labor force, particularly of immigrants, was equally threatening. A final explanation for the southern lag in industrial development places weight on the conservatism of the planter elites, their lack of an entrepreneurial bent.

None of the above conjectures provides a satisfactory answer. Southern industrial enterprises returned great profits, two and three times the returns on investments in agriculture in most instances; more capital should have been attracted to manufacture. The South bought manufactured goods from the North and Europe; local industries could have supplied this market. Obviously, too, slavery could be adapted to industrial pursuits. The South thus had during the antebellum period ample incentives and resources for greater manufacturing progress.

A key element in the question of southern industrialization has to be the proclivities of the men of wealth who could have bankrolled further developments. Those who accumulated surplus capital through agriculture either felt the risk too great, feared the social consequences of establishing manufacturing centers, or else felt no pressure to change their

activities. Merchant capitalists in the North eagerly sought new outlets for investment with the strain and uncertainties of commerce; they funded large-scale projects, and enterprising native-born and immigrant artisans filled in the voids. The power and authority of the elites of the South rested on their lordship of the land; they were not pushed economically to move in new directions, and they acted to preserve the basis of their status and the social order. There were no other groups to seize the industrial initiative. The South, again, wended its particular way.

### The Varied Course and Causes of Industrialization

There is, then, no single history of industrialization. Obvious differences can be noted between nations, but even within one country, as is the case with the United States in the first half of the nineteenth century, industrial development assumed various forms: the mill village with the family system of labor; the one-industry town; the diversified urban manufacturing center; industrial slavery. The disparate character of industrialization has not, however, prevented a search for singular answers, for locating key factors, causes, or prime movers of change. In the 1950s, to provide a notable example, scholars from a variety of disciplines—economics, political science, history—devoted great effort toward conceiving succinct explanations or models of industrialization. The Cold War provided the immediate backdrop to this rather agitated intellectual endeavor. The United States and the Soviet Union at the time vied for the loyalties of new nations created through decolonialization—the ending, after World War II, of centuries of European imperialism. Advice and programs were offered to modernize the countries of Africa, Asia, and Latin America that were deemed undeveloped; in the name of increased productivity and higher standards of living, industrialization emerged as a central goal. To counter the Soviet example and model—government-directed socialist development—American scholars rushed forward with alternative strategies drawn seemingly from America's successful past.

Concentrate on the production and marketing of a single staple crop or raw material that can be produced at a comparative advantage, went one answer. Use the monies gained from sales of that commodity in the world market to finance industrial development. Referred to here was the assumed prime role that cotton had played in antebellum America; the income the South derived from cotton fostered economic development in the Northeast and West as the South purchased goods and services from those regions. Create an infrastructure of transportation and commun-

cations facilities to allow and encourage market activity, went another proposal of the period that harked back to other developments in the early nineteenth century. Or place great energies and money into a prime industry—railroads or steel, for example—and through various spin-offs, that initiative would lead to expansion in all sectors. Build schools, increase literacy, and inculcate modern attitudes—a further answer drawn from the American experience that had its adherents.

The scramble to define and advance so-called noncommunist recipes for development can be faulted on any number of grounds (in fact, this entire intellectual enterprise had a short history, though not without great repercussions for American foreign policy). Circumstances differed so entirely that lessons drawn from the 1820s and 1830s had little practical value in the mid-twentieth century. Americans certainly did not face a world of fully developed and competitive countries at the moment of its economic ascendance, for example. Deliberation and plan also mark modern initiatives at development; they have followed revolutions and wars that established new nations. While some advocates of manufacture also portrayed American industrialization as part of a nation-building process, manufacturing emerged in the United States neither orchestrated nor part of a grand scheme. Certain answers likewise represented incomplete readings of the American past. Industrialization in the Northeast, for example, can hardly be attributed to demand for products from the cotton-rich South, as one Cold War-era theory of development suggested; industrialization rested more critically on factors internal to the region, including growing local demand for manufactured goods. Particular criticisms of the theories of economic development conceived in the 1950s can thus be noted, but a major point may be missed: that the entire effort to conceive of recipes rested on the dubious assumption that there is one road toward industrialization.

The varied nature of industrial development renders any discussion of the causes of industrialization necessarily complex. Two general approaches to explaining the transition to industrial society are apparent in the literature on the subject. The first is to focus on the role of *events*. For example, emphasis can be placed on the impact of a major invention or technological breakthrough. Thus, the invention of the steam engine (or the spinning frame) suddenly and dramatically altered the course of history. One could as well pinpoint the trailblazing initiatives of entrepreneurial figures and their investment in and establishment of new endeavors. This way of accounting for change has never proved adequate or satisfactory. Invention (or capitalization) rarely occurs in a vacuum, but rather in response to demands for products that are marks of changes already afoot in societies; likewise, the adoptions of inventions—and the

reasons behind them—are as important as, if not more important than, the inventions themselves.

Other kinds of events can also be made the center of the story. America's early industrial history has often been related to European political crises occurring during the first decades of the nineteenth century. The economic fate of the new republic hinged to a great extent on the ongoing Napoleonic Wars in Europe. America's commercial fortunes prospered when American ships remained free from attack and were the sole source of international transportation services; the business of American merchants collapsed when their ships lost their neutral status and came under fire. In 1807, France and England declared all ships carrying goods to the other side to be liable to attack; President Thomas Jefferson responded with the Embargo Act of 1807, which virtually ended all foreign trade of American shippers. The mercantile community in the United States suffered dearly—one reason why Francis Cabot Lowell and others sought new investment outlets—but ironically, suspension of overseas commerce served as a great boost to American manufacturers, who operated now without foreign competition. The seeds of American industrialization in this traditional way of analysis can thus be laid to geopolitical events of the first decades of the nineteenth century, and particularly to the Embargo Act of 1807. As with other explanations that fix on the importance of particular events, this too sidesteps a whole complex of developments.

A different tack than attributing industrialization to this or that invention, individual, or political crisis is to focus on long-term impersonal forces or the preconditions and givens that allowed for change. The new republic's vast natural resource base, trading experience and traditions, expanding population (and relatedly, expanding demand for products), supportive political framework, artisanal base, and relative antiradicalism and unboundedness—all of these served as critical factors. Capital, labor, and ideas could flow toward new opportunities unimpeded for the most part by custom, law, group ties, and the need of elites to maintain social ways (on these latter points the north and south do diverge). The ingredients were there, in other words, for industrialization.

Isolating necessary conditions for change does beg to a certain extent the question of the causes of industrialization. Scholars operating within this explanatory mode often have to resort to some precipitating event or development; once in motion, history unfolds rapidly given the various auspicious circumstances. This structural approach also ignores (or fails to account for) the very uneven and disparate character of industrial development. (The same could be said for perspectives that rest on the

role of specific occurrences.) The only conclusion to be drawn is that the causes of industrialization are complex. Underlying forces and critical events have to be considered in tandem; but more important, no discussion of the causes of industrial development can lose sight of its varied character. There is no single recipe.

If different paths were traveled—if the *course* of industrialization varied—the questions arises, then why? Values and political crises and ideology played some role. The potential existed for greater investment and progress in industry in the South, even with the great gains to be made in agriculture. But fears of social disorder with either a slave or free-labor (immigrant) industrial workforce, and the ruling elite's desire to maintain their status as lords of the land, placed a brake on development. In the North, too, concern about social unrest shaped choices. Samuel Slater and the men who launched large-scale industrial projects in Lowell and elsewhere mobilized labor and organized production in ways they hoped would sustain social harmonies. Native-born and immigrant artisans created enterprises that maintained craft traditions and practices. Moral visions and not just economic calculations guided these ventures and made for different histories.

Costs mattered, though, and particular resource endowments and costs contributed to differences in development. Results could be seemingly at odds. Consider wood as an example. The vast forests of the North American continent provided colonists and citizens of the new republic alike with an abundance of wood. Ships could be built cheaply, and the shipping industry thrived in northeastern cities. Inexpensive wood allowed machine builders to fabricate cheap machines, and machine use spread accordingly. Americans quickly learned disposable habits; with wood machines in relatively great supply, manufacturers replaced these less-than-durable constructions at will. In deforested England, in contrast, where wood was scarce, machines were built of wrought iron. They lasted longer, but their cost (and an English taste for quality) slowed the adoption of mechanical means of production. Yet, the very abundance of wood in the United States also led to a retardation of development in one key industry, and that was iron manufacture. Iron makers in the country continued to melt iron ore with cheap carbonized wood (charcoal) into the second half of the nineteenth century; in Great Britain, manufacturers at an early date experimented with treated coal (coke) as a fuel and were producing quantities of high-grade steel in specially developed blast furnaces decades before their American counterparts. A resource endowment did not necessarily induce technological progress; the cost factor could drive innovation or sustain old practices.

An abundance of wood also allowed for cheap building construction;

but here, the high cost of labor—specifically skilled labor—countered expansion. American builders soon developed new techniques—including balloon-frame housing, which required few hands—to alleviate the problem. Labor costs proved during the antebellum period to be an important element shaping developments. The many paths followed toward industrialization in the era can be related in great measure to the labor factor. In labor-scarce New England, manufacturers moved to substitute capital for labor and thereby established the fully integrated, mechanized textile mills of Lowell (they also made use of the region's underutilized labor of women and children as semi- and unskilled machine tenders); Samuel Slater dealt with the problem by employing whole families, who were often displaced from the land. In New York and Philadelphia, a relative wealth of skilled labor allowed for the maintenance and expansion of a special small-batch, custom production system. In the South, the costs of shifting labor fully and profitably employed on the land to industry deterred greater investment in manufacture. The labor factor does not singly explain differences in development. The investment behaviors of Boston's great commercial families have to be taken into account as well as labor costs in the New England region to understand the extraordinary history of Lowell; likewise, the fears and predilections of southern elite planters have to be weighed alongside the expense they might have incurred in substantially moving slave labor from the land to the mill. Still, labor was a resource whose varied cost contributed to a varied history of industrialization.

