

great days respectively."⁷⁰ For a society that sought dynamic, productive, and expressive images to embody its underlying principles, the fine arts alone were not sufficient. Though Emerson himself regarded the railroad as a limited art unless inspired by a vision of noble ends, the broader public discovered in it and in machine technology generally the combination of powerful emotion, utility, and moral purpose which they demanded for republican art. In this respect, it mattered little that most American writers and painters continued to adopt an attitude of studied indifference toward technology in their works. Despite their hostility, which of course was often returned in full measure by technologists, not only was technology adopted as a significant subject for art, particularly in the popular arts; it established a position as a popular art in its own right. The form and, more important, the aesthetic interpretation of American machinery thus developed in response to republican ideology, which technology itself had helped to shape.

5

TECHNOLOGY
AND UTOPIA

IN THE closing decades of the nineteenth century the tension between America's commitment to republicanism and her rapid technological growth reached a crisis. With dizzying swiftness the United States came of age as a technological society, and the transition affected virtually every sector of American life. A revolution in transportation and communications, led by the extraordinary expansion of the railroad, converted what had been a society of "island communities" into a centralized nation with vital links throughout the world.¹ The creation of new mass markets stimulated a transformation in all facets of industry. The steel, petroleum, and electrical industries quickly grew from infancy to gigantic proportions. Rapid implementation of new machines, interchangeable parts, and standardized processes allowed older industries to expand radically as well. From the fourth-ranked position among manufacturing nations of the world as of 1860, the United States pulled into a decisive lead. By 1894 the value of her manufactured products nearly equaled that of Great Britain, France, and Germany combined.² The social and cultural dislocations that attended this great technological transformation were immense. On the celestial railroad of American development, many found the journey disorienting, the roadbed rough, the milestones blurred, and the stations unfamiliar. Some were shut in box-cars or even condemned to ride the rods. Yet for a time their voices were muted as those who reclined in Pullman cars cheered on the nation's progress. Celebrating the stupendous achievements of America's "triumphant democracy," the steel magnate and Scottish immigrant Andrew Carnegie thumbed his nose at European rivals: "The old nations of the earth creep on at a snail's pace; the Republic thunders past with the rush of the express."³

An era of unprecedented production, the late nineteenth century was also a brilliant age of invention. A crude index of its achievement lies in the sheer traffic through the U.S. Patent Office. The record of 23,000 patents issued during the decade of the

1850s (which quadrupled the amount of the previous ten years) was approximated if not excelled during every single year from 1882 on. Bestriding the field of invention like a colossus was the great popular hero of the period, Thomas Edison. The inventor of the multiplex telegraph, an improved telephone transmitter, the mimeograph machine, the phonograph, the microphone, the motion picture, in addition to his celebrated development of a practical incandescent lamp, and countless other contributions in the field of electrical engineering, Edison literally made a business of invention. At a time when technological innovations were becoming increasingly complex and dependent upon science inaccessible to the layman, "the wizard of Menlo Park" provided a reassuring image of a self-taught, self-made man who could master the forces of nature and convert them to practical purposes. In the popular accounts of the time he became almost an allegorical representation of republican technology, both literally and figuratively dispelling "night with its darkness . . . from the arena of civilization."⁴

So firmly and immediately did the nation embrace Edison's and other technological developments that an American in 1900 looking back over the course of the last century could hardly imagine life without them. Writing in that year, a historian of invention, Edward W. Byrn, attempted to dramatize what moving backward in time a hundred years would entail. Leaving the present in "a luxurious palace car behind a magnificent locomotive, traveling on steel rails, at sixty miles an hour," one neared the beginning of the nineteenth century in "a rickety, rumbling, dusty stagecoach." Outside, in a ghostly panorama, the milestones of technological progress receded: not only telephone, phonograph, camera, electric railways, and electric lights, but as the journey progressed, telegraph, sewing machine, reaper, thresher, and India rubber goods. Americans lost the steam-powered printing press, woodworking machinery, gas engines, elevators, barbed wire, time locks, oil and gas wells, and ice machines. Faster and faster flowed the motley procession of inventions until Byrn's catalogue came in a rush:

We lose air engines, stem-winding watches, cash-registers and cash-carriers, the great suspension bridges, and tunnels, the

Suez Canal, iron frame buildings, monitors and heavy iron-clads, revolvers, torpedoes, magazine guns and Gatling guns, linotype machines, all practical typewriters, all pasteurizing, knowledge of microbes or disease germs, and sanitary plumbing, water-gas, soda water fountains, air brakes, coal-tar dyes and medicines, nitro-glycerine, dynamite and guncotton, dynamo electric machines, aluminum ware, electric locomotives, Bessemer steel with its wonderful developments, ocean cables, enameled iron ware, Welsbach gas burners, electric storage batteries, the cigarette machine, hydraulic dredges, the roller mills, middlings purifiers and patent-process flour, tin can machines, car couplings, compressed air drills, sleeping cars, the dynamite gun, the McKay shoe machine, the circular knitting machine, the Jacquard loom, wood pulp for paper, fire alarms, the use of anaesthetics in surgery, oleomargarine, street sweepers, Artesian wells, friction matches, steam hammers, electroplating, nail machines, false teeth, artificial limbs and eyes, the spectroscope, the Kinetoscope or moving pictures, acetylene gas, X-ray apparatus, horseless carriages, and—but enough!

Byrn shook himself and his readers from the thought as from a nightmare. To regress into the "appalling void" of the past, mired in ignorance and superstition, was unendurable. Far pleasanter was it to contemplate recent achievements and to anticipate future triumphs of technology, confident that no dream could be too bold.⁵

Byrn reflected the dominant popular conception of history as a steadily progressive record in which increased knowledge, technological development, and political liberty marched hand in hand. The course of technology was now bringing in sight a world civilization of reduced labor and enriched leisure, health and longevity, abundance, peace, and human brotherhood. Modern technology was giving birth to a "new epoch" of civilization that would penetrate around the globe, banishing ignorance, and eradicating "the savage and barbarous tribes" of the past. The vestiges of the primitive order would soon cease to function or even exist in the larger world and be confined to museums and academic studies.⁶ By this view, technology was fast making Thomas More's famous pun in coining the word "utopia" an anachronism. Eutopia, the good place, it certainly was, but the qualification that it was

also outopia, no place, no longer applied. Utopia lay precisely where many Americans had always contended, in the future, and every new invention attested to its existence and impending realization.⁷ Every day America moved closer to its practical fulfillment.

If one looked from patent office and production records to the condition of American society in the late nineteenth century, however, the impediments to utopia appeared immense. Technology had been embraced as a principle of order and preserver of union, the harbinger of peace and guardian of prosperity. But the overriding paradox of the age was the coexistence of technological progress and social chaos. The industrial economy, despite its extraordinary growth, was hardly a smoothly running engine but an erratic and dangerous machine, capable of great bursts of activity, then inexplicable slumps. The first of these, the Panic of 1873, spurred a groundswell of industrial and agrarian discontent, climaxed by a violent nationwide railroad strike in 1877. Then, as middle-class fears of a revolutionary uprising subsided in the early 1880s, another massive railroad strike in 1885 and Chicago's Haymarket riot of 1886 ushered in twelve years of almost unrelieved social crisis, reaching pitches of despair during the depression of 1893-97. The attempt of George Pullman, the sleeping car king, to create a model factory town in Pullman, Illinois, while retaining control and reaping a profit over its operations, received sharper rebuke in the bitter strike of 1894 than Lowell ever did. The shock of rapid urbanization profoundly transformed the pattern of American life and compounded the problem of cultural division. As showcases of the new technology, America's great cities dazzled visitors, but they frequently appalled them as well with their vivid contrasts of wealth and condition. Neo-Renaissance palaces and rat-infested tenements, society hostesses and "fallen women," the crazy-quilt of ethnic differences all became clichés in the description of city life, and the image of a smoldering volcano a master-metaphor. Often observers darkly alluded to the Biblical parable of Dives and Lazarus, in which the rich man is damned and the poor saved. Despite the din of cheers on behalf of technology as the great social unifier and horn of plenty, a succession of titles such as Henry George's *Progress and Poverty* (1879), Jacob Riis's

How the Other Half Lives (1890), and Henry Demarest Lloyd's *Wealth Against Commonwealth* (1894) pointed to fundamental economic rifts in American society based upon inadequate distribution of the fruits of technology. "The march of invention," wrote George, "has clothed mankind with powers of which a century ago the boldest imagination could not have dreamed. But in factories where labor-saving machinery has reached its most wonderful development, little children are at work; wherever the new forces are anything like fully utilized, large classes are maintained by charity or live on the verge of recourse to it. . . . The promised land flies before us like the mirage."⁸ Though their nostrums varied, George, Riis, Lloyd, and other reformers agreed that industrial America had strayed dangerously from both republican principles and Christian ethics. Unless social justice was speedily granted, they warned their readers, the oppressed might seek redress of their own through violent revolution.

While these reformers won an attentive audience in the late nineteenth century, a small but significant minority of American intellectuals abandoned progressive visions and surrendered to *fin-de-siècle* melancholy and sense of decadence. Imaginatively retreating to a golden age in the past, they discovered both a refuge from the present and a position from which to criticize their own era. Harvard professor of fine arts Charles Eliot Norton, Henry Adams, and the architect Ralph Adams Cram, for example, taught two generations of New Englanders to revere the Middle Ages as a civilization of social unity, moral idealism, energy, beauty—all the values they found lacking in industrial America. In the recent course of history they saw not progress but decline. "To live for the future," as we are told to do," Norton complained, "is to live on the windiest and least nourishing of diets." His criticisms of "this degenerate and unlovely age" in his Harvard lectures became legendary. Encouraged by Norton's example, in the 1890s Cram and his self-consciously aesthetic circle went so far in their medievalism as to repudiate republican principles altogether and embrace monarchism. Henry Adams's repudiation was still more cosmic. In the late nineteenth and early twentieth centuries he increasingly insisted that democracy, society, indeed, the universe as a whole were all undergoing a steady process of degradation

and dissipation in accordance with the laws of science. Behind illusions of progress and order lay the reality of chaos and decay which man was powerless to alter, so that history itself, Adams grimly insisted, would have to be redefined as "the science of human degradation."⁹

A more widely shared retreat from technological America was expressed in the pervasive nostalgia for the homogeneous, pre-industrial village culture of the early nineteenth century. The disorienting effect of rapid social and technological change—what Alvin Toffler has called "future shock"—reached epidemic proportions in the 1880s and '90s.¹⁰ In compensation, the past assumed new importance as an emotional center of stability and security. Opposing the centralizing tendency of modern transportation and communications, regional literatures sprang up throughout the country which evoked the lost youth and vanished way of life of a generation effaced, in Sarah Orne Jewett's phrase, by "the destroying left hand of progress."¹¹ The same theme figured prominently in the personal reminiscences of the period. Henry Adams dated quite precisely the eclipse of the world into which he was born: it was May 1844, with "the opening of the Boston and Albany Railroad; the appearance of the first Cunard steamers in the bay; and the telegraphic messages that carried from Baltimore to Washington the news that Henry Clay and James K. Polk were nominated for the Presidency."¹² When Henry James returned to the United States for a visit in 1904 after more than twenty years abroad, he too found himself "amputated of half my history" by the incursions of technological society. He discovered himself a stranger in his native land, his New York boyhood home gone, the old sights of the city compromised or completely obliterated by the new industrial landscape, the tempo increased, the commercialism rampant. Traveling to Washington Irving's house, Sunnyside, in Tarrytown, New York, James sensed that the very railroad on which he rode hopelessly compromised his literary pilgrimage. The train symbolized "the quickened pace, the heightened fever" that cut the modern world irretrievably from Irving's gracefully indolent time and condemned the tantalized James to grasp for "the last faint echo of a felicity forever gone."¹³