The question of labor costs and American industrial development has captured the attention of successive generations of commentators and scholars. As early as the 1840s and 1850s, British visitors to the United States focused on the relative scarcity of skilled labor in the country and suggested that the high costs of such labor had driven American manufacturers to substitute capital or machinery for labor in a dramatic way. They were equally impressed with the adoption by American businessmen of interchangeable parts production techniques, which they dubbed "The American System of Manufactures." The fitting of imprecisely tooled components into final products involved time-consuming and highly skilled labor; by improving parts manufacture, American industrialists, according to British investigators, had reduced the assembly process to a simple and cheaply paid task. A revolution in production had thus been achieved.

In highlighting seemingly special features of American industrialization, British visitors bequeathed a definitive view: that America's industrial development had a singular quality, was unique, and that high labor costs were the key generative force. That perspective continues to inform

studies of America's industrial past, and in our own time economists still debate what is called the "scarcity of labor" thesis—a beguiling mono-causal argument that can explain not only technological developments, but also, supposedly, the ease with which Americans accepted machinery since jobs were not threatened, Americans' penchant for cheap standardized products, the purchasing power of American consumers and American consumerism, the robustness of the American economy in general, and the relative absence of class tensions in the society. The issue of labor costs is critical in understanding early American industrialization (and in accounting for different paths taken), but qualifications are in order for this singular explanation as well.

First, British visitors saw and wrote of many things. They viewed Lowell and were impressed by the full-scale mechanization of production. The Americans had adopted their power loom technologies in a rapid and widespread way, and in this instance, the persistence of hand-loom weaving in England, with that nation's abundant supply of weavers in need of work, made a perfectly clear point. The British also made note of the fully integrated production system of the Lowell mills and drew similar lessons about the role of labor costs. But the visitors viewed another kind of work site where they were inspired in a different way. Wooden and brass clock manufactories, located largely in Connecticut, provided one impressive display. There, semiskilled workers stamped, carved, or lathed hundreds of simple parts and passed them along on a conveyor-line basis for the rapid assembly of uniform clocks. This was a far cry from the traditional clock works in which a few craftsmen painstakingly made custom clocks, often with one-of-a-kind clock pieces. Equally of note was the production of guns in American arms factories and especially in federal armories in Springfield, Massachusetts, and Harpers Ferry, Virginia. Eli Whitney had actually been one of the first manufacturers to experiment with the mass production of guns using interchangeable parts; Whitney is etched into history for his invention of the cotton gin, but he played an equally important role in devising new manufacturing techniques with guns. The great breakthroughs occurred in the federal armories in the first three decades of the nineteenth century with the development of new lathing and drilling machines that required little skill to operate and that produced precisely tooled parts easily assembled into guns on a mass-production basis; as late as 1800, all guns, their stocks, barrels, and locks, had been crafted by single gunsmiths. British visitors could not but be impressed by what they saw in the more notable clock and gun works that they toured, and it was the interchangeable parts manufacturing technique that they dubbed "The American System of Manufactures." It was not the fully mechanized and inte-

grated production at Lowell that they had in mind when invoking this cachet.

Unfortunately, British visitors saw only select sites and did not investigate deeply where they did tour; consequently, they handed down an incomplete and misleading view. Had they visited Slater's mill villages or, more notably, the labyrinthine world of metropolitan industrialization of a New York or Philadelphia (much less the manufactories of the slave-labor South), they would not have drawn a monolithic portrait. America had many systems of manufacture, and diversity should have been the key point of their reports, not the exceptional cases of Lowell and the interchangeable parts production clock and gun works they visited. Even at the latter, the British commentators exaggerated the extent to which an assembly-line system had been perfected. (They also missed the labor unrest that marked these places, particularly at the armory at Harper's Ferry.) Knowledge and technology were still in a primitive stage, and late into the century, skilled craftsmen were still filing and bending and getting the parts into place for the proper operation of the clocks and guns produced (and later, the sewing machines and other devices where interchangeable parts production techniques were adopted). Until a truly national and standardized market came into existence as well, there existed little pressure to have the absolutely perfect tooled parts that would make the promise of assembly-line manufacture a reality.

The British saw a piece of the whole, and that extraordinary piece cannot be discounted. Nor can the role that labor costs played in shaping American industrialization, particularly the diverse character of industrial development in the country. High skilled labor costs in New England caused the substitution of capital for labor and the adoption of detailed division and deskilling of labor techniques; a surplus of skilled labor, on the other hand, allowed for specialized manufacture in the nation's urban centers. The "scarcity of labor" thesis itself only holds in certain instances, but a general labor cost view that points to both insufficiencies and adequacies of labor is helpful in understanding the varied nature of American industrialization.

Values, fears of social unrest, and relative resource endowments can be employed to explain the different routes to industrial development traveled in the United States in the first half of the nineteenth century. But two additional considerations deserve mention. The first of these is the very absence of plan: a nation-builder on the order of a Bismarck or a Stalin did not force industrialization in this country; no person or group charted or had the power to fix a particular course, and varied paths could be followed. Second, the nation was too large, locally oriented, diverse demographically and in natural resources; and politically decen-

tralized for there to be one history written. Unevenness naturally marked the process. Early American industrialization, then, had a disparate character, but this did not in fact prevent the American people from reacting in both organized and personal ways to the vast social changes that occurred in the country in the early stages of development. But since a uniform industrial experience did not prevail, a unified response was not in the offing.

## Reactions

### *Americans' Responses to Early Industrialization*

ON THE EVENING of June 1, 1824, fire destroyed a portion of Walcott's Mill in Pawtucket, Rhode Island, and as a local newspaper reported, arson was suspected. This had not been the first fire of suspicious origin to damage a cotton mill in the seemingly peaceful industrial village developed by Samuel Slater, but the circumstances surrounding the blaze at Walcott's gave extra pause to textile manufacturers in the area. Just six days earlier, workers in the cotton mills of Pawtucket had walked off their jobs in protest over the simultaneous announcements of reductions in wages and increases in the hours of work. The fire on June 1 may have persuaded mill owners in Pawtucket of the deep-seated anger of their employees and the potential for greater disorder, for in two days' time they agreed to a compromise settlement of the dispute, and production resumed.

Burning factory buildings and destroying machinery represented one response to industrialization, but it was not a common one in the United States during the early years of industrial development. Evidence exists for only occasional and scattered incidents of such sabotage. Certainly, the country did not witness the contagion of machine-breaking that gripped England in 1811 and 1812, when manufacturing workers marching under the banner of the mythical figure Ned Ludd destroyed more than a thousand textile mills and hacked spinning jennies, power looms, and hosiery, lace, and shearing frames to pieces. Nor were there any outbreaks of violence equivalent to those accompanying the raids of English agricultural workers in the 1830s, this movement led by a mythical Captain Swing, that resulted in the burning of barns and massive destruction of threshing machines.

The English machine-breakers of the early nineteenth century left many a legacy, including a tangible image of labor violence, but also a label, Luddite. To judge modern technology as inherently dehumanizing and exploitative is to risk being called a Luddite. The term, however, provides a misreading of the events of the early nineteenth century. English workers who destroyed looms and threshers were not antagonistic to machinery per se. The historical record reveals their raids to have been organized, aimed at specific employers, part of strike activity, and launched during particularly bad economic times. Machine-breaking was more tactic than principle, a pre-trade-union way of protesting deteriorating conditions of work and life that echoed centuries-long traditions of plebeian revolt. This way of understanding violent responses in England to industrialization in the early period also offers a critical clue as to the relative absence of machine-wrecking in the United States in the same era. The commercialization of agriculture and open-field farming had released labor from the land and created a surplus labor population in England; the adoption of labor-saving devices made matters worse. English laboring people attacked the very objects that caused greater unemployment and powerlessness. In the United States, in contrast, machines replaced few workers; with an expanding agricultural base and with labor therefore lured to the land, machines filled a vacuum.

The machine did not emerge as a phantom in the midst of the new American republic, as a threat necessarily either to livelihoods or social order. Americans greeted the machines of the age with genuine curiosity and enthusiasm. Men like Thomas Jefferson, who greatly feared the personal and political impact of industrialization, assiduously followed the latest technological developments and delighted in their own inventions. Working people and manufacturers alike during the antebellum period flocked to demonstrations of the newest devices and attended lectures and forums on science and engineering at newly founded institutions, such as the aptly named Franklin Institute for the Promotion of the Mechanic Arts in Philadelphia. A Thoreau or a Melville might have depicted the machine as intruder and despoiler of nature, but a more common scene represented in the art and literature of the day was of the machine naturally absorbed into the pastoral American landscape. The machine further appeared in the essays of Emerson, the orations of Daniel Webster, and the poetry of Walt Whitman as a vital tool for the virtuous American yeomanry in whose hands rested the well-being and progress of the community. Artists and writers thus incorporated the machine into their visions of a bucolic American republic, but in the very taming of technology with their pictures and words there rested an admission of technology's potential threat to nature and the society. The

example of England hovered constantly in the mind. Still, the positive heralding of the machine had a basis in reality; industrial development by mid-nineteenth century was uneven and at an early stage, and in the American circumstance of a relative abundance of land and scarcity of labor, the machine did not displace.

Americans did react during the antebellum period in protest and fear over transformations occurring in their midst, but the machine was not the problem. At issue instead were fundamental changes in the nature of social relations and community life wrought by the expansion of unbridled market activity and the spread of the wage labor system. Americans responded in both organized and personal ways to these challenges of the day. Craftsmen protested the undoing of traditional practices in their trades, and workers in emerging industries, the exploitative character of new kinds of work. People of property and standing formed institutions to reorder their fractured communities. A more subtle response involved the assuming and fashioning of new lifestyles and poses. The various reactions to be delineated can be placed under the convenient title of "responses to early industrialization," but that caption requires clarification. Americans responded rather generously to the coming of the machine; they reacted apprehensively to a new age seemingly ruled by supply and demand and the cash nexus. The sum of the reactions, however, totaled less than an explosion, in contrast to social crises that would occur in the United States in the late nineteenth century. The unevenness of development in the antebellum period and varied industrial experiences moderated the reaction; an antimercantilist consensus also held events in check, and in general, the stage had not yet been reached where industrialization fundamentally challenged the groundworks of the republic.

### Artisan Protest

Change and conflict materialized first in the artisan shops of the new republic. Mechanization and factory production, hallmarks of industrialization, played only a small role here; at issue, rather, was the more fundamental question of the nature of social relationships in the craft shop. The craft system can be traced back to ancient times, but modern craft practices date to the creation of the guilds in thirteenth-century Europe. Artisans in medieval cities banded into associations that received special privileges from state authorities. The guilds obtained control of local entrance to trades; in return, they accepted responsibility for the upholding of standards of production and the regulated training and employment of labor.

The guilds began to disintegrate in Europe in the sixteenth century under the pressure of expanded commerce. In England, the Crown moved to bolster the threatened craft system through legislation. Parliament passed the Statute of Artificers in 1562 making guild practices national law. Artisans had to abide by government edicts that controlled the quality and price of goods manufactured as well as the respective obligations of masters, apprentices, and journeymen.

British settlers in the Western Hemisphere transported British laws and traditions with them. The open environment of the New World hampered attempts at establishing guilds and state regulation of trades, production, and employment; but by the late eighteenth century, craft shops in American cities operated by and large as idealized. Master printers, carpenters, silversmiths, bakers, and tailors produced items to order; engaged apprentices and journeymen for fixed periods to serve under them; and remained responsible for their lodging, feeding, and instruction in the so-called mysteries of trades and facilitating their entries into masterhood.

Increased market activity and demand for manufactured products at the turn of the nineteenth century forced change in the American craft shop. The initial agents of change were enterprising artisans and merchants who consolidated the putting-out system into centralized workshops. These entrepreneurs opted to produce standardized goods. They affected detailed divisions of labor in their shops and hired workers on a daily wage basis without any greater obligations to them than to pay for specific tasks completed; labor was thus translated from a fixed to a variable cost.

In the venerable printshops of America, the training of all-around printers who set and inked the type, turned the presses, and even occasionally wrote the copy, came to an end. The trade divided into newspaper, book, journal, and miscellaneous publishing. Setting type became the separate job of compositors, and cheap, nonapprenticed labor was now employed to tend the increasingly automated presses. Craftsmen in tailor shops similarly were turned into either cutters of fabric or finishers of garments; manufacturers of apparel now contracted the sewing of precut materials into clothes to proliferating sweatshop operators in the city. Master cabinetmakers at the same time stopped taking apprentices and journeymen into their homes and shops, where they would be taught all the stages of fabricating fine furniture; hands now were hired to lathe and cut uniform pieces of wood quickly to be fit together by semiskilled workers.

The transformation of craft work in the United States in the first half of the nineteenth century occurred without pattern. Artisanal production

persisted in different trades and places, particularly where demand for custom goods existed and where market activity remained localized. Skills also were not automatically eliminated, just narrowed. Printshop owners and garment manufacturers still required typesetters and cutters and finishers; where once young men entered into service broadly to learn skills with the goal of establishing their own craft establishments, apprenticeship programs now prepared workers to occupy specific positions—skilled ones, to be sure—simply as employees. The craft shop also became tied to a larger world of production. Artisan shops received orders from major manufacturers for custom items; they thus thrived as subcontractors, but as in the case of garments, craft shops themselves in turn contracted out work.

Complexity may have marked the transformation of the craft system, but general changes in relations, expectations, and patterns of work produced a visible and vocal reaction in the shop. Journeymen mounted the charge. As early as 1768, a group of twenty journeymen tailors in New York City left their benches in protest over a reduction in wages announced by their masters. Although there are earlier references to job actions in colonial newspapers, this is probably the first strike—or “turn out,” as it was then called—launched in America. Printers similarly struck in New York in 1778, seamen in Philadelphia in 1779, shoemakers in New York in 1785, printers in Philadelphia in 1786, and carpenters there in 1791. These work stoppages represented isolated, short-lived events and did not involve any organizations that approximated trade unions.

Relations between masters, their apprentices, and especially their journeymen remained harmonious for the most part during the last decades of the eighteenth century. Men of the shop, in fact, joined in patriotic groups before and during the American Revolution to support independence and the establishment of democratic institutions. They marched together also to encourage the writing and ratification of the Constitution; a national government that could erect protective tariffs and stimulate manufacture was in the common interests of masters and shop workers. They formed organizations, such as the General Society of Mechanics and Tradesmen in New York and the Association of Tradesmen and Manufacturers of Boston, to further promote their shared economic and political aims; these organizations also operated as social, educational, and mutual benefit or insurance societies. Finally, masters, apprentices, and journeymen in general joined at the turn of the century to boost the political party movement of Thomas Jefferson. They upheld the vision of a small producers’ republic; they opposed government dispensation of favor, aristocratic rule, and powerful groups such as merchants and bank-

ers who made fortunes not through tangible labor but by hoarding resources and controlling markets.

Nevertheless, the reorganization of production in the shop opened a widening breach between masters and their charges. In the first decade of the nineteenth century, journeymen protested not only wage reductions, but also the lengthening of the work day, the derogation of apprenticeship, general deskilling, and the growing employment of common day laborers. They protested too in a more organized fashion. Journeymen printers, cordwainers, tailors, carpenters, cabinetmakers, shipwrights, coopers, millwrights, stonecutters, handloom weavers, and hatters in New York, Philadelphia, Boston, Baltimore, Albany, Washington, Pittsburgh, and even New Orleans either transformed their old fraternal societies or formed new organizations to demand and bargain for improvements in working conditions. The Federal Society of Journeymen Cordwainers, established in Philadelphia in 1794, led the way; formed as a mutual benefit group, the association soon evolved into the nation's first bona fide trade union and conducted the first organized strike of American workingmen in 1799. The Journeymen Cordwainers in Philadelphia seven years later would also be embroiled in the first great legal trial in the United States involving the rights of union workers. Society members were indicted and found guilty of conspiracy under common law of concerted action to injure others and restrain trade. The right of workers to organize long remained a contested issue, until federal protections were extended to them during the 1930s, yet the decision against the cordwainers in 1806 and others to follow did not stop the further formation of trade unions during the antebellum period, the use of strikes, or a certain amount of leniency allowed by local judges and juries. The nascent trade union movement of craft journeymen also faced more important economic than legal obstacles. Few of the early unions survived the fluctuations in the economy during the second decade of the new century that accompanied geopolitical conflict and a major business collapse in 1819.

A second, broader and more notable surge of protest activity by craft workers would occur in the late 1820s and early 1830s as business revived and pressure mounted anew to change old ways of production. The rupture between masters and journeymen grew. Once again, craftsmen from Philadelphia, and cordwainers in particular, led developments. In 1827, William Heighton, a shoemaker by trade, helped found in the city the Mechanics Union of Trade Associations, the nation's first federated body of unions, and the *Mechanics' Free Press*, official organ of the society and the nation's first labor newspaper. The new association grew out of a strike by carpenters who had organized on behalf of the ten-hour

workday; cooperation among workers from different building trades during the dispute convinced Heighton of the power of united action. Heighton used the *Mechanics' Free Press* to defend labor protest and advance the notions that workers should be rewarded all the proceeds received from the sales of the products of their labors and that access to educational opportunities and land should be equal for all citizens of the republic. Heighton further attacked merchants and others who profited not from the producing goods of value, but from taking advantage of market circumstances and receiving privileges from the state. As to the latter, Heighton argued that workers needed to control government; to that end, he called for and helped establish the Working Men's Party of Philadelphia, the nation's first labor party.

Word of these events in the Quaker City spread quickly, and soon Working Men's parties began to appear in a dozen states and scores of localities. Brunswick, Maine; Palmyra, New York; Carlisle, Pennsylvania; and Zanesville, Ohio, among other towns and cities, would soon host local labor parties. A common program is discernible. The parties called for the creation of free, common school educational systems so that children of laboring families could receive the advantages of schooling and not in the setting of the stigmatized community pauper schools. They favored abolition of imprisonment for debt; prohibition of licensed monopolies; reorganization of local militia systems (where recruitment practices placed a heavy burden on young men from working-class backgrounds); legal protections for unions; the abolition of prison labor contracting; and district systems of election. They also called for payment of wages in hard currency rather than in scrip or other unreliable paper notes; passage of mechanics' lien laws to assure that workers had first claims on employers' assets in the event of bankruptcies; and provision of better public services for residents of poor neighborhoods.

The Working Men's parties flourished, garnering sizable votes, and placed labor candidates in office, but the movement peaked early. By 1832, few of the local labor parties remained in operation, most victims of internal factionalism, poor financing, and infiltration by mainstream politicians and absorption into their organizations. However, the demise of the Working Men's parties did not spell an end to protest by craftsmen during the era. Trade union officials picked up the pieces of their failed political crusade and embarked on an intense period of union organizing. Political mobilization spurred their efforts, but so did deteriorating economic and social circumstances. Rising prices, wage cuts, the lengthening of the work day, and further disregard for craft practices and denigration of the journeyman's labor heightened grievances. In every urban community in the United States between 1832 and 1836, craft workers

joined together in protest and to defend their interests and status at the workplace.

In Philadelphia, the cordwainers recoordinated their efforts; and hand-loom weavers, bricklayers, plumbers, blacksmiths, cigar makers, and comb makers formed new unions. In New York, cabinetmakers, hat finishers, basket makers, and locksmiths, among others, followed the established examples of printers, cordwainers, and tailors. Baltimore, Pittsburgh, and Louisville likewise witnessed the unionization of bootmakers, stonemasons, coopers, and carpet weavers. Cooperation among workers in different trades also marked this era of union-building. By 1836 central labor councils or federations were established in thirteen manufacturing centers from Boston to Washington, D.C. and west to Cincinnati; in metropolitan areas such as New York and Philadelphia, they were composed of more than fifty separate trade union affiliates. The so-called general trades unions of the period established labor newspapers; sponsored lectures, dinners, and parades on behalf of labor; and most important, fostered interunion assistance during job actions, including the initiation of several general strikes. The most successful of these occurred in Philadelphia in 1835, when approximately 20,000 workers across a dozen trades walked off their jobs to achieve a ten-hour workday and succeeded in having their demands met by their respective employers.

The Philadelphia general strike of 1835 represents a high, and, as it emerged, an end point, for the burgeoning trade union movement of the 1830s. By the end of the decade, few traces of union effort or strength could be found. Economic crisis—this time a long-term business collapse starting in 1837—again decimated union organizations as union members and other workers lost their jobs. Counteroffensives by employers, a restricted ideology on the part of labor leaders, and divisions among laboring people along the lines of skill, gender, race, and ethnicity also contributed to the disintegration.