Not only the physical environment, then, but the emotional

texture of the world of the generation born before the Civil War was altered drastically in the late nineteenth century. From a shelter of the pleasure principle they had fallen into an anxious world of time-consciousness. Lewis Mumford has argued that the clock, which induces a mechanical concept of time abstracted from the natural order, is the key machine of the industrial era; and we have already seen its importance in the establishment of factory discipline in the case of Lowell.¹⁴ In *Walden* Thoreau had noted how the railroad was whirling Americans' "pastoral life . . . past and away" and manifestly altering their sense of time: "Have not men improved somewhat in punctuality since the railroad was invented? Do they not talk and think faster in the depot than they did in the stage-office?"¹⁵ In the last quarter of the nineteenth century the technological order strengthened time regimentation. Thoreau's observation proved prophetic, as a system of standard time was instituted in 1883 to simplify and coordinate railroad timetables, sweeping away a hodgepodge of more than fifty different local times.¹⁶ By the early 1890s time clocks were being introduced into offices and factories, and Frederick W. Taylor, the father of "scientific management," was conducting his famous time-motion studies, which broke every job down to its principal components to determine the most efficient pattern for each. So well did Americans internalize the exacting time requirements of their age that George M. Beard, a pioneer in the field of psychosomatic medicine, listed the perfection of clocks and invention of watches high among the causes of American nervousness. In his view, technological society in general exacted a stiff price for its comforts and conveniences in the historically unprecedented strain it placed upon the nervous system. "Modern nervousness," Beard concluded, "is the cry of the system struggling with its environment."¹⁷

This sense of contradiction between inherited values and sudden change, between technological progress and social discontent, between republican principles and the new industrial order welled up powerfully in the late nineteenth century. Frustrated in society at large, the desire for synthesis of technology and republicanism expressed itself most fully in utopian literature. In the late 1880s and 1890s over 150 utopian and dystopian novels were published

in America, many of them centering on the crisis of American republicanism in a technological age.¹⁸ Amid this deluge of utopian literature, four books emerge prominently as the most imaginative and searching considerations of this crisis: Edward Bellamy's *Looking Backward* (1888), Mark Twain's *A Connecticut Yankee in King Arthur's Court* (1889), Ignatius Donnelly's *Caesar's Column* (1890), and William Dean Howells's *A Traveler from Altruria* (1894).¹⁹ Representing four different types of the genre, together these novels provide an unfolding dialogue on the problems of integrating technology within a republican order. In their own distinctive ways each assesses the results of the United States' first century of political, social, and technological development, the meaning and relevance of egalitarian ideals in a technological society, and the possibility of achieving a republican utopia. Thus, these works spoke compellingly to a large readership profoundly agitated by the trial of American society and values. *Looking Backward* and *Caesar's Column* were two of the outstanding best-sellers of their day; and while neither *A Connecticut Yankee* nor *A Traveler from Altruria* could rival them in circulation, as books by two of the most popular and respected authors of the period, they reached a substantial and influential audience.

The novel provided these and other authors with a popular forum to communicate their ideas; but the impulse to utopian literature sprang from deeper sources as well. In a confused and apocalyptic time the form of the utopian novel offered a mode of interpreting social experience. Such fiction exposed the contradictions of contemporary American life, either by contrasting them with an imaginary unified social order, or by extrapolating the chaos that would result if American society continued to develop along existing lines. The novel provided writers with a flexible medium in which they could render ideas in imaginative terms instead of merely stating them as abstractions. Both the reductive and creative demands of fiction enabled authors to articulate their social visions with greater clarity than in discursive writing. Narrative structure and the conventions of plot provided mechanisms of ordering the confusing flux of social change and of charting its direction by relating it to a fictive beginning and end.²⁰ Utopia in these novels thus functioned as "a speculative myth," a mode of

projecting a vision of social possibilities at a time when Americans felt themselves at a turning point in history, but desperately in need of a sense of direction. The calendar itself appeared to invite both millennialist and catastrophic projections that the end of the century would mean the end of an era.²¹ While popular historical romances in the late nineteenth century, such as *The Prisoner of Zenda* and *When Knighthood Was in Flower*, offered their readership a retreat to a mythic past, utopian writers generally cast their readers' vision forward to a reconciliation of the anarchic forces of the present, ultimately a release from history itself, in a mythic future. With some significant exceptions, these utopian authors departed from the traditional location of utopia at a *physical* remove from their own society—in the manner of Plato, Bacon, and More—and located it instead at a *temporal* remove, projecting a vision of technological society that might emerge out of the turbulent events of contemporary America.

However, by no means were all of these visions unqualified affirmations. A recurrent theme in much of this utopian fiction concerned the possibility of social breakdown or catastrophe if American technology and society were not harmonized and controlled. "The imagination of disaster" frequently colored these works, whether the ultimate conclusion was positive (utopian) or negative (dystopian), and the forms which this imagination took illuminated and often criticized the dominant assumptions of the progressive view of American technological development.²² Both utopian and dystopian works pointed to the danger of barbarism at the heart of America's vaunted civilization rising out of the gulf between the nation's abundant resources and her shocking social inequities. In a society whose republican purposes had been obscured or corrupted, these writers emphasized, technology itself might serve as an instrument not of liberty but of repression, not order but chaos, not creation but destruction. The hopeful vision of an integrated technological republic struggled against the dreadful anticipation of technological tyranny and holocaust.

Far and away the most popular and influential of all utopian novels of the period was *Looking Backward*. Edward Bellamy began the book in late 1886 and sent the completed manuscript to

the publishers the following August. Published in January 1888, *Looking Backward* enjoyed only moderate sales of 10,000 copies during its first year. In 1889, however, sales climbed to over 125,000, and during the 1890s the book became an international best-seller and the stimulus for a host of volumes that extended, qualified, or repudiated Bellamy's ideas.²³ The work even inspired a short-lived reform movement, the Nationalists, a motley assortment of amateur social theorists, socialists of various stripes, clergymen, prohibitionists, feminists, army veterans, Theosophists, and litterateurs. By 1890 the number of Nationalist clubs had climbed to some five hundred across the country, all eagerly discussing how best to implement Bellamy's vision, though by the mid-1890s their strength waned considerably.²⁴

Bellamy propounded the technocratic utopia of *Looking Backward* in response to what he saw as the subversion of republican institutions by the growth of industrial capitalism. A journalist and novelist before his book's success launched him into reform politics, he lived almost his entire life in the mill town and industrial cousin of Lowell, Chicopee Falls, Massachusetts. Like numerous other nineteenth-century Americans, he first perceived "the inferno of poverty beneath our civilization" only when he traveled to Europe in 1868 at the age of eighteen. Upon his return he discovered "I had now no difficulty in recognizing in America, and even in my own comparatively prosperous village, the same conditions in course of progressive development."²⁵ Beginning in the early 1870s in editorials in the *Springfield Daily Union*, Bellamy pointed to the alarming concentration of wealth and power in the hands of a few and the ruthlessness with which they exercised control. The spectacle of deformed, emaciated, ignorant factory children in the local mills, a sight Americans had at one time thought impossible in their own country, shocked him profoundly. Their presence, he warned, offered undeniable proof that "a great wrong exists somewhere among us which is inflicting a vast amount of barbarity, a positive cruelty of monstrous proportion, upon these children and others like them in New England." As yet, however, Bellamy could suggest only piecemeal reforms, such as the establishment of half-time schools for child laborers.²⁶

The root of this new social barbarism, Bellamy believed, lay

in the rise of a new industrial aristocracy rather than in technology itself. He found the grossly inequitable distribution of the fruits of technology all the more intolerable because of his own fascination with new mechanical marvels and their potential social benefits. In his short story "With the Eyes Shut," for example, he joined in popular speculation on the possible social impact of Edison's phonograph.²⁷ Edison himself had predicted that his invention would revolutionize existing forms of letter-writing, dictation, books, clocks, music, and hundreds of other practices, disseminating and preserving new worlds of expressive sound for people now bound by cold symbols and print.²⁸ Bellamy imagined a society in which magazines, newspapers, books, and letters were all recorded on phonographs, so that for the general public reading and writing would have become skills as dead as Greek. As Bellamy depicted it, this technological transformation standardized and mechanized potentially every facet of experience. An inventor even has devised a greeting machine for clerics and politicians; a visitor need only press various buttons describing his situation to receive a hearty programmed response. Similarly, the phonograph has been married to the clock to extend time-discipline and increase social control. Equipped with portable timepieces, individuals are now obliged to follow orders from their family or superiors literally like clockwork. As the story ends, the narrator discovers that he has been pleasantly dreaming on a train and that these inventions still remain to be developed.

In *Looking Backward* Bellamy brought together his distress at the growing plutocratic control of American institutions and his vision of a truly egalitarian technological republic into a unified work contrasting contemporary American society with his utopian alternative. Set in the year 2000, the book cleverly begins with a sham preface that premises the attainment of Bellamy's utopian society and proposes in the guise of historical romance to "look backward" at the contrasts between the nineteenth and twentieth centuries. The narrator of this fiction, Julian West, presents himself as uniquely qualified to compare the old order and the new. For, as he explains, he himself was once a wealthy and idle aristocrat living in late nineteenth-century Boston. As a member of the privileged class, he felt no concern with the misery of the mass of

society, only resentment at the workers for their paralyzing strikes which delayed construction of his new house and marriage to his fiancée, Edith Bartlett. Nonetheless, West suffered from insomnia, a symptom of the nervous spirit of the age and the troubled soul of unregenerate man. In order to sleep, he habitually retreated to "the silence of the tomb" of a subterranean chamber, symbolic of his isolation and spiritual death.²⁹ One night, according to his occasional practice, West called a mesmerist to this vault to help him fall asleep. When he awoke, however, it was no longer 1887 but 2000.

To catapult his hero suddenly into the future in this way afforded Bellamy not only a convenient device to contrast his contemporary and utopian societies; in its extreme violence it provided a powerful metaphor for the painful sense of dislocation due to rapid change that characterized the late nineteenth century. Thus West is seized with terror as he realizes he is suspended in an alien world a century beyond anything he has ever known: "There are no words for the mental torture I endured during this helpless, eyeless groping for myself in a boundless void." Struggling to regain a sense of personal identity and continuity, he falls on a couch and fights for sanity: "In my mind, all had broken loose, habits of feeling, associations of thought, ideas of persons and things, all had dissolved and lost coherence and were seething together in apparently irretrievable chaos. There were no rallying points, nothing was left stable." Here is a dramatic rendering of the condition Henry Adams described in his *Education*: "He saw before him a world so changed as to be beyond connection with the past," and like an earthworm, he "twisted about, in vain, to recover his starting-point."³⁰ In his description of West's discovery that he has awakened into a world totally new, Bellamy at once emotionally validated his readers' own sense of historical disorientation and presented a vision of the culmination of history in a stable and beneficent social order.

For West's revival is the beginning of his resurrection. By the year 2000 society has realized in practice the republican principles and Christian values that had been frustrated and defeated in his earlier life. All but household goods have been nationalized and every citizen is guaranteed comfortable and equal support

throughout his life. This material security has precipitated a revolution in social assumptions and morals. The vices of egotism have vanished and a new altruism, based upon recognition of the organic nature of society, has sprung up in their place. The ideal of public virtue and the spirit of social cohesion have at last become a reality. West is introduced into the new society by Dr. Leete, his wife, and daughter Edith, who discovered his sleeping chamber and revived him from his trance. His narrative thus becomes the story of his conversion from nineteenth-century skepticism to belief in twentieth-century republicanism. Though he feels conscious of his cultural inferiority, as an anachronistic remnant of a barbarous age, the Leetes welcome him into their household as an equal. His challenge is mental and spiritual: to adjust to his new condition and to reach beyond the confines of self to the fraternity of society. Toward the end of the book his belief is tested when in a nightmare he returns to his nineteenth-century life. Revisiting scenes he once readily accepted, he is now tormented by his new perception of society's fierce competition, widespread suffering, and callous egotism. He bursts in upon a dinner party at his fiancée's home and pleads with the guests to heed the cries of the poor and build a new egalitarian social order. Unmoved, they denounce him as a mad fanatic and start to throw him out of the house. However, West reawakens in the year 2000, but now happily engaged to Edith Leete, who has revealed that she is the great-granddaughter of his lost love Edith Bartlett. Their romance provides him with a link to his past life and a surrogate for his loss and at the same time signals his integration into the new society.

In a series of conversations which form the bulk of *Looking Backward*, Dr. Leete explains to West how society achieved the republican ideal. As the industrial monopolies which West had known swelled to gigantic proportions by the early twentieth century, a new "national party" sprung up, advocating government ownership and operation of these trusts for the good of the whole people. Its members contended that nationalization of industry would raise both society's productive capacity and its ethical level as citizens worked in a vital union for the common good. This revitalized republicanism gradually won more and more converts as private monopolies absorbed one another. The process finally

ended in the nationalization of industry and capital as the people of the United States extended the principles of the American Revolution from politics to industry. As Dr. Leete presents it, socialism marks the culmination of republicanism.

The economic basis and school of republicanism in Bellamy's Nationalist utopia is the "industrial army," in whose ranks both men and women must serve between the ages of twenty-one and forty-five. Here governmental and working forces are combined in a minutely structured hierarchy, beginning with common laborers and rising to the general of the army, the President of the United States. As a youth Bellamy himself had dreamed of a military career, an ambition that was dashed when he failed the physical examination for entrance to West Point. Nonetheless, he retained a lifelong fascination with military affairs, amusing himself even in his final illness in 1898 by deploying toy soldiers on his bed.³¹ For Bellamy the military offered a model of both social ethics and organization, of solidarity and efficiency. With William James, Oliver Wendell Holmes, Jr., and other members of their generation, he keenly admired the martial virtues of selflessness, discipline, valor, patriotism and sought to find, in James's phrase, "a moral equivalent of war" to train a healthy citizenry. In Bellamy's industrial army, workers learn "habits of obedience, subordination, and devotion to duty" and are encouraged toward their best efforts by appeals to their sense of honor and service.³² As the industrial army instructs workers in republican virtue, it also forges them into a mighty economic machine. A centrally coordinated system of planning, production, and distribution completely supersedes the wasteful and erratic economy of the nineteenth century to achieve unprecedented abundance. For Bellamy the war on poverty is hardly a metaphor. At one point Dr. Leete argues that the comparative effectiveness of the divided organization of manpower under private capital as against the unified industrial army may be likened to "the military efficiency of a mob, or a horde of barbarians with a thousand petty chiefs, as compared with that of a disciplined army under one general—such a fighting machine, for example, as the German army in the time of Von Moltke." Evidently Julian West is persuaded by Leete's analogy, for in his nightmare return to nineteenth-century Boston the only admirable

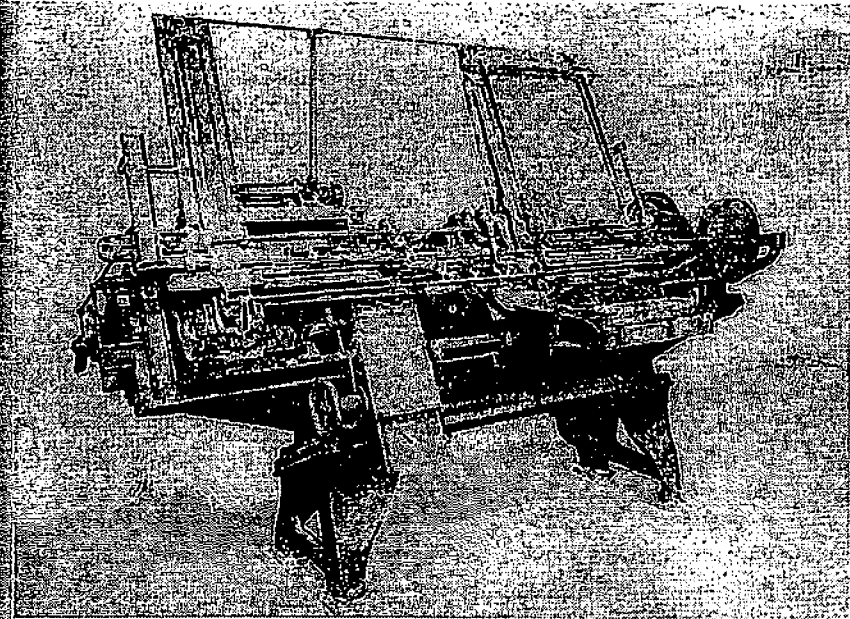
sight he finds is the appearance of a military parade: "Here at last were order and reason, an exhibition of what intelligent cooperation can accomplish." In language that recalls Dr. Leete's, he sees the passing regiment not as individuals but as a "tremendous engine . . . able to vanquish a mob ten times as numerous," and he marvels that the spectators do not see in its scientific organization and centralized control a model for the rest of society.³³ Thus for Bellamy as for a number of other utopian and dystopian writers, the ultimate extension of technological organization lay in the mechanization of men themselves.

To help mold workers into this industrial machine, Bellamy devised a system of industrial management that anticipated in rudimentary form some of the features of Frederick W. Taylor's system of scientific management. (Indeed Taylor would have made an excellent general in Bellamy's industrial army.)³⁴ Promotions through the ranks of the industrial army are intensely competitive, and, instead of increased wages, proper motivation is encouraged through elaborate manipulations of status, including privileges, prizes, and honorable mentions. Dr. Leete rather smugly observes that the "nobler sort of men" rise above this spirit of emulation and obey their own sense of duty—though this opinion is suspect, since he later confesses his own youthful ambition to win an honorific ribbon. These positive incentives are reinforced by punitive pressures. A special presidential police, called the inspectorate, supervises all aspects of the industrial army. "Not only is it on the alert to catch and sift every rumor of a fault in the service, but it is its business, by systematic and constant oversight and inspection of every branch of the army, to find out what is going wrong before anybody else does."³⁵ Those workers who persist in negligence or disobedience are placed in solitary confinement on bread and water until they relent. The criminally deviant are regarded as exhibiting "atavistic" behavior and their illness treated in hospitals.

Further to ensure discipline, members of the industrial army are not allowed to vote for their commander-in-chief, the President. Only after they have been mustered out of the ranks at age forty-five do they gain the franchise that permits them to indicate a preference for President from among the ten lieutenant-generals who command various departments. Thus in Bellamy's utopia, so-

ciery as a whole has become a kind of republican asylum. As in earlier republican asylums such as Lowell, factory discipline and adherence to the industrial hierarchy form the basis of republican deportment. Since the possibility of conflicts of interest is denied, no provision is made for political dissent. Indeed, Bellamy sought to eliminate politics altogether and to reduce the complex structure of government and industry alike to machine-like simplicity, efficiency, and regularity. Although municipal governments still exist in his utopia, state governments have become superfluous. Congress meets only every five years, rarely considers significant legislation, and in any case may only commend new bills to the following session "lest anything be done hastily." Instead of governmental innovation the system requires only superintendence; instead of politics, management. Administrators of the industrial army, Dr. Leete assures West, need have no more than fair abilities: "The machine which they direct is indeed a vast one, but so logical in its principles and direct and simple in its workings, that it all but runs itself; and nobody but a fool could derange it."⁸⁶ By insisting that the economy and government of his utopia would be largely self-regulating, requiring only technical adjustments rather than decisions of value and acts of authority, Bellamy hoped to mitigate the irony that to achieve the ends he most desired in a technological republic, he sacrificed, or at least severely circumscribed, democracy itself.

Bellamy no doubt would argue that this curtailment of political liberty is not really a sacrifice at all, since no substantial differences are presumed to exist, and in return his utopia promises complete social and economic security, even unprecedented abundance. In fact, Bellamy built this exchange of libertarian surrender and material reward into the heart of his social system. Beyond the privileges and honors to be gained from advancement within the industrial army lie the even greater joys of retirement. Once workers have discharged their duties and are mustered out of the industrial army at age forty-five, unless they assume one of the high administrative posts they are free to spend what Dr. Leete calls "the brighter half of life" at leisure. As to *how* they spend it, Leete gestures grandly to the cultivation of "the higher exercise of our faculties, the intellectual and spiritual enjoyments and pursuits



Mark Twain's "mechanical miracle," the Paige Compositor.

which alone mean life."⁸⁷ Somewhat anticlimactically, however, he acknowledges that the majority of retirees do not share these artistic, scientific, or scholarly interests. It would be surprising if they did, since they have had no real opportunity to acquire such tastes and skills; the intellectual and professional departments are run separately from the industrial army proper. Instead, most retired workers are left to participate in what appears to be the principal recreation in Bellamy's utopia: material consumption.

Images of consumption and of the technological achievements that make it possible are in fact one of the most powerfully and concretely rendered aspects of this utopia, far more so than the new sense of human solidarity and brotherhood that Bellamy insists upon throughout but never demonstrates in specifically human terms. (The reserved benignity of the Leete family is hardly an exception.) Significantly, when West first awakens in the year 2000 and refuses to believe that he really has slept 113 years, Dr. Leete does not attempt to convince him by demonstrations of the

new social ethic but by the physical spectacle of the new Boston, a model City Beautiful:

Miles of broad streets, shaded by trees and lined with fine buildings, for the most part not in continuous blocks but set in larger or smaller inclosures, stretched in every direction. Every quarter contained large open squares filled with trees, among which statues glistened and fountains flashed in the afternoon sun. Public buildings of a colossal size and an architectural grandeur unparalleled in my day raised their stately piles on every side.

Faced with this material grandeur, West is immediately convinced of the reality of his great transition: "Surely I had never seen this city nor one comparable to it before."³⁸ Bellamy's city represents "the metropolis as a department store"; it embodies an almost exclusively consumer culture.³⁹ Though Bellamy gestures vaguely to the existence of clubhouses for vacations and sports, he shows no public social interaction. He concentrates instead upon depicting the city's two great institutions of consumption: the local dining-hall and the distribution center (where finished goods are purchased by credit card). Both offer efficient, impersonal service in sumptuous surroundings. Over the entrance to the latter stands "a majestic life-size group of statuary, the central figure of which was a female ideal of Plenty, with her cornucopia," the symbol of Bellamy's promise of abundance for all and the key to his society's cohesion.⁴⁰ The problem of luxury, Bellamy suggested, disrupted American society in the nineteenth century only because it reflected gross inequities. Equally shared and guaranteed abundance eliminates the desire to hoard possessions.

This culture of consumption has transformed domestic life in general. Though families still maintain individual residences, all such tasks as washing, cooking, and sewing are performed in public facilities. But as domestic chores have been appropriated by the state, so have domestic pleasures, and a technological mass culture placed in their stead. To take a prophetic example, the singing and playing of music in the home have been totally superseded by professional concerts transmitted by a kind of telephonic radio. Church services, similarly, are rarely attended in person but rather

audited and sampled by this medium. In his fascination with technological devices as stimuli, Bellamy even anticipates the clock radio and Muzak, with programmed reveilles in the morning.⁴¹ In general, responsibility, interaction, and hence emotional intensity among members of the family have been parceled out to the state. Though the husks of domesticity remain, both public and private passions have been diffused to a benign, brotherly glow.

The modern reader's response to Bellamy's utopian vision is inevitably tinctured by the fact he too is "looking backward" and that as more and more of the specific features of Bellamy's society have been realized, the ideal grows less attractive. As Lewis Mumford has observed, utopias such as Bellamy's, with their standardization, isolation, stratification, and militarism, merge all too readily into the dystopias, both fictional and actual, of the twentieth century.⁴² It is easy, if perhaps unfair, to see Bellamy's utopia as culminating in fascism and the Orwellian tyranny of 1984 or dovetailing insidiously into Huxley's *Brave New World*. But the fears that Bellamy's book raises are not prompted solely by twentieth-century experience. Almost all the reservations modern critics have expressed concerning the militarism and materialism of Bellamy's utopia were previously voiced by his own contemporaries.⁴³ What made Bellamy's work controversial both in his own time and in the twentieth century was the way in which he expressed the tensions and dilemmas of the quest for an ideal technological republic. Castigating both the material and ethical results of industrial capitalism, Bellamy attempted to reassert popular control over technology in order to achieve a society where republican virtue once again could flourish. In this spirit he boldly projected a socialist order consonant with American traditions and experience. Significantly, he insisted upon the word "nationalist" rather than "socialist," a word he "never could well stomach." Bellamy explained his aversion to the term in a letter to William Dean Howells: "In the first place it is a foreign word in itself and equally foreign in all its suggestions. It smells to the average American of petroleum, suggests the red flag, with all manner of sexual novelties, and an abusive tone about God and religion, which in this country we at least treat with decent respect."⁴⁴ Bellamy wished not to set one class against another but to enlist all citizens of good

will in a campaign to abolish class itself; he aimed not to foment a new revolution but to defend the ideals of the Revolution of 1776 by extending popular control from government to industry. Beneath this egalitarian strain, however, his conception of republicanism still contained strong elements of the hierarchical structure, institutional discipline, and social control which had been important components in conservative republican thought ever since the late eighteenth century. Seizing power from a capitalist elite, he thrust it into the hands of a technocratic one. His faith in the unlimited potentialities of human nature and of technology once they were freed from the prison of nineteenth-century capitalism led him to assume that when these bars were lifted mankind could return to its original innocence and build a heaven on earth. He did not see that his own system could rigidify into a prison itself.