The organizing of craft workers in the first decades of the nineteenth-century represents one critical reaction of Americans to the changes wrought by industrialization. However, historians have differed in their interpretations of these early protest movements, particularly with regard to the Working Men's parties and subsequent trade union drives of the late 1820s and early 1830s. The authenticity of these latter movements has been questioned. For example, were the Working Men's parties really organizations formed by and for working people? There is evidence of infiltration and manipulation by middle-class reformers and mainstream politicians. What of the message of labor protest at the time? Was it distinctive? Reformist? Or radical? Did the movement succeed? Why did it dissipate?

The following points are offered to provide some perspective on the

protests of craft workers during the late 1820s and early 1830s. First, the ubiquitousness and reach of the movement have to be appreciated. Working Men's parties appeared in cities and towns across New England, the Middle Atlantic states, and into Ohio. Community after community in the North was touched by the insurgency. The movement also spawned an estimated twenty labor newspapers that popularized the cause, and at least fifty daily journals in fifteen states reported approvingly on activities of the Working Men's parties between 1828 and 1832. Trade union organizing after 1832 had as wide a spread and sway, with upwards of 300,000 workers enrolled under the union banner during the period.

Second, the movement brought to the fore, and was guided by, a remarkable and articulate group of leaders from within the community of craftsmen. Representative of these leaders were William Heighton, shoemaker, founder of the nation's first local trade union federation, labor newspaper, and labor party; Thomas Skidmore, machinist, controversial leader of the Working Men's Party of New York, who criticized existing divisions of property and called for an end to the inheritance of wealth; John Ferral, handloom weaver, who helped forge a united trade union movement in Philadelphia, led the 1835 general strike, and pointed to political institutions as the source of inequalities in society; Seth Luther, journeymen carpenter, who was a key labor figure in New England and leader of the region's ten-hour movement, as well as a fiery orator, particularly on the subject of accumulations of wealth by bankers, merchants, and other nonproducers; and John Commerford, chair maker, a popular and tireless labor movement organizer from New York City who became a staunch spokesman for the equitable distribution of public lands.

Labor leaders from the craft shops were joined by a group of vocal labor advocates who came from more comfortable backgrounds. For example, Robert Dale Owen, along with his father, the early socialist Robert Owen, founded a number of famed cooperative communities, and among other radical ideas proposed the removing of both rich and poor children from their families and their common attendance in state boarding schools. An associate of Owen's, the extraordinary free thinker Fanny Wright, advocated women's rights, easy divorce, the abolition of slavery, and communal living, and delivered stirring speeches describing the plight of working people in the changing America of the 1830s. George Henry Evans, editor of the *Working Man's Advocate*, became the leading voice for land reform. Thomas Brothers, a hat manufacturer, published another leading labor newspaper of the day that repeatedly attacked financiers and monopolists "as the vilest race that ever infested the world."

The presence of middle-class reformers and radicals in the craftsmen's

movement of the late 1820s and early 1830s has provided grounds for some scholars to doubt its authenticity. Indeed, the ideas and personalities of these seeming outsiders created divisions that weakened the Working Men's parties, with a number of trade union leaders at the time expressing distrust of these allies and wondering aloud whether political activity too grievously sapped energies from trade union organizing (a difficult question that would endure). The opportunism of certain figures in the movement, such as William English and Ely Moore, men who actually came from the craft shops and used labor protest as a means to establish places for themselves in mainstream politics, has also encouraged cynical views. This delving into the social backgrounds and motives of the leadership, however, may miss a critical point: what is notable about the period is simply the absolute swirl and sweep of labor activity and discussion.

Labor advocates also spoke with a common, highly politicized voice. In their writings and speeches, craft shop organizers and radical intellectuals shared themes. They upheld a labor theory of value: workers were entitled to the entire proceeds received from the sales of the products of their labors. Workers, in John Commerford's words, were the "real producer[s] of all the wealth and luxury possessed by the rich and powerful." Labor leaders, in fact, saved their greatest invective for merchants, bankers, and speculators, who accumulated wealth not through production; thus, Seth Luther denounced those "who toil not . . . but who are nevertheless clothed in purple and fine linen and fare sumptuously every day" because of the labor of others. The spokesmen for labor also attacked concentrations of wealth as inimical to a democracy. Disparities of wealth in this respect did not flow from natural inequalities in ability or merit. Men were equal by nature; political institutions structured by men generated inequities. John Ferral stated this common theme as follows: "The accumulation of the wealth of society in the hands of a few individuals (which has been abstracted from the producers thereof by means of the erroneous customs, usages, and laws of society) is subversive of the rights of men."

Labor leaders from within and outside the craft shop were also in common men of the Enlightenment. They were Deists, believers in the powers of human reason. They applauded the latest inventions, though not the manner of their application. "Under the *present commercial arrangements*," Robert Dale Owen wrote, "machines, the people's legitimate servants, have become their masters . . . labor-saving machinery, *as at present directed and controlled*, works against the poor man." They similarly petitioned for the ten-hour day so that working people would have the time to read and attend lectures to remain informed of the latest

political and scientific developments. The creation of public common schools became a key demand and goal; children from working-class families had to be afforded a proper education to gain the essential power that came from knowledge.

The total program of the labor advocates can be interpreted in various ways. The protest movement of craftsmen in the 1820s and '30s can be placed within the mainstream of American politics. The attacks on non-producers and government favor and the upholding of a vision of a small producers' democracy fit well with the ideals of Jefferson and the contemporary populist politics of Andrew Jackson and his Democratic Party followers (the movement became easily absorbed into the latter). With the possible exception of Thomas Skidmore, who called for the confiscation and distribution of inherited property, labor advocates did not challenge the principle of private property, and in fact, property holding of an equitable kind represented for them the base of independent-minded citizenship. Skilled workers also, in organizing to protect their jobs and improve working conditions, contributed (perhaps unwittingly) to the demise of the craft order; they turned journeymanship, a passage into masterhood, into permanent wage holding, cementing the wage labor system. Protesting craftsmen in this way of thinking did not forge a distinctly oppositional movement.

From another standpoint, the Working Men's parties and the trade union drives of the 1820s and 1830s can be seen as exceptional and radical. Industrial development was in an early stage and was uneven; that labor protest emerged in such a full-fledged manner in the United States at the time is remarkable. Workers in America demonstrated in no less a militant, politicized, and widespread a fashion than their counterparts in England and France. Moreover, their protests cannot be judged by modern standards. They offered no socialist critique, but socialism as a theory or as a rallying cry had little history anywhere by then; early socialists, in fact, could be found in the ranks of the American movement, and radical labor spokesmen raised the issue of redistribution of property. Protesting craftsmen certainly did not embrace the individualist ethos or petty-entrepreneurialism of the Jacksonians. They offered a critique of a society ruled by the forces of supply and demand and opposed concentrations of wealth. They were egalitarians and ultra-democrats, the radicals of their day.

These two different portraits of the early American labor movement can be resolved by placing events in a third perspective. Protesting craftsmen of the 1820s and 1830s joined a debate on the character of the new American political economic order. They had immediate grievances and demands, such as the ten-hour workday, but the movement spoke to

larger issues about the republic. The old regime based on crown rule, regulated markets, state creation of privilege, and the empowerment of the merchant class—mercantilism, in short—had been shed. Yet, a new political economic system had not been fixed and remained a contested matter. Craftsmen, like other parties to the dialogue, acted more against the old regime than in favor of a specific future. They attacked tangible vestiges of the old order, such as debtors' prisons and elitism, monopoly power, and governmental favor in general. They contributed to ongoing efforts at making a return to the past unacceptable. As to the future, they feared a new order of competitive, self-interested politics and rapacious economic activity, as well as rule and regulation by new industrial elites. Journeymen imagined a self-regulated society of ultimately equal, hard-working people providing for each other's needs and respectful of each other's labors and rights to participation in the affairs of their communities. That mutualistic vision flowed from their craftshop experience and was the journeymen's particular input into the postmercantilist debates of early-nineteenth-century America. Labeling the movement as radical, reformist, or whatever misses this basic dynamic.

In the end, the journeymen failed to build a sustained working class movement. Internal squabbling and divisions among workers by skill, gender, race, ethnicity, and just experience (the latter, a product of uneven economic development) are cited as reasons for the demise of organized labor activity of the 1820s and 1830s. The clobbering blow of the depression that began in 1837 is sufficient explanation alone. The ideology of the craftsmen's movement also has to be taken into consideration. Their critique of the old and their fears and visions of the future fueled grievance and protest activity, but also served to moderate and impede. Labor advocates challenged various inequities, but not property, wage labor, or market society per se; they had a distinct message, but one that could be subsumed under the Jacksonian banner. More notable, their ideology was highly exclusive. They valued craft labor and citizenship, but these were experiences open only to skilled white men. Their vision did not speak to women, African-Americans, immigrants, common day laborers, and factory hands—groups, in fact, whom the journeymen saw as strikebreakers and replacements, threats to their very livelihoods and workplace and societal ideals. In boosting their cause, in striking a pose of worthiness and respectability, the men of the shop and white working-men in general delineated themselves from these other workers at the margins and in the process contributed to the racial, gender, and ethnic stereotyping and intraclass divisions of the day. The inability or unwillingness of the craft activists to reach through the expanding and diversified work populace would blunt their own efforts.

## Protests by Industrial Workers

The new factories of the republic also became sites of agitation during the first decades of the nineteenth century—witness the events of June 1, 1824, in Pawtucket, Rhode Island—but factory workers did not wait for leadership from the urban craftshops. They took matters into their own hands to demonstrate against the deplorable conditions of their work. This history had an important twist: the story of the first protests of American industrial workers is a story of American wage-earning women. Decades before a Francis Cabot Lowell dared to conceive of a manufacturing center on the order of Lowell, Massachusetts, Tench Coxe and others had argued that a reserve army of women and children could serve in the front lines of industry. And by the 1830s women had come to represent more than a third of the nation's entire manufacturing workforce but upwards of 80 percent of those employed in the great textile mills of New England and elsewhere. Women comprised a disproportionate number of the nation's first truly industrialized workers, and they would launch protests of their own making.

The hope had been that harmony would mark the new textile mill villages and cities of the Northeast. Founders of these communities had provided housing, schools, churches, and cultural events as gestures of goodwill; the engendering of loyalty and diligence was also in their minds. Events did not unfold according to design. The boardinghouses of Lowell, for example, intended as wholesome environments, became perfect centers for the organizing of protest. The mills themselves served as further places to build labor solidarity. New recruits to the mills were assigned to experienced hands, who not only initiated them into the work but also into the mores and grievances of the emerging sisterhood of operatives. Reality in the form of changing economic circumstances played final havoc with best-laid plans. Increased production and competition in the 1830s, in particular, forced mill owners to reduce costs. They looked to lowering wages, lengthening the workday, speeding the machinery, and increasing individual work assignments. The moment became ripe for conflict. While incidents of unrest among mill hands were recorded before the 1830s and would continue to affect mill communities across New England and the Middle Atlantic states, the first great outbreak of organized industrial protest would occur in the 1830s, and, as might be predicted, in Lowell.

In mid-February of 1834, rumors of impending wage reductions swept through the mills of Lowell. Faced with rising inventories and a sluggish market, directors of the Lowell manufactories were in fact debating the issue and were about to post notices. Women mill operatives did not

require confirmation to begin organizing. They held meetings, circulated petitions, and mobilized support throughout the mill community. Agitation on February 14 reached the point that work came to a halt in some mills. The dismissal of one alleged leader then led to an initial walkout and protest. Soon, eight hundred women workers, one-sixth of the entire female labor force of the city, took to the streets in a kind of massive demonstration that had not been seen in New England since the time of the American Revolution. At a mass outdoor rally that followed, the protesters resolved to remain off their jobs until they received guarantees that wages would not be reduced.

Protesting Lowell mill hands failed to sustain the initiative; in less than a week's time, the turnout collapsed and the women returned either to the mills or to their homes in the New England countryside. The demonstrations nevertheless shocked local supervisors and the Boston directors of the Lowell textile works. The ease with which the women organized caught them by surprise; suspicions existed that a base for organization had been laid down well prior to the protests. Appearances of harmony were deceiving. Equally notable was the rhetoric of the pioneer industrial strikers. Even though they were unskilled mill hands and deprived of full citizenship because of their sex, Lowell's protesters spoke a language akin to the discourse of the men of the shop. "The oppressing hand of avarice would enslave us," a key petition announced. The women sought just wages as just reward for their hard labors and to avoid dependency; as "daughters of freemen," they deserved proper treatment.

Neither fine organization nor rhetoric helped the cause, but the early collapse of the 1834 strike did not still conflict in the nation's model industrial city. In October 1836, women workers in Lowell walked off their jobs again. This time the precipitating event was the announcement of increases in the price of room and board charged by company boarding-houses. Once more, protesting women workers displayed impressive organizing skills; in fact, an actual organization—the Factory Girls' Association, with a membership of 2,500—emerged to coordinate activities. And again, the strikers spoke of their dignity and of rights being trampled by a new tyranny. This time, however, the protests of the Lowell women proved more enduring and successful. Upwards of one-third of the female workforce in the city joined walkouts called in opposition to increased charges, and the pressure was maintained for several weeks. Better economic conditions in 1836 than 1834 helped the cause. Faced with increased orders for cloth, effective organization on the part of workers, and difficulty in recruiting new hands, employers soon surrendered and rescinded orders to raise the price of lodging.

Opportunities for further organization on the part of Lowell's female

mill operatives were dashed, however, as was the case with craftsmen, by the onset of the depression of 1837. Mill owners cut back production in response to falling demand and laid off workers. In attempting to remain in business by assigning more machines to individual employees and by speedups, Lowell's textile manufacturers did lay the basis for another outburst of protest by their female workers. With the intensification of work came calls for relief. Lowell's female mill hands joined a larger movement of the mid-1840s to demand the ten-hour workday in industry. Lowell would become the focal point of a campaign that would grip all the mill centers of New England.

Leaders of the 1840s' ten-hour movement opted for a political strategy. Rather than appeal to individual employers for reductions in the hours of work from twelve and more a day to ten, they sought legislative action, laws that would uniformly impose shorter hours. Organized groups of mill hands launched drives to gain signatures on petitions that were submitted to state assemblies. Activists in Lowell established the Lowell Female Labor Reform Association in 1845, by far the largest of its kind. Within a year's time, the association had assembled a petition addressed to Massachusetts state legislators on behalf of the ten-hour day that included more than five thousand signatures.

The Lowell Female Labor Reform Association mobilized the community of female mill hands in the city for a number of years. The group sent representatives to other mill towns to boost protest activity throughout the region. Association leaders prepared and presented testimony to legislative committees and helped defeat candidates opposed to ten-hour legislation. They held parades and demonstrations and launched a lecture series for mill operatives that featured such well-known reformers and critics as the abolitionist William Lloyd Garrison and the editor Horace Greeley. Finally, between 1845 and 1848, members of the association published the *Voice of Industry*, a popular weekly labor journal that provided women mill workers the opportunity to express themselves publicly.

Ten-hour reformers did not see their demands met. In fact, events were transpiring in Lowell that would see an end to more than a decade of protest by female mill workers in the city. The grueling conditions of work within the mills made employment there less attractive for young women from the New England countryside, and many sought better opportunities elsewhere. Employers who were now finding these Yankee "daughters of freemen" a thorn in their sides and finding their own paternalistic programs too costly and ineffective gradually looked to hire a more docile workforce on a pure and even cheaper wage-labor basis. They turned eventually to the mass of Irish immigrants flooding into

Boston. The demography of the mills and the community soon changed completely; the mill workforce became dramatically more male and foreign-born, and the city came to be composed of separately residing immigrant families. These new social arrangements hardly brought peace to the community, though there would be a long hiatus before the next outburst of organized labor activity. In the meantime, women workers in Lowell provided the first chapters in the history of protest of American industrial workers.

In Lowell, women dominated the labor force of the textile mills and early labor protest. Male workers, who largely occupied skilled positions in the mills, also formed protective associations during the period. Co-operation generally marked relations between the men and the women during periods of protest, especially during the campaign for the ten-hour workday. Lynn, Massachusetts, the other great site of eventual full-scale industrialization in the United States before the Civil War, also witnessed notable agitation on the part of workers; but here the story was complicated by the city's very complex industrial history as well as by divisions within the community between working men and women.

As women in Lynn began to be hired directly on an outwork basis as shoebinders and drawn into wage labor—as they began to labor not entirely as unpaid members of the family economic system, in other words—they picked up the gauntlet of organization. In 1831, women in Lynn and surrounding towns formed the Society of Shoebinders to demand uniform wage schedules for the various upper-parts of shoes they stitched and to encourage cooperation and the resisting of individual bargaining by outworkers. The society boasted a membership of more than two hundred shoebinders. Although the group appears to have had a short-lived history, even the brief organization of women who worked at home across a several-county area represented a formidable achievement.

Two years later, an even larger collective venture was launched. In 1833, in response to wage cuts, more than a thousand women from in and around Lynn joined the new Female Society of Lynn and Vicinity for the Promotion of Female Industry. In a series of meetings and letters to the press, the group made their presence known and felt. Leaders of the movement demanded wage increases and employed the labor theory of value as justification. "It is highly reasonable, that those who perform a considerable portion of the labor, should receive a considerable portion of the recompense," they argued. "Manufacturers frequently become wealthy, while the more laboring portion of the community, are obliged to struggle hard for a compensation, and are frequently distressed." Moreover, women had to be treated with the same dignity as men. "Equal rights should be extended to all—to the weaker sex as well as the stronger."

Lynn's shoebinders echoed the language of protesting craftsmen to a greater extent than their sisters in Lowell. For Lowell mill operatives and machine tenders, anger over their poor treatment flowed from their perceived position as daughters of independent farmers and freeholders. The manufacture of shoes still remained in the hands and fine stitches of Lynn's shoebinders, and grievance emanated from the pride they took in their work. The women shoe workers of Lynn, of course, were not like craftsmen in one great respect. Opportunities for masterhood were closed to them. When the women demanded just wages, they sought "comfortable support" for their families, "freedom from want," and in the case of widows, avoidance of dependency and public welfare; it was compensation to bolster the family, not the male demand for a "competence" that would allow for eventual independent producership.

Members of the Female Society of Lynn received assistance from men shoemakers, who had formed their own Society of Cordwainers in the early 1830s. That group agreed to refuse orders for lasting the uppers to the shoe bottoms they prepared from manufacturers who had not acceded to the wage demands of the shoebinders. Despite that support and a flurry of protest activity, Lynn's women shoe workers faced an almost impossible task in organizing their trade. Manufacturers could simply transport materials to be sewn through a widening arc of the New England countryside to households that needed the extra work to make ends meet or that wished to purchase goods in the region's expanding market. The female society collapsed within a year's time.

Relations between men and women workers in the shoe industry became more complicated in the decades that followed. In the 1840s, male shoe lasters reorganized into an effective cordwainers' union that published a popular labor newspaper, the *Awl*. The men invited the female shoebinders to join the association but on an auxiliary basis—to lend support and have the organization appear as a defender of working families in the community, not necessarily to help them exert their own pressure on employers. The question of whether women were to act and be treated as independent wage earners or as members of family economic units that were led by men emerged as an issue in a full-blown and telling way in labor disputes in the 1850s, including the shoemakers' general strike of 1860, the largest strike of American workers in the antebellum period.

Changes in the organization of production in the shoe industry provide the backdrop to events in the 1850s. Increased centralization and mechanization during the decade led to the creation of an industrial shoe labor force to complement the shoebinders and shoemakers who continued to work on a contract and outwork basis. Industrialization writ large

with migration to the community drove down the price of labor—and an economic depression in 1857 made matters worse—but the responses among workers varied significantly. In 1859 a protest movement led by journeymen shoemakers emerged in Lynn and other shoe towns. The men set forth their demands for wage increases. Female factory shoebinders then placed their own agenda on the table, and an entangled debate ensued.