"Began 'Looking Backward' Nov. 5, 1889, on the train. A fascinating book," Mark Twain wrote in his notebook shortly before the publication of his own novel *A Connecticut Yankee in King Arthur's Court*. Within a month he was hailing Bellamy as "the man who has made heaven paltry by inventing a better one on earth," and soon after arranged to have Bellamy visit him at his home in Hartford, Connecticut.⁴⁵ One wonders if these authors discussed their two books, for the works make an intriguing comparison.⁴⁶ Whereas *Looking Backward* presented Bellamy's vision of an American technological republic in the future, in *A Connecticut Yankee* Mark Twain sent a contemporary American back in time to institute a technological republic in the distant past. Both novels fictionally tested the implications of a republican order based on technology, and in both cases dystopian elements arose out of their visions despite themselves. Though Mark Twain was less of a conscious critic of nineteenth-century industrialism than Bellamy, *A Connecticut Yankee* presents some of the most disturbing portents of the failure of the utopian quest for a technological republic of any book in American literature.

Study of Mark Twain and *A Connecticut Yankee* is especially illuminating because he beheld technology with his culture's most uncritical fascination and yet uttered some of his era's gravest forebodings over the course it was taking. His father was

a reckless speculator who reportedly dreamed of devising a perpetual motion machine, and early in life Mark Twain was fired with the spirit of technological enterprise.⁴⁷ A would-be inventor and entrepreneur, he provided during the course of his career financial support for as many as a hundred inventions and manufacturing schemes, almost all of them unsuccessful. These projects included: a steam generator, a steam pulley, a marine telegraph, a watch company, an engraving process, a carpet-pattern machine, a Teleelectroscope (an early sort of television), a skimmed milk cure-all called plasmon, a cash register, and a spiral hat pin. Mark Twain even held patents of his own for three (deservedly obscure) inventions: an adjustable and detachable clothing strap, a pre-gummed scrapbook (from which he actually made money), and a memory-building game.⁴⁸ As a writer, he was particularly fascinated by inventions that facilitated communication. He owned the first private telephone in Hartford, bought and used one of the first Remington typewriters, avidly collected fountain pens, and experimented with phonograph dictation.⁴⁹ This enthusiasm led him from 1880 to 1894 to the most famous and disastrous of all his technological obsessions, his enormous investment of time, money, and energy in James W. Paige's typesetting machine.⁵⁰

The Paige typesetter was one of a number of machines in the nineteenth century designed to imitate and supersede a human printer by setting, justifying, and distributing single foundry types automatically. An impossibly cumbersome and intricate device, it weighed about 5000 pounds and contained some 18,000 separate parts, 800 shaft bearings, and innumerable springs.⁵¹ By 1884 the invention was already rendered obsolete by Ottmar Mergenthaler's Linotype machine, which instead of distributing type, melted it down and started afresh after each run. However, Mark Twain obstinately refused to acknowledge Mergenthaler's superiority, and the deeper his obsessive support of Paige took him, the wilder his visions of immense wealth. At times his pages of figures prophesied returns approaching the billion mark, and he gleefully exulted that he would need ten men to count the profits. "I am one of the wealthiest grandees in America—one of the Vanderbilt gang, in fact," he boasted in 1890, yet ruefully added he had hardly a dollar to spare.⁵²

A master of popular rhetoric, Mark Twain was also its victim. The language of the technological sublime shut his ears to the absurdity of his quixotic venture. Paige, he insisted, in phrases that recall Thomas Ewbank, was "a poet; a most great and genuine poet, whose sublime creations are written in steel. He is the Shakespeare of mechanical invention." To the typesetter itself, Mark Twain paid extravagant tribute, attributing to it human skills and personality. Thus he urged his friend William Dean Howells (like himself, a onetime printer) to attend a demonstration in October 1889: "You & I have imagined that *we* knew how to set type—we shabby poor bunglers. Come & see the Master do it! Come & see this sublime magician of iron & steel work his enchantments." The anthropomorphic conception of the machine that ran through so many of his comments became explicit as he boasted in another letter that his "magnificent creature of steel" was in construction "as elaborate and complex as that machine which it ranks *next*, to, by every right—Man—and in performance it is as simple and sure."⁵³ The extraordinary complexity of the machine should have warned him of its impracticality; but in his technological naïveté that very complexity proved irresistibly appealing, another instance of the mysterious wonders of invention. In one of the many false dawns when Mark Twain thought the typesetter finally stood on the brink of perfection, he wrote his brother Orion Clemens in January 1889, grandly announcing that "at 12:20 this afternoon a line of movable types was spaced and justified by machinery, for the first time in the history of the world!" Drunk with the epochal significance of the machine, he continued:

All the other wonderful inventions of the human brain sink pretty nearly into commonplace contrasted with this awful mechanical miracle. Telephones, telegraphs, locomotives, cotton gins, sewing machines, Babbage calculators, Jacquard looms, perfecting presses, Arkwright's frames—all mere toys, simplicities! The Paige Compositor marches alone and far in the lead of human inventions.⁵⁴

During much of the period when Mark Twain was most actively engaged in the development of the Paige typesetter, from

December 1884 to May 1889, he conceived and wrote *A Connecticut Yankee*. In his enthusiasm and frustration, he even developed an irrational sense of linkage between the novel and the typesetter and wished to complete both projects on the same day, as if he too were a word-machine.⁵⁵ In a sense, the book may be regarded as an attempted justification (though ultimately a judgment) of Mark Twain's own passionate involvement with technology. By sending a nineteenth-century Yankee (in the early notebook entries the character was Mark Twain himself) to Arthurian England and depicting his adventures, he intended a comic contrast between two cultures: modern, republican, technological America and primitive, aristocratic, superstitious England. In conception, at least, the novel defended contemporary American society against both millennialist critics and nostalgic dreamers. History was a record of ethical, political, and technological progress from medieval barbarism to the glories and comforts of the present. America would advance toward perfection by developing along existing lines. Thus Mark Twain ostensibly offered his readers a reassuring message. He confirmed the achievements of the present by journeying back in time to burlesque the romantic attraction to the Middle Ages. He made this point explicit in an unpublished preface: "If any are inclined to rail at our present civilization, why—there is no hindering him, but he ought to sometimes contrast it with what went before and take comfort and hope, too."⁵⁶

Mark Twain's protagonist, Hank Morgan, describes himself at the outset of the story as "a Yankee of the Yankees—and practical; yes, and nearly barren of sentiment, I suppose—or poetry in other words." He stands as the embodiment of nineteenth-century technological man, scornful of the traditional arts and fascinated by machinery. At the Colt arms factory in Hartford (where Mark Twain first saw the Paige typesetter), Morgan boasts he "learned all there was to it; learned to make everything; guns, revolvers, cannon, boilers, engines, all sorts of labor-saving machinery." The capacity for violence suggested by his work he cheerfully acknowledges, saying he is "full of fight."⁵⁷ Gradually he has risen from worker to manager. As head superintendent at the factory, he backs up his official authority over the workers by sheer physical strength

—until in a duel with crowbars a worker hits Morgan over the head so hard he sends him back in time thirteen centuries to Arthurian England.

Morgan's situation is thus the reverse of Julian West's in *Looking Backward*; so too is his response. The Yankee is so confident of his internal stability that at first he believes all the inhabitants of Camelot to be simply inmates in a lunatic asylum. When he discovers that he indeed has awakened in the year 528, he quickly gets over his astonishment and adjusts to his new situation. To a believer in the progressive course of history, a plunge backward to the sixth century would seem to be unendurable torture, but as a practical Yankee he discovers personal compensations: "Look at the opportunities here for a man of knowledge, brains, pluck and enterprise to sail in and grow up with the country. The grandest field that ever was; and all my own; not a competitor; not a man who wasn't a baby to me in acquirements and capacities." Far better was it from an entrepreneurial point of view, Morgan decides, than if (like West) he had been hurled forward in time to the more advanced twentieth century; for there he "could drag a seine down-street any day and catch a hundred better men than myself." In the Nationalist order of the year 2000, West discovered to his astonishment that even the gold in his vault was worthless. Morgan, by contrast, contemplates his position in the Middle Ages as an extraordinary financial opportunity, feeling "just as one does who has struck oil."⁵⁹

Morgan thus approaches Arthurian England like a nineteenth-century American industrialist before a newly discovered country populated by a curious, technologically backward, and therefore "primitive," people. Or in his words, "I saw that I was just another Robinson Crusoe cast away on an uninhabited island, with no society but some more or less tame animals, and if I wanted to make life bearable I must do as he did—invent, contrive, create, reorganize things; set brain and hand to work, and keep them busy. Well, that was in my line."⁶⁰ A one-man imperial expedition, the Yankee regards Arthur's subjects much as nineteenth-century English and Americans viewed underdeveloped nations of black Africans and Indians of their own time. On different occasions he calls them "white Indians," "modified savages," "pigmies," "great

simple-hearted creatures," "big children," "sheep." They are pictured as credulous, superstitious, gleeful, innocent, cruel, irrational, dirty, vulgar—all the "native" virtues and vices. The Yankee, by contrast, regards himself as clever, practical, rational, foresighted, chaste, and humane—the virtues of a technological and republican culture, though they are virtues which will themselves be tested in the course of the novel.

As a stranger from another culture, the Yankee's position in Arthur's realm resembles that of the shipwrecked European sailor who, before the advent of the white man, washed up on the Javanese coast, was taken by the people for a white monkey and chained to a rock. Though he scratched his name and an account of his shipwreck in three languages, he never really communicated with his captors. As they doubted his humanity, he may have indeed doubted theirs.⁶⁰ Hank Morgan is taken by the English, if not for a white monkey, at least for a kind of monster or powerful animal, certainly not a man like themselves. Condemned to be burned at the stake, the Yankee forestalls his execution with what had become in nineteenth-century literature a well-established mode of dealing with "savages," whether American Indians, black Africans, or, in this case, medieval English. Morgan providentially remembers the imminent occurrence of a total eclipse of the sun and, armed with this bit of scientific trivia, he stages a "miracle."⁶¹ As a sharp Connecticut trader, Morgan threatens to blot out the sun unless he is made King Arthur's chief minister and promised one per cent of the revenue his programs contribute to the state. His success in achieving this agreement confirms his sense of superiority.