The factory women were largely young, unmarried, and new to the community—without roots in the old home/shop system of production. The shoemakers asked the factory women to lower their demands; they feared that if factory wages were raised, stitching of uppers would be centralized and homework eliminated, thus jeopardizing family incomes. They argued that efforts should instead focus on increasing men's income. The factory women, under the leadership of the twenty-one-year-old Clara Brown, countered by declaring their willingness to organize and represent outworkers, a show of female solidarity. Community pressure mounted for the factory women to lower their sights, however, and eventually a majority voted to follow the men's leadership. An official strike was then called to begin on Washington's Birthday in late February 1860.

By early March more than ten thousand shoe workers across New England joined the cause, with Lynn providing the anchor for the movement, and on March 7 Lynn was the site of a grand protest parade that became the largest labor demonstration of the early industrial period. Women shoebinders proudly marched under the banner, "American ladies will not be slaves. Give us fair compensation and we will labor cheerfully." The great show of solidarity hid great divisions—and an actual lack of strength, for the strike would crumble within a month's time with only scattered gains. The shoemakers' strike of 1860 revealed shared grievances and commitments among workers, but also fractures within the working class—between workers tied to and protective of old ways and their neighbors already enmeshed in the wage-labor, factory production system. Wrapped in this broad divide were the cutting forces of gender and ethnic differences. Industrialization wrought camaraderie and protest within working-class communities and serious breaches as well.

### Other Responses to Industrialization

The labor organizing and protest activities of craftsmen and industrial workers—women notably figuring in the latter instance—during the antebellum period represent the overt responses to industrialization. Amer-

icans also reacted in less defined and more personal ways to the great economic and social transformations of the day. The expansion of market activity, the spread of the wage labor system, mechanization, and the coming of the factory disrupted community life. While people responded to the general upheavals of the times by mobilizing in certain instances to create new institutions of social order, they also responded personally as well by affecting new manners and appearances. As with the more explicit responses of workers to changing conditions in the workplace, machinery and technology were not the fundamental issues of concern; rather, changes in relationships among people within communities forced these other kinds of reactions.

Transiency was one visible sign of changing times. People moved within and through American antebellum cities and towns with great frequency and in great numbers. This movement has to be placed in a world-historical perspective. The nineteenth century was marked, at least in the Western world, by massive labor migration flows. The passage of laws after various democratic revolutions allowing men and women to migrate from their homelands, and concurrent advances in transportation and communication facilities, *enabled* people to move. Religious and political persecution, deteriorating economic circumstances, but most important, changes in agriculture and rural landholding patterns *pushed* families away from their places of birth. New opportunities in industry and expanding urban economies in general finally *pulled* people from age-old areas of settlement. The United States was the farthest point west in this migration swirl, but the process continued on the American mainland. With the country's expanding frontier, some immigrants—especially Scandinavians and Germans—found themselves back on the land. Others were lured to urban centers, as they had been in Europe. As the century wore on, the country witnessed further westward movement but also a rural-urban migration flow that mirrored developments in Europe.

Scholars have fully documented the notable transiency of the American people in the antebellum period and throughout the century. The extent of movement and the groups that moved the most have been calculated and determined. Yet, the reasons for migration and the implications for the lives of those involved remain clouded. Historians have thus selected samples of Americans from U.S. manuscript population censuses and noted who could and could not be found ten years later in the next official censuses. Upwards of 60 percent of traced populations invariably disappear from the records, an indication that only two in five Americans stayed in their communities for extended periods of time. These figures hide the actual extent of population turnover, however, for not taken into account in these investigations are the sizable numbers of

people who moved in and out communities within the intervals between census enumerations. Another kind of tracing conducted by historians can render this greater sense of the churning of the American population. In following workers' careers through early- and late-nineteenth-century payroll records of companies, scholars have discovered in any number of instances that more than 50 percent of those employed stayed with their employers for periods of no longer than six months. Whether through census or payroll tracings or available literary evidence (letters, sermons, commentaries of the day) all indications point to a population constantly on the move, to high levels of transiency.

We know who moved most regularly—young, single adults and people without property—but why these or other Americans chose to migrate and with what consequences are puzzles not easily solved. Did Americans move in such great numbers because of poor prospects and failure? Or to ensure ever better opportunities? Did they find securer circumstances? What impact, if any, did migration have on them and their families? Since tracing people across locations is a difficult task, historians have not been able to answers these questions with any certainty. It is known that moving represented for some a way of "voting with one's feet"; workers left incorporated mill villages in New England and the Middle Atlantic states, for example, to escape the regimen and close supervision. This was an unorganized and personal form of labor protest.

Transiency appeared as one mark of the unraveling of the social order; greater differentiation among the American people loomed as another. Before the nineteenth century, American communities were hardly homogeneous. The ethnic and racial mix of the population was already pronounced, and dramatic inequalities in personal and real wealth emerged and prevailed at early dates. Certain rural communities, most notably in New England, may have had a uniform look, but diversity and inequality characterized settlements in North America from the outset.

Differences became more glaring during the early industrial period, but that is only a part of the issue. Pre-nineteenth-century American communities may have been heterogeneous, but they remained integrated with people from all backgrounds and walks of life comingling in close proximity. By the mid-nineteenth century, eyewitnesses could not be but impressed by the segmentation within American communities; a districting of difference had occurred that disturbed older and established members who feared for the decomposition of their cities and towns. Population expansion and dispersion and immigration guaranteed a greater balkanization of society; communities were now too large for face-to-face relations among different groups, and the very possibilities for ghettoization had increased. Also critical was the role that the spread of

market activity, the wage labor system, mechanization, and factory production—industrialization writ large—played in creating grave disparities in position and means.

In the new, diversified manufacturing centers of antebellum America, the segmentation of social life took its most visible form. Population expansion there forced residential dispersion and real estate development. The spreading outward of city dwellers was not a random process; income, in fact, became the key determinant in where an individual or family would land on the expanding urban map.

The poorest of the inhabitants of New York, Philadelphia, and elsewhere clung to neighborhoods about the docks and in downtown in general. Employed as common day laborers and on an intermittent basis, they stayed near to the greatest concentration of unskilled jobs, walking about day after day if need be in search of work. As city dwellers with the least means, they also could not afford the costs of commuting on the new, privately owned horse-drawn omnibus systems that were laid out in American urban centers during the antebellum period: the daily fare would have amounted to one-tenth of the seventy or eighty cents a day a common day laborer then earned. Lower-class neighborhoods thus had emerged in all American cities by mid-nineteenth century, inhabited largely by young single males, newcomers, both foreign and native-born, who lived in crowded boardinghouses and tenements.

Away from the teeming dock areas there appeared factory districts. Manufacturers, whose operations outgrew their downtown central shop spaces, looked toward nearby outlying areas to build larger facilities. Workers who were more steadily employed and their families began to inhabit the neighborhoods that developed around the mills. They lived in rented apartments and houses built by either their employers or small-scale real estate operators, or in small row homes that they purchased with loans from local savings societies or fraternal organizations. The new mill districts formed enclosed, relatively settled communities with local churches, schools, retail businesses, and ethnic and labor organizations.

Outward from the port and industrial districts, other kinds of residential neighborhoods emerged. Skilled workers who could afford transportation and the purchase of modest row or detached homes moved to new respectable working-class communities. Professionals and small proprietors bought larger homes on larger lots of land farther away, and at the borders of the city by the 1830s and 1840s could be found the first suburbs of large estates built by merchants, bankers, new industrialists, and other people of means. The wealthy could not only afford the commuting costs, but they could also take advantage of decreasing land values at the farthest points from the commercial downtown to construct

their suburban mansions on vast acreages. Their move outward also represented an escape from the growing unpleasantness of city life.

By the mid-nineteenth century, social divisions within American communities could be mapped, every ring about the center representing a different income group; even in districts where a certain heterogeneity prevailed, internal distinctions occurred, with the wealthy living on the avenues and people of lesser means on the side streets. Segmentation appeared in its clearest form within cities, but these developments were matched in smaller communities as well.

The separation of people within localities had a number of effects. As one example, in the settling process within communities, work became divorced from home life. A good portion of the community now lived at significant distances from their work. This changed the place and meaning of work (and leisure) in their lives and led to a system of dual identities: people were now members of separate work and residential communities. This would have great implications for labor protest, as many scholars have argued, and for politics in general.

The new spatial and sociodemographic arrangements of communities, in fact, had great impact on politics. By the third and fourth decades of the nineteenth century, cities and towns in the United States had become too large and populous to remain administered through town meetings. Accordingly, representative systems of government were adopted. As families of wealth and standing abandoned the city for its outskirts, vacuums in power also emerged within antebellum communities. From newly created political districts, ambitious local leaders appeared to fill the void. They characteristically built neighborhood organizations to get out the vote; once in power, they returned favors to their political allies and sought and provided a variety of services to their local constituencies. Competitive ward politics thus replaced the deferential politics of an earlier era when communities were compact and people bowed to well-recognized elites.

This new system of politics quintessentially materialized by mid-nineteenth century in New York City with the rise of the famed Tammany Hall machine of the Democratic Party and was met with both apprehension and disdain by people of standing. The street-based, street-wise politicians of the party also vied with labor activists; at stake were the attention and allegiances of working people. But the seemingly sympathetic politics of the men of the political machines were a far cry from the politics articulated by the men of the shop, and not just because Democratic Party ward leaders often formed alliances with business elites in the community; rather, their rough-and-tumble, pluralistic politics, a politics to match the highly self-seeking and competitive economic order

then emerging, struck at the heart of an ideal, that of a republic of independent, virtuous citizens and producers.

Disparities in income drove the segmentation process, with its various social and political consequences. Even with population pressure and transportation innovations, the placement of people within communities would have been more random and less pocketed had wealth been divided equally; Thomas Jefferson and other spokesmen for the republican vision could have warned as much. The issue of income also raises another question regarding standards of living during the early industrial period. In Great Britain, generations of scholars have debated whether industrialization led to the pauperization and immiseration of substantial portions of the British population. No consensus has been reached on the subject despite substantial research. Students of nineteenth-century American social and economic history have not engaged in great discussion on the matter (particularly for the antebellum era). Research is limited, and any comments on the material well-being of the first generations of American wage laborers have to be tentative.