Once established in power, the Yankee institutes a program of technological development and political reform in order to recast sixth-century England in the image of nineteenth-century America. In this effort, as in the case of so many ventures in the nineteenth century, motives of republican reform and personal aggrandizement combine. Morgan covertly establishes a network of industries and communications throughout the land and trains a cadre of technological experts to administer them. Like the founders of Lowell and other model factory towns, he conceives of his industrial complex as a cradle of republican civilization. Reversing Victorian critics of factory life, preeminently John Ruskin, who contrasted the modern

operative as "an animated tool" with the freedom of the medieval craftsman, Morgan commends his factory as a place "where I'm going to turn groping and grubbing automata into *men*."⁶²

Within its comic framework, then, *A Connecticut Yankee* raises the question of the true civilizing power of Morgan's technology and his republican system. He aspires to be a Great Man who will literally change the course of history.⁶³ But as with all utopian schemes, there is the formidable problem of how to institute the new order. On this issue, despite his cocksure manner, Morgan remains uncertain. As he temporizes in pointless farcical quests or (like so many late nineteenth-century reporters and sociologists) joins with the king in incognito excursions to discover "how the other half lives," he debates how to initiate his program of reform. At first Morgan rejects a sudden transition in favor of "turning on my light one-candle-power at a time." Though he defends the Reign of Terror as infinitely swifter and more humane than the thousand-year terror of the *ancien régime*, still he shrinks from revolution, arguing he must educate "his materials" first. The mute resignation of the people, however, at times makes him despair of ever succeeding. Fatalistically, he declares:

All gentle cant and philosophising to the contrary notwithstanding, no people in the world ever did achieve their freedom by goody-goody talk and moral suasion: it being immutable law that all revolutions that will succeed, must *begin* in blood, whatever may answer afterward. If history teaches anything, it teaches that. What this folk needed, then, was a Reign of Terror and a guillotine, and I was the wrong man for them.⁶⁴

Here Morgan epitomizes his ambivalent position, denouncing mere progressive rhetoric and declaring only violent revolution will answer, then shrinking from his own political imperative—though finally he will embrace it with a vengeance. At the root of his strategic dilemma is his contradictory position as a self-styled republican reformer who feels no ideological unity with the people he proposes to lead, only condescension and contempt. Occasionally, he gives some recognition to this problem. A number of times in the course of the book he speaks forcefully about the

inflexibility of established attitudes and the impossibility of overturning the effect of cultural training overnight. Nevertheless, in the last analysis he perceives all the English people's departures from his own cultural values as evidences of primitivism. In benign moods, he regards them as "the quaintest and simplest and trust- ingest race" and boasts that he stands among them as "a giant among pigmies, a man among children, a master intelligence among intellectual moles: by all rational measurement the one and only actually great man in that whole British world." Occasionally, he discovers an individual who responds to his influence, declares him "a man"—his highest tribute—and sends him to his factory settle- ment. But at other moments he sighs despairingly, "There are times when one would like to hang the whole human race and finish the farce."⁶⁵

Ultimately, the Yankee is a person more attracted to the idea of achieving what he calls his "new deal" than to republicanism itself. This "deal," the plan to industrialize and democratize Arthurian England, arises more out of his own needs and assumptions than those of the English themselves. His deepest ambition is personal: to be "the greatest man in the kingdom," to exert "enormous authority," to remake Arthurian England in his own image. He revels in his title spontaneously awarded by the people, which, "translated into modern speech, would be THE BOSS." This is not the title of a republican leader but that of a dictator, a phrase linking him to the political and industrial bosses of the nineteenth century and, still more ominously, translated into modern Italian and German, to *il Duce* and *der Führer* of the twentieth.⁶⁶ Despite his professions of republicanism, the Yankee displays alarming fondness for despotic power, as when he exults over the swift development of his factories: "Unlimited power is the ideal thing when it is in safe hands."⁶⁷

How "safe," then, are Morgan's hands? A number of passages in the novel raise basic questions as to the character of his mission. As he vaunts his clandestine factory colony, his language contains a strong note of menace: "There it was, as sure a fact, and as substantial a fact as any serene volcano, standing innocent with its smokeless summit in the blue sky and giving no sign of the rising hell in its bowels."⁶⁸ This use of volcanic imagery and mixture of

praise and dread in describing the Yankee's nascent industrial civilization is continued in the name of the newspaper he establishes: the "*Camelot Weekly Hosannah and Literary Volcano*."⁶⁸ The ambiguous title points to a fundamental dichotomy in Morgan's venture. Is he a Yankee Saviour bringing technological and political enlightenment in order to lead the people to a new heaven on earth? Or is he an Exterminating Angel, prefiguring the character Satan in Mark Twain's *The Mysterious Stranger*, destined to destroy them? The mode of Morgan's public displays of technological power reinforces doubts. Whether blowing up Merlin's tower with a lightning rod and blasting powder or repairing a holy fountain with pipe, a pump, and a grand display of fireworks, he depends for his success both upon his own practical knowledge and his audience's continued ignorance. As much as his rival Merlin, he is a magician, concealing his methods behind a subterfuge of showmanship and special effects.⁷⁰ His displays are more threatening than constructive, calculated to arouse the public's terror and admiration and to boost his reputation as he battles Merlin for power. Furthermore, once he can amass the materials, these "miracles" reveal the Yankee's irresistible penchant for explosives and growing disregard for human life. When first he actually kills with his devices, using a dynamite bomb against two mounted knights, it is ostensibly to save the king's life. Nevertheless, he has been fairly itching for an excuse, and he revels in the spectacle of destruction like a boy at a fireworks: "Yes, it was a neat thing, very neat and pretty to see. It resembled a steamboat explosion on the Mississippi; and during the next fifteen minutes we stood under a steady drizzle of microscopic fragments of knights and hardware and horse-flesh." The image of nineteenth-century technological disaster raises further doubts as to the efficacy of Morgan's program. Later, the lethal capacity beneath his American folk humor asserts itself more baldly as the Yankee challenges the members of the Round Table in a self-proclaimed battle "to either destroy knight-errantry or be its victim." He begins his series of jousts with a lasso, dressed like a circus performer, and ends an arrogant and ruthless gunman exulting over ten dead.⁷¹

With this triumph the Yankee at last feels free to unveil his burgeoning nineteenth-century civilization and to develop it

openly. Within three years, he proclaims, "Slavery was dead and gone; all men were equal before the law; taxation had been equalized. The telegraph, the telephone, the phonograph, the typewriter, the sewing machine, and all the thousand willing and handy servants of steam and electricity were working their way into favor. We had a steamboat or two on the Thames, we had steam war-ships, and the beginnings of a steam commercial marine; I was getting ready to send out an expedition to discover America."⁷² Morgan plans to overthrow the Catholic Church in favor of Protestant denominationalism and after Arthur's death at last to institute his republic—with himself as first president. Yet one sees nothing of real improvements in popular life; quite the opposite, in fact: undisciplined speculation in the stock market the Yankee has established soon divides the Round Table and leads to civil war. The analogy to irresponsible and criminal financial manipulations in Mark Twain's own time and their polarizing effect upon American society is clear.⁷³ Ironically, the Yankee has reproduced nineteenth-century American civilization all too faithfully, and he sighs, "My dream of a republic to *be* a dream, and so remain."⁷⁴ The hope that technological civilization could lift Arthurian England out of its morass of ignorance, inequality, and oppression to republican enlightenment and virtue fails; and by implication, it signals the failure of technology to institute a true republic in America. The issuing of typewriters and sewing machines to the people does not automatically usher in the millennium. Instead, Morgan's experiment backfires: the Church exploits the anarchy his schemes have created to entrench its power more firmly than ever and to ban the Yankee and modern technology.

When Morgan finally does proclaim a republic, it is an empty gesture, calculated to provoke a fight. The people in whose name he pretends to speak reject his program, and his only remaining supporters are his assistant Clarence and fifty-two adolescent boys, all of whom have been schooled since childhood in his factories and thoroughly indoctrinated in his principles. As the Yankee's vision is at last decisively rejected, it turns to destructive megalomania. Throughout, Morgan has reflected his experience at the arms works in a strong affinity for military technology and a fascination with battle; he has even established his own West Point.⁷⁵ As he turns to

gain by force what he has failed to achieve by peaceful means, his actions reveal the technological violence of which Americans (among others) are capable when their republican values are opposed by an alien and technologically less advanced people, such as the American Indians in Mark Twain's own time or the Vietnamese in recent years. Failing to win "the hearts and minds" of the medieval English by his program of industrial development or by his limited duels, the Yankee escalates the conflict to a war against all comers, against all forces of cultural resistance. The war of liberation thus becomes a war of extermination. Morgan installs his crew in a fortress and lovingly and meticulously assembles his era's most modern technology of death: Gatling guns, land mines, and, his *pièce de résistance*, a row of electrified fences.⁷⁶ These weapons consummate the interest Morgan expressed in such "labor-saving machinery" at the very outset of the story. For they were all regarded in the late nineteenth century as more efficient and hence, proponents reasoned, more "humanitarian" weapons because they would lead to smaller armies and shorter wars. The inventor of the Gatling gun, Dr. Richard J. Gatling, who lived not far from Mark Twain in Hartford and whose gun Mark Twain had delightedly test-fired at the Colt arms works as early as 1868, defended his weapon in just these terms, and so too did enthusiastic defenders of dynamite guns and land mines in popular magazines.⁷⁷ Because of this increased efficiency, technological innovations in weaponry were particularly celebrated as at last assuring the supremacy of the forces of civilization over their "barbarian" antagonists.⁷⁸ The Gatling gun, never fired in the American Civil War for which it was developed, became a favorite weapon of the United States army in the Indian wars of the 1870s and 1880s as well as of the British army in the Zulu war of 1879.⁷⁹ Morgan's actions at the end of *A Connecticut Yankee* are thus less of an aberration than critics have suggested. Having regarded the Round Table as "a sort of polished-up court of Comanches" and the population in general as "white Indians," he proceeds to treat them as such.⁸⁰

A Connecticut Yankee ends in an Armageddon between the forces of the nineteenth century and the sixth which becomes a study in technological atrocity. Morgan defines it as a war to end wars, fought in the name of the republic, a crusade on behalf of

liberty and equality, a struggle between animal might and the resources of free and intelligent men. But in fact it is a war between two clashing systems of oppression. If the English forces marching against Morgan represent the barbarism of feudalism and a corrupt Church, the Yankee himself comes to represent the authoritarianism and dehumanization of uncontrolled technological power. Although he is ostensibly fighting on behalf of technological civilization, he blows up his own beloved factories lest they fall into enemy hands. The final legacy of his inventiveness is not his "civilization-factories" but an automated battlefield. His sophisticated weaponry insulates him and his youthful assistants from direct contact with the enemy and as a consequence he loses all sense of restraint.⁸¹ He delights in his power to kill efficiently and distantly through his technology and indulges in a feeble military wit, what might be called the pornography of destructive power, which conflates extraordinary and deadly actions with mundane and innocent ones. Thus Morgan and his assistant Clarence speak of the "music" of Gatling guns and offer mock hospitality toward the enemy. In one exchange, the Yankee savors the news of how a party of clerics who marched toward the fortress to demand their surrender has "tested" the land mines:

"Did the committee make a report?"

"Yes, they made one. You could have heard it a mile."

"Unanimous?"

"That was the nature of it."⁸²

In his fascination with technological destruction, Morgan, who has earlier been appalled by the torture of a single man, discovers an awful joy in his ability to kill eleven thousand with a single switch of an electric fence: "There was a groan you could hear!" His scorn of the English as a low and undifferentiated "mass" at last achieves its physical correlative. "Of course we could not count the dead," he explains at one point after exploding a land mine, "because they did not exist as individuals, but merely as homogeneous protoplasm, with alloys of iron and buttons."⁸³ Nevertheless, he does announce a body count of 25,000—a final application of the quantitative standards of technological "progress." As the perpetrator of technological atrocity, the Yankee is not only physically

insulated but emotionally desensitized. He counters this "psychic numbing" to a degree only when he leaves his fortress to confront the dead and wounded directly. Once on the battlefield, he is exposed physically and also emotionally. The wound he receives from an injured enemy is the product and symbol of his residual guilt.⁸⁴

The book concludes heavy with irony. Morgan's youthful supporters are trapped in their fortress and die infected by the rotting bodies they have killed. Clarence pronounces the moral of their technological assault: "We had conquered; in turn we were conquered."⁸⁵ Merlin's magic ultimately triumphs over the Yankee's as he enters the fortress in disguise and places Morgan under a spell to sleep thirteen centuries. At last, then, after an age-long sleep, the Yankee returns to his once beloved nineteenth century. Significantly, however, unlike Julian West, he is not reintegrated to society in the end. Instead, he dies in delirium, longing for his Arthurian wife as an image of restoration, a symbol of an imagined harmonious past which he feels he has betrayed.⁸⁶ His dream of introducing a republic by fomenting an industrial and political revolution has turned into a nightmare, and not simply loss but a deep sense of unresolved guilt are implicit in his final words to his now centuries-dead wife: "Death is nothing, let it come, but not with those dreams, not with the torture of those hideous dreams—I cannot endure *that* again."⁸⁷

The full depths of Mark Twain's fable of technological and political progress were ignored by American reviewers of *A Connecticut Yankee*, who generally took the Yankee's self-declared position as a humanitarian and republican industrialist at face value. Bellamy's supporter Sylvester Baxter enthusiastically applauded the book as "eloquent with a true American love of freedom, a sympathy with the rights of the common people, and an indignant hatred of oppression of the poor, the lowly and the weak." He even bemoaned the fact that savages similar to the medieval English still existed among the Indians of the American West, and in central Asia and Africa, who had not been exposed to "the light of a genuine civilization."⁸⁸ Mark Twain's friend William Dean Howells heralded the novel in *Harper's Monthly* as "an object-lesson in democracy" which "makes us glad of our republic and our epoch."

As late as 1908 Howells "re-re-read" *A Connecticut Yankee* and wrote Mark Twain, "It is the most delightful, truest, most humane, sweetest fancy that ever was."⁸⁹

Though a number of recent critics have argued that Mark Twain's difficulties in control of the book reveal his internal frustrations and ambivalent attitude toward the ideology of technological progress, it is difficult to determine to what extent he acknowledged the import of his novel.⁹⁰ In any case, to Mark Twain more than to most writers applies D. H. Lawrence's dictum: "Never trust the artist. Trust the tale."⁹¹ While Edward Bellamy's *Looking Backward* castigated the economic and social cleavages he believed inherent in industrial capitalism, Mark Twain's *A Connecticut Yankee* challenged his society's progressive values on another, still more disturbing level. The book demonstrated how a powerful, supposedly humanitarian republican leader may betray his own ideals as he seeks to extend control over a weaker, underdeveloped nation through essentially aggressive use of his technology. This tendency, present throughout the book, explodes into genocidal violence at the end. The inability of reviewers to confront the theme of technological atrocity at the heart of the novel only reveals how deep-seated the Yankee's capacity for violence and for the self-deception which supported it was shared by society at large.

The author of *Caesar's Column*, Ignatius Donnelly, surged with a passion for social justice and an apocalyptic imagination congenial to Mark Twain's own. But while Mark Twain grew increasingly pessimistic of the prospect of social reform, Donnelly aimed to enlist his readers in a massive campaign of social regeneration. Known variously as "The Sage of Nininger," "Prince of Cranks," "Apostle of Discontent," and "Tribune of the People," Donnelly achieved a colorful and multi-faceted career as a reformer and rebel. He participated actively in politics for over forty years and further pursued his interests and assaults on orthodoxy as a lawyer, farmer, lecturer, lobbyist, political journalist, scientific popularizer, Baconian, and social novelist. His greatest political success was his first. Moving to Minnesota from his native Philadelphia in 1856, he joined the newly emergent Republican party

and was elected Lieutenant Governor by the age of twenty-eight. He served two terms in the state house, followed by three more in Congress as a Radical Republican; but in 1868 he was squeezed out by the Minnesota Republican organization and defeated in his try for a fourth term. Donnelly won election to the state legislature on a number of occasions in following years. However, he never regained his Congressional seat, let alone the Senate post he coveted. Instead, he assumed a leading role in the many third-party movements that swept the Midwest in the late nineteenth century—Grangers, Greenbackers, Farmers' Alliance, Populists—and gradually emerged as one of the region's most important agrarian spokesmen. In 1900, despite failing health, he ran for Vice-President on the Mid-Road People's party ticket, those Populists who refused merger with the Democrats. Thus a rebel to the end, he died on January 1, 1901.⁹²

Donnelly voiced the protest of an agrarian America suddenly eclipsed by the industrial transformation of the late nineteenth century. Instead of easing the plight of farmers and laborers, the rapid proliferation of technology appeared to him and other Populists only to increase their burden. By the early 1890s they joined in demanding radical changes in the capitalist structure and popular control of technology, particularly through nationalization of the railroads.⁹³ The conviction that America stood once again in the balance between aristocratic subversion and a new assertion of republican principles seized them with apocalyptic intensity. Donnelly vividly expressed this sense of social crisis in his famous preamble to the Populist platform of 1892. "We stand," he declared, "in the midst of a nation brought to the verge of moral, political and material ruin. . . . The fruits of the toil of millions are boldly stolen to build up colossal fortunes, unprecedented in the history of the world, while their possessors despise the republic and endanger liberty. . . . A vast conspiracy against mankind has been organized on two continents and is taking possession of the world. If not met and overthrown at once it forbodes terrible social convulsions, the destruction of civilization, or the establishment of an absolute despotism." Echoing the language of the Declaration of Independence and the Preamble to the Constitution as radical workers had

done ever since the 1830s, Donnelly called for a new revolution in American politics that would restore the republic to "the 'plain people' with whom it originated."⁹⁴

Although Donnelly was a master of political oratory, even such fervid and grandiloquent rhetoric did not do justice to the urgency of the crisis he foresaw and the vividness of his imagination. To dramatize fully the alternatives facing America, he did more than attend reform conventions; he turned to the genre of utopian fiction which Bellamy's *Looking Backward* had popularized. Here, freed from the exigencies of the political platform, he revealed most starkly his views on the nightmarish and utopian alternatives of American political and technological development. Donnelly wrote *Caesar's Column* quickly in 1889 in the wake of another defeat in his quest for the United States Senate. At least five different publishers rejected it for its "revolutionary not to say inflammatory character," and one of them pleaded with Donnelly that if he insisted on publishing the book at least to price it above a dollar lest it fall into "the wrong hands." Donnelly did not heed this advice, however. *Caesar's Column* finally appeared in 1890 under a pseudonym in both hardcover and paperback editions. The novel attracted over 60,000 American buyers during its first year of sales; by 1899 their numbers had risen, according to Donnelly's estimate, to 230,000, plus another 450,000 in Europe. The national constituency that Donnelly was continually denied as an officeholder, he attained as a social novelist.⁹⁵

Donnelly's novel offers a double vision of utopia and catastrophe in ways that link it to both Bellamy's *Looking Backward* and Mark Twain's *A Connecticut Yankee*. Though in his conclusion Donnelly presented his own version of utopia, the negative vision, the dystopia, dominates the book. In many respects he played off the expectations of Bellamy's readers, allowing them to reach his paradise only after a purgative journey into hell.⁹⁶ The book depicts the adventures of Gabriel Weltstein, a shepherd of Swiss extraction from Uganda, visiting New York in 1988. At first he is as dazzled by the city as Julian West is by the new Boston. Glass-covered arcades, elegant shops, elevated and underground electric railroads, and ingenious airships all compel his admiration.

The dining room of his sumptuous hotel surpasses even the luxurious facilities West encountered. In a triumph of mechanical service, guests summon exotic foods to their table at the press of a button and eat in silence, entertained by a global telecommunications system.

However, as Donnelly releases the springs of his plot, Weltstein quickly discovers that this society is the opposite of utopia. Even in his hotel he senses that material power has flourished at the expense of individual worth and human charity. Soon after, he finds himself innocently embroiled in an international revolutionary movement called the Brotherhood of Destruction. From one of the revolutionary leaders, Maximilian Petion, he learns that America remains a republic in name only. Despite the trappings of representation, it is in fact ruled by a tyrannous merchant, Prince Cabano, and the Council of the Oligarchy. The palace from which the prince exerts his malevolent authority is the embodiment of luxury which Americans ever since the Revolution had been taught to fear. Filled with rare books, precious statuary, kingly paintings, and other works of art, it represents "the very profligacy and abandon of unbounded wealth."⁹⁷ As the crowning mark of his debauchery, the prince keeps a bevy of mistresses. His latest acquisition to his harem, the innocent and uncomprehending Estella Washington, a direct descendant of "the father of our country," symbolizes the plight of republican virtue menaced by the ravishment of tyranny.

Both this private luxury and the public splendor which the city affords the rich depend upon the ruthless oppression of the majority. Petion takes Weltstein on a tour of the houses and factories of the working class, in effect a separate city called the "Under-World." There he discovers a stunted and enslaved proletariat, reduced to a deathlike submission, so that they have almost ceased to be human and have become "automata." Donnelly's depiction of their brutalized and numbed existence anticipates later descriptions of the Nazi concentration camps. Even their end is chillingly prophetic: they are swept off in scores as soon as dead, carted away in streetcars, and thrown into white-hot furnaces, finally to vanish through a high chimney. "That towering structure was the sole memorial monument of millions of them. Their graveyard was the air."⁹⁸

The barbarism West encountered in *Looking Backward* was that of his own nineteenth century before the principles of Nationalism have triumphed. Weltstein, by contrast, confronts a society that has continued to deteriorate past all possibility of social reconstruction. Cataclysm can no longer be averted. "Two hundred years ago," Petion tells Weltstein, "a little wise statesmanship might have averted the evils from which the world now suffers. One hundred years ago a gigantic effort, of all the good men of the world, might have saved society. Now the fire pours through every door, and window and crevice; the roof crackles; the walls totter; the heat of hell rages within the edifice; it is doomed; there is no power on earth that can save it." Though farmers and laborers can still muster the strength to revolt against their rulers, they are too degraded to create a new civilization. The Christian social message that knits the citizens of Bellamy's utopia in a common bond has here all but ceased to exist. The rich have embraced a religion of cruel oppression and egotistical hedonism, and the poor have lost all hope in the possibility of redemption. "We have ceased to be men—we are machines," a labor spokesman exclaims to Weltstein. "Did God die for a machine? Certainly not."⁹⁹

Politically bankrupt, socially polarized, morally decayed, the nation rushes toward catastrophe. Prince Cabano and his councilors coolly plot to crush the festering rebellion and retrench their power by killing ten million people. The Brotherhood of Destruction, meanwhile, moves to foil the prince's plot and massacre the aristocracy. When the revolutionaries manage to bribe the air force and thus gain control of their dynamite and poison bombs, they have the crucial advantage. As in *A Connecticut Yankee*, then, the culmination of this society's technological development is to facilitate its own destruction. By having the idealistic Weltstein accompany the revolutionist Petion through the final stages to the revolution itself, Donnelly allows the reader to seek vicarious revenge over the corrupt and despotic plutocracy even while standing morally opposed and aghast. The division in Mark Twain's Hank Morgan between humanitarian ideals and revolutionary bloodthirstiness is thus in Donnelly's story objectified (if diluted) in two separate characters. Weltstein watches in fascinated horror as the elite air corps, called the "Demons," use their advanced technology

to destroy the prince's foot soldiers. As the oppressors at last stand defenseless before the mob, the revolution turns to anarchic looting and killing. Like the Angel Gabriel, for whom he is named, Weltstein presents the slaughter of the rich as a last judgment for their greed and complacency:

You were blind, you were callous, you were indifferent to the sorrows of your kind. The cry of the poor did not touch you, and every pitiful appeal wrung from human souls, every groan and sob and shriek of men and women, and the little starving children—starving in body and starving in brain—rose up and gathered like a great cloud around the throne of God; and now, at last, in the fullness of time, it has burst and comes down upon your wretched heads, a storm of thunderbolts and blood.¹⁰⁰

The decline of the American republic from agrarian virtue to plutocratic imperialism to mob barbarism is encapsulated in the life-history of the leader of the revolutionary Brotherhood, Caesar Lomellini. His very name, indeed, recalls the earlier decline and fall of Rome. Once he had been "a quiet, peaceful, industrious" farmer living happily in the newly settled state of Jefferson. However, he fell in debt to bankers, who enslaved him and his family, drove them from their home, and seduced and abandoned his daughter. The treachery of the plutocrats transforms Caesar from a peaceful farmer into a self-appointed avenger of the poor and enslaved. He launches a rebellion against the economic oppressors that culminates in the international revolution of the Brotherhood of Destruction. As Prince Cabano personifies the spirit of plutocratic tyranny, so Caesar embodies the beastlike violence of the unleashed mob.¹⁰¹ Together they represent the two opposing threats to republican society, aristocratic tyranny and popular demagoguery, which Americans ever since the Revolution had been taught to fear. In the midst of the slaughter of the rich, Caesar boasts that now *he* is king and drunkenly urges on the killing. Finally, he is confronted with the same problem that Hank Morgan faces in *A Connecticut Yankee*, of how to dispose of the corpses before his own forces perish through infection. Despite his drunkenness, he displays an inventiveness the Yankee would admire. Caesar orders his men to

erect a cement column of the dead, laced with dynamite to discourage tampering. Weltstein pronounces the column a monument to "the death and burial of modern civilization."¹⁰² As the anarchic passions of the mob sweep out of control, Caesar ultimately falls victim of the revolution he has helped to create. He last appears in the novel with his head on a stake. The collapse of American civilization is complete, and the golden age of the early republic will rise again, if at all, only in a millennium.