Numerous methodological and conceptual problems confront investigations of standards of living during the antebellum period. Only scattered records of wages and commodity prices survive for the era; wage information, moreover, reveals little about total incomes, since a significant portion of the workforce was employed on an irregular basis. (Government agents would not collect data on wealth and income in a systematic fashion until after mid-century.) Enormous variations in wages across and within regions, across occupations, and over time also have to be considered. Conditions were particularly dire in the late 1830s and early 1840s, when the country was in the midst of a severe depression. Finally, calculating the base needs of a typical family of four in order to determine the percentages of families living above and below subsistence levels raises difficult interpretative questions.

The following has been established on the subject. American workers during the antebellum period earned substantially higher wages than their counterparts in Europe; skilled workers, in particular, were paid at rates two and three times higher than they would have been in England, Germany, or France. The flow of people west across the Atlantic is testimony to the differential. American workers also benefitted from the rich, expanding agricultural base of the country; food prices were substantially lower on this side of the Atlantic. Immigrants reported in their diaries and letters home of having meat meals two and three times a week—absolutely unheard of in Europe—and of being able to afford wheat rather than oaten bread. "You would be surprised to see provisions so cheap," John Parks, a carpenter wrote to friends in England in 1827:

"we buy the best of meat for 4p. per pound." John Mooney, another immigrant, echoed his words, saying that the "food of the American farmer, mechanic, and labourer, is the best, I believe enjoyed by any similar classes in the whole world." American workers also benefitted from the cheap prices of other goods, particularly cloth that issued from the fully integrated and mechanized mills of New England.

Evidence of relatively high wages and low commodity prices can lead to the conclusion that American workers in the early nineteenth century had the good fortune in general of living above the margins, but definite qualifications are in order. First, when wages and prices are charted in tandem between 1820 and 1860, only modest gains in real income are recorded; this was not, then, a period of rising standards of living. Second, wages varied dramatically. Unskilled workers earned between sixty and eighty cents a day during the era; women textiles operatives earned at the low end of this scale, between fifty and sixty cents a day. Skilled workers, in contrast, could expect to receive at least two and three times the average daily wage paid common hands. Some aristocrats of labor at the time—iron puddlers, for example—could even make nearly three dollars a day. These variations obviously militate against drawing any general conclusions concerning the material well-being of American people during the antebellum period. Finally, American workers may on average have received greater compensation and benefitted from lower food prices to allow them to live at higher standards than laboring men and women in Europe, but this may have also come at the cost of longer hours of work and an intensified pace of work. Visitors to the United States who came to see the dazzling aspects of American industrialization, as well as new immigrant workers, remarked consistently on the different regimen of the American workplace. "I can assure you I never worked so hard," William Danley wrote back to his wife in England in 1857. A Norwegian tin worker warned his relatives, "Day labor [in New York City] demands a more strenuous exertion than we are used to." A reporter for a British journal placed the matter squarely: "Although [the emigrant] may get better wages, he has to give a much greater amount of labour for his money." Statistical studies have not been conducted to determine whether higher standards of living in the United States were in fact related to intensified work, but the literary record is clear on the question. It is not coincidental that hours of work represented such a key and constant grievance of the early trade union movement in America. In the labor protests of the 1820s and 1830s, wages were rarely at issue; hours and other concerns about the place of working people in the republic were uppermost in mind.

The "standard-of-living controversy" is a basic component of studies

on European industrialization during the nineteenth century; the subject has not found a place in American histories. This reflects the common judgment that by and large, the first generations of American wage earners lived above basic subsistence levels and with some comforts (even if that required extraordinary labors). However, that general conclusion has to share the spotlight with another: that extreme disparities in wealth and income prevailed in the period. Unskilled workers who earned eighty cents a day—even if they worked a full complement of days over the year, which was highly unusual—could not have fed, clothed, and sheltered their families, except in the barest of ways, on their \$250 yearly incomes. Commentators at the time estimated that families of four needed at least \$400 a year to live with a modicum of decency; some placed the figure as high as \$600. The only way for these families to survive was to have two and three extra breadwinners in the labor market, which meant the employment of older sons and daughters (and in fact, despite the growth of public school facilities, the nineteenth century would witness progressive increases in teenage participation in the labor force, particularly those teenagers from families whose fathers occupied jobs on the lower end of the occupational scale). Nor did many unskilled workers succeed in improving their lots during their lifetimes. Scholars who have calculated rates of occupational mobility have found that when Americans in the nineteenth century moved up the occupational ladder, they did so only in small steps.

Inequalities had marked American settlements from the outset, but the situation by the mid-nineteenth century had new dimensions. All evidence points to a widening of difference. Wage rates between the skilled and the unskilled spread during the antebellum period, as did the gap between salaried workers, professionals, and employers in the community and wage earners in general. The expansion of market activity, the extension of the wage labor system, mechanization, and the building of factories had created a growing tier of new, low-paid positions, jobs often filled by women, children, and immigrants. The bottom had swelled, and people at the bottom now formed a visible mass in the core of American cities and many other communities. It was the glaringness of the inequalities, not the discrepancies themselves, that was new.

Americans separated and clustered themselves within their communities during the antebellum period. They formed enclaves defined by specific levels of income. But the divisions that emerged in the population at the time were not purely economic. The splits between the various haves and have-nots were also divides of culture, of habits, and of manners. Differences among Americans during the early industrial era can be traced to differences in work experience and personal means, but varia-

tions in urban-rural and ethnic backgrounds figured as well. This is to say that there would have been disharmonies within American communities because of growing class divides, but the fractures were compounded by related divisions in cultural heritage and traditions.

Within working-class wards alone in antebellum cities and towns, visitors could discern at least three distinct subcultures. Men of the craft shops maintained a world of their own. They proudly marched together in civic celebrations displaying their wares and in protest parades. They convened in meetings and lectures to hear about and discuss the latest developments in science as well as new social and political ideas—for example, on the latter, producers' or workers' cooperatives, utopian socialist communities, and land distribution reforms. They tried to salvage the remains of their trade union organizations, which were decimated by the economic crises of the late 1830s; and by the late 1840s and early 1850s they presided over a revival in labor activism that accompanied a return of prosperous times. They were joined in this new surge of organizing by immigrant skilled workers from England and Germany, many of whom had participated in radical movements in Europe and brought with them new energies and commitments. The activist craftsmen formed a distinct segment within working-class communities; they were serious, literate, secular, highly politicized men who played a role disproportionate to their numbers in mobilizing their neighbors and providing leadership, ideas, and rhetoric for organized labor protest.

Another segment of American wage earners during the early industrial period found religion. Religious revivalism spread in wildfire fashion through American communities during the 1830s and 1840s. Those who were inspired established organizations that blanketed the nation with Bibles and religious tracts; makeshift churches appeared overnight, and a score of fiery ministers tramped from town to town bringing the word of personal redemption through faith and renunciation of sin. There is no easy way to account for the sweep of religious enthusiasm during the period. At a time of great social and economic transformation (and economic crisis, with the eight-year depression starting in 1837), some Americans may have found comfort in intense religious experience. For older-stock Protestant Americans, fervent belief may have brought a semblance of order to their lives, especially in the face of industrialization and the immigration of massive numbers of Irish Catholics. In challenging staid established churches, the new revivalist ministries also mirrored the new open and competitive spirit of the times. Explanations of this kind are available, but no sociological answer to the question of evangelicism can do justice to the engagement of any single person.

Religious revivalism of the antebellum period is commonly associated

with rural and small-town America and people of middling social rank, yet Protestant workers in industrial areas enrolled in the mission. Recent research suggests that evangelical ministers found a ready audience in mill towns and urban factory districts. The audience may have consisted of Protestant men and women who had just migrated from farm areas and found fervent religion helpful in coping with industrial work and regimen; it is also clear that in many instances, their attendance at church and religious meetings was required by their employers. Only a mixed assessment as to the backgrounds and motivations of engaged workers is possible. Nonetheless, the historical record does show that working people did attend revival meetings, join new churches, declare their piety, and, most notably, publicly forswear drink. The evangelism of the period gave rise to a vocal and visible temperance crusade, and Protestant workers swelled the ranks. The Washington Temperance Society, founded in 1840 by a group of artisans, proselytized directly in working-class neighborhoods; and organizers boasted that more than three million workers had sought membership in the association by the mid-1840s and in the process declared their abstinence from alcohol.

In seeking to lead pious and sober lives, working-class evangelicals marked themselves off from labor activists, but also from a third contingent within the antebellum laboring population. A more raucous mass of working people lived at the margins of American communities at the time. Generally engaged in heavy physical labor or sweatshop work, employed irregularly, newcomers to the industrial scene, newcomers to America in many instances as well, they acted in freewheeling and episodic ways. They worked hard, but set the time, pace, and standards of their work. They also played hard. By the mid-nineteenth century, American communities had their rough-and-tumble wards known for their saloons, amusement halls, unruly fire brigades, street gangs, and rich street life (the Bowery in New York City became the most notorious). The character of these neighborhoods can be explained in part by the kinds of work available to their inhabitants, in part by their age profiles—young, unattached men and women composed a greater part of these subcommunities—and in part by their ethnic composition: non-Protestant immigrants of rural background increasingly populated these districts, and they generally held to task-oriented rather than clock-oriented senses of time. The growing visibility of this community was a function of their numbers: while the foreign-born represented 20 percent of the populations of such cities as New York in 1820, they were 50 percent of the population of New York by 1850; 400,000 immigrants came ashore in the city in the decade of the 1840s alone, and they would constitute upwards of 80 percent of the wage-earning workforce.

Complicated, often tense relations prevailed among the subcommunities of the laboring population. Men of the shop and the evangelicals shared a common sober disposition toward life, but not a politics. A number of union leaders could trace their involvement in labor protest to intense religious experiences; the democratic, antiestablishment, and perfectionist impulses of evangelism could spur militancy on behalf of the oppressed. But for most religious workers, the search for personal redemption led away from politics and toward conservative attitudes and behaviors.