However, Donnelly does not conclude on this cataclysmic note. Though the United States and Europe have succumbed to barbarism, Weltstein and his friends manage to escape in a last airship and flee back to Uganda. America no longer offers the pastoral setting requisite for a healthy republic, and Africa emerges as the last "new world." Nevertheless, this retreat does not signify a final rejection of modern technology and all its works in favor of the shepherd's pipes. Before Weltstein departs, he assembles a kind of Noah's ark of the most important elements of Western civilization: "literature, science, art, encyclopedias, histories, philosophies, in fact all the treasures of the world's genius—together with type, printing presses, telescopes, phonographs, photographic instruments, electrical apparatus, ecesions, phemasticons..."—Donnelly adds the names of fictitious inventions to encompass twentieth-century developments. Once they have returned safely to their "garden in the mountains," Weltstein quickly sets about instituting a new republican order to protect his homeland from the destructive fate of republics abroad. His first step is to barricade the entrances to his country from the outside world and to manufacture rifles and cannon to repel invaders. Then, Weltstein and a few other "superior intellects" devise a constitution which the people accept. It is in some ways an elitist document, dividing the governing body into three branches by profession: workmen and farmers; merchants, manufacturers, and employees; and writers, artists, scientists, and philosophers. In this republican utopia technology plays an important but carefully circumscribed role. Weltstein's experience has made him deeply suspicious of uncontrolled development of manufactures and industry. Instead, he hopes to divert attention from the development of isolated inventions to more humanly sig-

nificant social problems. "If the same intelligence which has been bestowed on perfecting the steam-engine had been directed to a consideration of the correlations of man to man, and pursuit to pursuit, supply and demand would have precisely matched each other, and there need have been no pauperism in the world."¹⁰³ Toward this end the state itself assumes control over technology. It owns all railroads, mines, and utilities. Though it does not actively encourage new labor-saving inventions, it buys rights to useful ones for the benefit of the people. In all cases, its principle is to subordinate technology to the welfare of the republic.

Thus, Donnelly and the Populist thought he reflects did not oppose technology as such. On the contrary, he affirmed that freed from the imperatives of a capitalist and competitive order and guided by an enlightened socialism, modern machinery might play a significant role in the liberation and fulfillment of mankind. Nevertheless, a certain sense of uneasiness pervades Donnelly's inclusion of technology within his utopia, a concern to keep it within carefully prescribed limits. In this respect his pastoral society contrasts markedly with Bellamy's technocratic order. Whereas Bellamy seized upon the capacity of modern technology to create a society of unprecedented abundance, Donnelly clung to an older conception of a harmonious and egalitarian society arising out of rusticity and an economy of sufficiency rather than abundance. These were the essential preconditions of a pastoral republic as he understood it and the reason why technology was necessarily subordinate. His vision of a "garden in the mountains," free from external contamination and composed of village workmen and yeoman farmers powerfully recalls the pastoral ideal of *Notes on Virginia*. Yet writing a century after Jefferson, Donnelly could not heedlessly indulge in the Virginian's enthusiasm for labor-saving devices without any sense of their potential threat to his pastoral ideal. Instead, Donnelly attempted to achieve the social order which Jefferson thought would naturally develop through strict governmental regulation of technological development, industrialization, and urbanization. While Jefferson relied upon the ecology of liberty to support his republican garden, Donnelly found it necessary to build a hothouse and to place within it a *memento mori*, as a continuing

reminder of the catastrophic fate of uncontrolled technological republics.

The crisis of American republicanism in an urban-industrial age and the possibility of utopian reconciliation, considered in such feverish and apocalyptic tones by Ignatius Donnelly, were also explored in the early 1890s by a very different kind of social novelist, William Dean Howells. The two writers make a striking juxtaposition. While Donnelly characteristically assumed a grandiloquent, even quixotic, attitude, Howells impressed his contemporaries with his dignified, reasonable, unassuming appearance. While Donnelly functioned both in politics and in literature as a rebel on the periphery, Howells by the early 1890s stood squarely at the center of the world of literary affairs, "the dean," in the popular tribute punning on his name, "of American letters." Despite their contrasting personalities and social positions, however, Howells and Donnelly converged in their concern that an industrial plutocracy was fast replacing democracy in America and frustrating the expression of republican values. In turning to utopian fiction, both writers attempted to break the chain between republican ideology and the imperatives of industrial capitalism that had been continually forged and strengthened since the early nineteenth century and to recover a vision of agrarian and egalitarian America that the nation had lost.

As recent scholarship has amply shown, Howells was a far more complex and serious writer than the figure H. L. Mencken contemptuously dismissed as "a placid conformist" who tepidly produced "a long row of uninspired and hollow books, with no more ideas in them than so many volumes of the *Ladies' Home Journal*."¹⁰⁴ Though he rose with dizzying swiftness from his Ohio boyhood to the summit of the American literary establishment, Howells always retained an essential ambivalence toward this literary world and his own critical and financial success in it.¹⁰⁵ His agreeable and prosperous bearing masked a troubled sensibility, increasingly given to doubting both his own achievement and the course of American society as a whole. As he confided to Henry James in 1888, "I'm not in a very good humor with 'America' myself. . . . I

should hardly like to trust pen and ink with all the audacity of my social ideas; but after fifty years of optimistic content with 'civilization' and its ability to come out all right in the end, I now abhor it, and feel that it is coming out all wrong in the end, unless it bases itself anew on a real equality. Meantime, I wear a fur-lined overcoat, and live in all the luxury my money can buy."¹⁰⁶ This passage, with its barely controlled frustration and self-lacerating irony, explodes the stereotypical image of Howells as an exemplar of gentility and complacency. Moreover, he was not content to fume in private; he *did* trust his pen with his social ideas both in his novels in the late 1880s and 1890s and in regular columns for *Harper's Monthly* and other popular magazines.¹⁰⁷ More than any other American novelist of comparable stature at the end of the nineteenth century, he used his voice and influence in the cause of social reform, from publicly protesting the impending execution of the anarchists convicted of throwing a bomb in Chicago's Haymarket Square to commending in magazine editorials a wide variety of important social critics ranging from Tolstoy to Veblen. In addition, Howells also began to feel the lure of utopia, the need of a social model with which to exert sufficient leverage to lift American society back to its republican ideals. He expressed interest in a number of the cooperative experiments of the day, including W. D. P. Bliss's Christian Socialist mission in Boston and Edward Bellamy's Nationalist party. Nevertheless, he shrunk from discipleship in any organized crusade, keenly aware of his ambiguous position as a prosperous citizen attempting to bridge class divisions by preaching equality and understanding. Fascinated as he was by the example of Tolstoy, who renounced his aristocratic privileges for the life of a peasant, Howells found it impossible to emulate. As he ruefully remarked of himself, Mark Twain, and their wives, "We are theoretical socialists, and practical aristocrats."¹⁰⁸ This gulf between practice and conviction, Howells came to realize, resulted not simply from personal hypocrisy but from the false positions into which all Americans were forced by the existing social and economic order. The difficulty of escaping the horns of this social dilemma and of successfully acting upon reformist convictions formed the theme of some of his most important novels of this

period, including *Annie Kilburn* (1888) and *A Hazard of New Fortunes* (1890). In an effort to clarify this theme and to dramatize the gulf in American society as a whole between social ideals and social practice, Howells, like so many other writers of this period, turned to utopian fiction in the early 1890s and wrote *A Traveler from Altruria*.

In tone and setting, though not in theme, *A Traveler from Altruria* differs significantly from *Looking Backward*, *A Connecticut Yankee*, and *Caesar's Column*. Instead of placing his characters in strange surroundings in the past or the future, Howells locates them squarely in the present in the comfortably familiar setting of a New Hampshire summer hotel. There they are visited by a traveler from the distant country of Altruria, Mr. Homos (whose name, Greek for "same," suggests equality and homogeneity). The Altrurian presents himself as a curious though uninitiated student of American civilization, familiar with the Declaration of Independence and other expressions of American republican ideals and eager to study their workings firsthand. His host at the hotel is a writer of genteel romances, Mr. Twelvemough. Twelvemough quickly emerges as Howells's portrait of the artist as a moral coward. He characteristically views life in terms of literary effects rather than human involvement and attempts to mask with jokes and quips his basic timidity and insecurity. Twelvemough introduces Mr. Homos into the circle of business and professional men staying at the hotel, who, like himself, are defined in terms of their class and occupations. In conversations with one another they begin by complacently repeating the democratic pieties of equal opportunity and political equality. However, under Mr. Homos's persistent probing, they gradually acknowledge that despite having "a republican form of government, and manhood-suffrage, and so on," America is permeated with economic and social inequality. They jealously protect their economic self-interest by suppressing their generous emotions as inappropriate to the world of affairs and exercising brute power against the working class in order to smash the unions and thwart their demands. Their operative principle in business has nothing to do with equality or justice, certainly nothing to do with charity; it is, "The good of

Number One first, last and all the time."¹⁰⁹ Behind the façade of a democratic society, their conversations reveal, exists a ruthless scramble for economic and social dominance.

As Howells presents it, these men are engaged in a race without winners, only losers. Despite their social privileges and affluence, they are almost as trapped and driven in their lives and work as the poor. "You can have no conception of how hard our business men and our professional men work," boasts Mr. Twelvemough, thinking all their frenetic activity admirable. "There are frightful wrecks of men strewn all along the course of our prosperity, wrecks of mind and body. Our insane asylums are full of madmen who have broken under the tremendous strain, and every country in Europe abounds in our dyspeptics." While these men are exhausted by the pressures of work, their wives are similarly driven to nervous collapse by the dictates of conspicuous leisure and consumption. Mrs. Makely, the voice of the leisure class in the novel, catalogues the endless round of a society lady's duties: "making herself agreeable and her house attractive, . . . going to lunches, and teas, and dinners, and concerts, and theatres, and art exhibitions, and charity meetings, and receptions, and . . . writing a thousand and one notes about them, and accepting and declining, and giving lunches and dinners, and making calls and receiving them." She finally shrieks to the Altrurian, "It's the most hideous slavery! You don't have a moment to yourself; your life isn't your own!"¹¹⁰

In such moments members of the upper class profess to envy the simple life of the workers, and this sentimental solicitude is the nearest the two classes come to true communication. For their part, the working class is hedged in by economic tyranny on every side. They farm the poor land until it slides to the total control of the banks, work in the mills to be laid off during depressions, or join the desperate migration to the cities and the West. Without condoning their circumstances, Howells takes the hopeful view that the poor, at least, far more than the wealthy, approach a condition of true equality and brotherhood, if only for the simple reason that "poor people have always had to live [for one another], or they could not have lived at all."¹¹¹

Throughout these conversations, Mr. Homos has given Ameri-

cans only glimpses of Altrurian society, saying he wishes to learn rather than teach. Finally, however, he agrees to give a benefit lecture on Altruria to both the prosperous guests of the hotel and the farmers and factory workers of the surrounding area. His talk quickly emerges as a parable of America's historic development and a prophetic vision of the way to utopia. Once (like America) Altruria had overthrown a monarch and instituted a republic. Anticipating a new era of freedom and brotherhood, citizens discovered new energies of mind and hand. New inventions sprang forth and commerce flourished, promising prosperity and the public good. Yet the era of industrialization proved to be a new tyranny:

It was long before we came to realize that in the depths of our steamships were those who fed the fires with their lives, and that our mines from which we dug our wealth were the graves of those who had died to the free light and air, without finding the rest of death. We did not see that the machines for saving labor were monsters that devoured women and children, and wasted men at the bidding of the power which no man must touch.¹¹²

The Accumulation, as this power was called, grew and consolidated its strength until it owned almost the entire means of production. But as in Bellamy's *Looking Backward*, in this monolithic condition it proved most vulnerable to nationalization when citizens finally realized its true monstrousness. In a peaceful and legal revolution, the Accumulation was transformed into the commonwealth of Altruria.