Relations between the pious workers and the improvident were completely hostile. The divides between these two communities were manifold. The common hands of the community were seen as threats to the wages, jobs, neighborhoods, and sensibilities of those who sought respectability. To make matters worse, age-old antagonisms between English Protestants and Irish Catholics were involved. In the early 1840s, amid worsening economic conditions, the situation turned nasty, with Protestant workers joining a series of nativist attacks on immigrant Catholics in various cities in the Northeast. Violence also erupted from within lower-working-class neighborhoods, as the same period witnessed rioting between immigrant groups and African-American day laborers who occupied the same poor and crowded areas of communities and vied for the same menial jobs.

Between labor activists and the downtrodden ambivalence marked relations. Unskilled workers represented a forceful mass whose anger could be tapped on behalf of organized protest. During the general strike of 1835 in Philadelphia, and at other moments, labor leaders reached out and mobilized this portion of the laboring community with notable success. Yet here, too, there were enormous divides of occupational experience, political perspective, and temperament. Local mainstream politicians were better able to forge allegiances with workers from lower-class neighborhoods, especially immigrants, and attach them to the machinery of the Democratic Party—thereby blunting independent labor party efforts.

### The Emergence of a Middle Class

The divisions manifest among laboring people in American communities during the antebellum period had repercussions far beyond working-class neighborhoods. The divides among workers—based on varying work experiences and incomes, conflated by cultural differences, and reinforced by geographical segmentation—handicapped trade union organizing and labor political activity. For community members of greater

wealth and standing—shopkeepers, small manufacturers, new white collar workers, professionals, merchants, industrialists, and bankers—the splits within the laboring population were signs of the general breakdown of the social order. Whole sections of their cities and towns had emerged as alien and beyond control. Rootless young men and women, disheveled and unlikable immigrants, and angry mobilizing workers comprised these districts; the crime, low life, and internal violence of these areas threatened to spill over into respectable neighborhoods; and with the system of ignoble ward politics, political leaders could no longer be relied on to tame the unruly. The unraveling of community relations accompanying the great economic and social transformations of the day produced a response among people of means. Middle-class members especially reacted in formal ways: they organized to create a wide array of associations and institutions of social order. They also responded in personal ways: they moved away from alien neighborhoods to their own enclaves, found comfort in religion, and adopted new styles of behavior to mark themselves apart.

The early industrial age, from the 1820s to the Civil War, witnessed a mobilization on the part of people of means within American communities. Foreign visitors to these shores at the time (the French historian and social commentator Alexis de Tocqueville stands out here) made special note of the unusual proclivity of Americans to form voluntary associations; they referred by and large not to the trade union organizations established by workers, but to plethora of organizations created by Americans of middle- and upper-class standing. During the antebellum period, these Americans participated in a flurry of associational activity.

Religious organizations topped the list. In community after community during the antebellum period, well-off citizens (that is, Protestants) formed local Bible societies, Sunday School unions, Sabbath observance groups, religious tract societies, missionary associations, and, without fail, temperance organizations. Spiritual reawakening obviously required more than the spirit. Religious fervency also led to other kinds of associational work. Religiously inspired Americans helped form various private charity groups and lent their time and money to such causes as the abolition of slavery, greater rights for women, the creation of free common schools, and prison and asylum reform. For middle- and upper-class Americans this was an era of association as well as institution-building, and they contributed to the establishment of school, police, prison, and mental hospital systems in this country.

People of means participated in other kinds of associational activity. They formed literary, drama, and music societies; the upper crust established their exclusive sporting and social clubs. They also helped to es-

tablish new political movements in the country. Some became involved in nativist politics, and through both organizations and political parties, called for severe restrictions on immigration. Others participated in the building of first the Whig Party and, later in the 1850s, its successor, the Republican Party. Both parties stood for a dynamic and organized society, encouragement of industry, greater state intervention in economic and social life (for example, government-mandated tariffs and temperance), and rule by the meritorious. Whigs and Republicans presented another postmercantilist possibility, and they appealed to religiously inspired Protestant workers on economic and moral grounds to forsake labor radicals and Jacksonian Democrats alike. Tariffs would protect their jobs, they would oppose the extension of slavery (and the rule of aristocratic slaveholders) in order to keep western territory open for yeoman producers, and they would bring order to communities through their example of rectitude and policing legislation.

The association- and institution-building activities of middle- and upper-class Americans during the antebellum period can be simply labeled as efforts at social control. That conclusion is unassailable, yet a great deal of history and understanding is lost if some perspective and qualification is not added.

American communities had become too large, diverse, and segmented for order to be instilled by consensus reached at town or church meetings or through deference to known elites. Those interested in reordering their communities had to create new institutions, and that required organization. That much is clear. Yet, religious revivalism added a dimension and complexity to the process. Well-off Americans entered a period of institution-building at the exact moment of a spiritual reawakening. Whether the latter was more cause than effect can occupy hours of unresolvable debate, but the point is that this particular effort at social reordering was colored by particular religious ideals and zeal. Antebellum Protestant evangelism had a positive, perfectionist core (it shared much with Enlightenment thought), and religiously inspired reformers sought to rehabilitate and not simply to discipline and dominate. They established associations and institutions with reformatory ends in mind (the later purely custodial nature of the institutions formed had more to do with the bureaucrats placed in charge than with the intentions of the originators). Religiously inspired reformers also found themselves engaged in activities that aimed at greater social equity rather than just order. Their involvement in abolitionism and women's rights causes brought disfavor and attack and was hardly motivated by the longing to quell social tensions. Finally, a focus on middle- and upper-class reformers loses sight of support for reform from other groups in the com-

munity as well as opposition to their efforts. People of property may have petitioned for the establishment of public school systems to ensure a future workforce of disciplined wage earners, but organized workers lobbied for public schools too for their own reasons. There were limits, as well, to the impact of the reformers. Try as they might, religiously inspired temperance crusaders could not curb drinking in working-class communities. There were walls of culture and geography that they could not breach.

In engaging in associational activity during the antebellum period, the well-off of American communities may in fact have had greater impact on their own lives than on those whom they attempted to alter. The organizing of middle- and upper-class community members should be understood as an effort at self-definition as well as social control. In appearing as the purveyors of right behavior and sustainers of the community, they created particular personas. People of means reacted to the great economic and social transformations of the early industrial age by distinguishing themselves. They did this through religious and secular organizational endeavor, and this is another way of understanding their activity.

Americans of property and standing also consciously marked themselves in more private ways and in particular by creating a new kind of home life with an emphasis on propriety and respectability. Here, two developments are of importance: the growth of middle-class occupations and the changing role of women. The expansion of market activity enlarged the ranks of people of middling status. Retail shopkeepers, small manufacturers, professionals, and a growing army of clerks and other white-collar employees now comprised a identifiable population in American communities, and it would be they who would labor to fashion lifestyles of decorum. They modeled themselves not in a vacuum, but in opposition to those above and below them—to both the profligate, indulgent rich and the improvident poor.

Mothers occupied a key place in the new respectable middle-class household. (And this was a smaller household, it should be noted. As a measure of the new emphasis placed on social and personal control, middle-class families led the way in a general demographic shift in the mid-nineteenth century that would see—before widespread knowledge and use of contraceptives—the lowering of birth rates of women from more than five children, on average, to slightly more than three.) Men now worked outside the new ideal small household; their destinies lay in the marketplace and in earning sufficient incomes to maintain their families in comfort. Women's place was in the home. Mothers remained responsible for the traditional hard work of the home—cooking, clean-

ing, sewing, and in some instances in middle-class households, the taking in of piecework—but the popular literature of the day also prescribed for them the role of guardians of the family, in charge of the moral education of children and the upholding of family standing. As to the latter, women oversaw the tasteful furnishing of their homes, once sites of production and now of consumption (though not too conspicuous). Men and women were thus to play separate roles. As one antebellum advice writer counseled, "Each has a distinct sphere of duty—the husband to go out into the world—the wife to superintend the domestic affairs of the household."

An ideology thus emerged during the early nineteenth century that limited women to the private world of the family. Yet, as with plans for the Yankee farm girls who went to work in the textile mills of Lowell and elsewhere, women defied the conventions. A separate sphere presented women of the middle class with opportunities to form close friendships among themselves—they refused to remain confined to the home—and also with a great deal of time to become engaged in religious and reform work. In fact, the history of religious revivalism and associational activity in general during the antebellum period is largely a history of women, for women constituted a disproportionately large share of the membership and often leadership of various movements. Women were denied citizenship and relegated to the domestic sphere, yet in actuality they played a most public role in their communities.

The respectable middle-class home was another response to and product of the early industrial period. People of means during the antebellum period mobilized to create organizations and institutions that aimed at restoring order. They forged lifestyles that brought some stability to themselves and their families in the face of growing social divisions and turmoil and the emerging competitive spirit of the age. A catalogue of reactions to industrial development includes middle-class as well as labor activism.

A small group of Americans responded in a different way. They reacted to the coming of unbridled market activity and the factory system by opting to live in utopian socialist communities, places where all property was owned in common, the work shared, and the proceeds of the work distributed equally. In some instances, as in the case of the Shakers, these communities were established by religious groups; others, such as Robert Owen's New Harmony, founded in Indiana in 1825, were entirely secular ventures. Few of these experiments in communal living survived, yet by the time of the Civil War, no fewer than 150 utopian communities had been formed in the United States.

The adoption of a communal lifestyle represented perhaps the most radical of the responses to the economic and social transformations that

altered America in the first half of the nineteenth century—to the changes that are conveniently labeled "industrialization" or "early industrialization." The history of the period reveals a general apprehension about the expansion of market activity, the spread of wage labor, and the factory system. The machine was not the issue. Americans greeted the new technologies of the day with curiosity and enthusiasm: the machines could serve, not displace. The changing nature of social relations and the breakdown of community life caused alarm. Americans of different standing reacted in different ways, both formally and informally. But the reactions were of a tentative, private, or local kind. New organizations, many ephemeral, such as trade unions and religious and charity groups, appeared, as did new institutions—the middle-class family and public schools, for example. The overall forces of industrialization were thus mediated but not stemmed. Events had unfolded in too uneven a fashion for there to have been a general or definitive response. But more important, in dismantling an old order of privilege and control, Americans of varying interests collectively ushered in the new competitive age. They did so warily, but antimercantilist sentiment prevented—at least for the time being—a more structured response to the upheavals of the day, especially a response that would have involved the powers of government and particularly their national government.