Altruria represents Howells's conception of the true fulfillment of republicanism, the flowering of Christian community, and the integration of the machine. In a number of respects it resembles Bellamy's utopia: citizens live for one another in conditions of perfect equality; there is no competition for goods, no money, no politics, no war, no crime. Yet one of Howells's principal objections to the utopia of *Looking Backward* was that it conceded too much to materialist taste. "I should have preferred," he later wrote of Bellamy's book, "if I had been chooser, to have the millennium much simpler, much more independent of modern inventions, modern conveniences, modern facilities. It seemed to me that in an

ideal condition (the only condition finally worth having) we should get along without most of these things, which are but sorry patches on the rags of our outworn civilization, or only toys to amuse our greed and vacancy."¹¹³ Bellamy wished to free technology from the inefficiencies of capitalism. Howells, by contrast, wished to break free of the dominance of technocratic values altogether—of expansion, quantity production, specialization, efficiency, regimentation, centralization—and to reintegrate the machine into an organic way of life. Or as Mr. Homos expresses it:

Our life is so simple and our needs are so few that the handwork of the primitive toilers could easily supply our wants; but machinery works so much more thoroughly and beautifully, that we have in great measure retained it. Only, the machines that were once the workmen's enemies and masters are now their friends and servants; and if any man chooses to work alone with his own hands, the state will buy what he makes at the same price that it sells the wares made collectively. This secures every right of individuality.¹¹⁴

Like Ruskin in *Unto This Last*, Howells in effect asserted, "*There is no Wealth but Life.*" "Labor-saving" inventions formerly served not actually to save labor but to increase production, profits, and consumption, resulting in extremes of wealth and poverty and a materialistic society in which people had luxuries but not necessities. In Altruria, however, a balanced economy ensures sufficiency of consumption for all, and the superfluous products of an endlessly expanding economy are forbidden. Since men no longer compete with one another economically, Mr. Homos repeatedly emphasizes, "*there is no hurry.*" Altrurians work only three hours a day. Whatever efficiency of production may be lost is compensated by a greater creative life. Freed from artificial pressures, men and women rediscover "the pleasure of doing a thing beautifully." Art and industry at last are reconciled; but this marriage is achieved not by celebrating brute power, material conquest, and wealth in the spirit of the technological sublime, or by elevating the inventor at the artist's expense. People are not distinguished by their occupations in Altruria. All work daily in factory or field, and in the less intense pace of work, all may be artists: "In all Altruria there was

not a furrow driven or a swarth mown, not a hammer struck on house or on ship, not a stitch sewn or a stone laid, not a line written or a sheet printed, not a temple raised or an engine built, but it was done with an eye to beauty as well as to use."¹¹⁵

The revitalized character of work in Altruria is part of a general assimilation of modern technology within a new pastoralism. Instead of the complexity and intense centralization of *Looking Backward*, Howells celebrated a simplified, decentralized society in which man is integrated with his physical and social environment. Altrurians have abandoned their old cities altogether, preserving them only as a historic and admonitory lesson of the chaos and corruption of a former age. People now live either in regional capitals or villages, and farming is again as in Jefferson's Virginia honored as the occupation closest to God and most conducive to that love of home, family, and community which stands at the center of Altrurian values. Fewer desires or needs impel men to travel from one place to another; and although swift electric transportation operates in the capitals and along major routes, most of the old railroads that shackled the landscape have been deserted and recovered by nature. Altruria's small communities encourage free and spontaneous social life, including festivals, picnics, plays, and sports; yet each individual may have as much privacy as he desires. In short, individual character, variety, happiness, and disappointment still exist, but in no case are they determined by economic conditions. In his vision of a humane technological republic, freed from the dominance of capitalistic values, Howells looks both back to Emerson and a host of nineteenth-century critics and forward to twentieth-century formulations of an organic society based upon modern technology, of which Lewis Mumford is perhaps the most famous proponent.¹¹⁶

However, Howells intentionally presented only a sketch of Altruria, not a blueprint. His parable offered a way of sidestepping certain issues while raising others. Like most utopian writers, he only vaguely described how the Altrurian society arose out of the grim regime of the Accumulation. Similarly, his description of life in Altruria has a generalized, spectatorial air. He gestures to factories and shops as "temples" of art and industry but does not actually show us a worker before a machine. Howells concentrated

upon the ethical dimension of his utopia rather than the functional. When he attempted to flesh out his depiction of Altrurian society in a sequel, *Through the Eye of the Needle* (1907), he lost the power of the Altrurian parable without appreciably adding to his utopia's solidity. However, Howells anticipated a mixture of hope and incredulity from his readers. They stand in the position of the hotel guests at the end of *A Traveler from Altruria* as Mr. Homos leaves to visit New England's farms and factory towns, wondering if he is not an impostor, if Altruria is not too good to be true. "I feel as if he were no more definite or tangible than a bad conscience," Mr. Twelvemough remarks at one point; and that, of course, is precisely the ambition Howells had for Altruria as a whole: to act as the nagging conscience of America.¹¹⁷ He insisted that as a physical goal it would always remain elusive. Howells took pains to qualify his utopia because he was well aware of the fatal arrogance characteristic of most utopian thought. He wished Altruria to serve not as a precise pattern for reform but as an animating possibility and informing ideal.

Looking Backward, *A Connecticut Yankee*, *Caesar's Column*, and *A Traveler from Altruria* mark the culmination of over a century of American attempts to integrate technology and republican values. As Bellamy, Mark Twain, Donnelly, and Howells presented their visions of technological utopia and dystopia, they encapsulated many of the issues Americans had addressed ever since the Revolutionary era: the possibility of forging an alliance between technology and republican ideology that would achieve the vision of the Revolution; the problem of establishing factories that would serve as republican communities; the impact of technology upon imaginative freedom; and the desire to fuse art and machine technology as the basis of a republican aesthetic. No more than previous generations did these writers achieve a final synthesis in the dialectic between technology and republicanism. Howells's remark to Charles Eliot Norton after completing his sequel to *A Traveler from Altruria* applies to them all: "I have given my own dream of Utopia, which I fancy your not liking, unless for its confessions of imperfections even in Utopia. All other dreamers of such dreams have had nothing but pleasure in them; I have had

touches of nightmare."¹¹⁸ In fact, the way in which nightmare intrudes upon the dreams of a utopian order forms a recurrent theme among the utopian novelists of this period. Rightly seen, Bellamy suggested through the experience of his character Julian West, the existing conditions of nineteenth-century American society were nightmare enough; but critics found still more disturbing the technocratic authority of his utopia. In his book *Caesar's Column*, Donnelly was consumed with depicting the cataclysmic destruction of America and the industrialized world as a whole if his countrymen allowed the fleeting opportunity to control the nation's unbridled industrial development and economic polarization finally to slip from their grasp. Most disturbing of all is the way in which dream turns horribly into nightmare in *A Connecticut Yankee*. The idea of a comic excursion of a nineteenth-century American into Arthurian England first came to Mark Twain quite literally in a dream.¹¹⁹ But as Hank Morgan assumes his role of emissary of technological republicanism to medieval monarchy, the narrative exposes the brutality, dehumanization, oppression, and self-deception latent in his culture. The centuries-long nightmare in which Morgan dies haunted by guilt and the need for forgiveness signaled in a way readers were unable to acknowledge the confusion of technological and republican values in nineteenth-century America as a whole.

Despite the nightmarish possibilities of American technological civilization which concerned all these writers and which Mark Twain expressed most deeply, the dream of a humane technological order persisted. The utopias of Bellamy, Donnelly, and Howells, for all their important differences, reflect a common effort: to revitalize the egalitarian strain of American republicanism as an ideological basis for a new social order. They contended that the economics and ethics of industrial capitalism, while mutually reinforcing, were neither desirable nor inevitable. To locate an alternative tradition and source of value, they insisted, one need not turn to the disruptive radicalism preached in Europe; the values of the Revolutionary generation and their heirs, of Jefferson and Emerson, while obscured and thwarted in the uncontrolled expansion of urban-industrial society, still could offer Americans inspiration and guidance as they approached a new millennium. The Revolutionary

vision of a new era of human freedom, political and moral purity, social responsibility and harmony, these novelists affirmed, far from being a dead dream, remained a vital possibility quite within their grasp. The spirit of commercialism, competition, and individualism which stifled cooperative effort and altruistic impulses arose not out of brute "human nature," but from an inequitable and exploitative economic system. Bellamy, Donnelly, and Howells all strenuously advocated extending the principle of democratic control from government to industry as the essential step in achieving a truly republican order. If ever competition for material goods was necessary, it was no longer so in an age of modern technology. Government rather than benefit a few special interests, and peace, abundance, for all. Technology itself had outgrown the competitive capitalist ethic which clung to it and demanded a new cooperative republican socialism. Only allow technology to serve the people as a whole rather than benefit a few special interests and peace, abundance, leisure, equality, and virtue could be assured. Thus while the key instrument of Bellamy, Donnelly, and Howells for attaining utopia was government control of technology, the heart of their concern was moral. They demanded for each citizen an equitable share of society's goods not as the ultimate fruit but as the essential precondition for utopia. Once established on a common ground with a genuine community of interests, former plutocrats and proletarians would at last be reconciled, and the generous, creative, and noble aspects of humanity would flower as never before. While Donnelly, the only politician among these writers, allowed his profession a limited role even in utopia, Bellamy and Howells planned their republics to be so united as to banish politics altogether, as a relic of the vulgarity and corruption of the late nineteenth century.

Yet the very purity for which these writers ached, the way in which they wished, in one great leap, to transcend the divisive economic, social, and political conditions of the late nineteenth century, was a measure of the obstacles before them. For most Americans of all classes the vital sense of connection between republican ideology and American society was no longer clear in the polarized industrial order of the late nineteenth century. Earlier efforts to unite the two had lost their guiding force. Lowell's directors had long ago abandoned their experiment of a model

republican community. Emerson was dead, his radicalism tamed, his doctrine of self-reliance perverted to the dogma of laissez-faire. Rather than pursuing his critical evaluation of technology's impact upon republican civilization, middle- and upper-class Americans were increasingly content to view the course of American technological development as a grand, progressive pageant, a national work of art. Like the hotel guests in Howells's *Traveler from Altruria*, they continued to pay tribute to republican ideals while supporting a social system that effectively denied their promise. As they sought to mask the contradiction between belief and action, they reduced republicanism's egalitarian thrust to complacent homilies of self-help, the notion of the public good to facile assertions of management and labor's "community of interests." The result was to convert republicanism from an animating ideology to a static buttress of the conservative industrial order.

The utopian impulse, then, was an expression of republican ideology *in extremis*, a desperate attempt to demonstrate the continuing relevance and transforming power of America's republican tradition for the crises of industrial society. Utopian novelists intended their books to serve as a diagnosis and prescription for the gap between republican ideology and industrial society. Ultimately, however, they stood as symptoms of this very split. As the republican values for which these writers stood were attenuated and thwarted in existing society, they were compelled to invent in fiction a social order in which such ideals could flourish. The utopian novel provided an arena to give substance to their ideas, to demonstrate their implications for human experience, which they were denied in the larger society. In part, too, novelistic embodiment of their visions provided an emotional compensation for their practical defeat. Bellamy identified a tendency toward wishful dreaming not only in his own character but in the entire quest for republicanism in the late nineteenth century when he wrote, "Having fully calculated upon and expected a thing, I am so justly disappointed by its failure to come to pass that the balance of my nature goes over to the potential world, and I go to Might-have-been-land."¹²⁰ In the authorial freedom of "Might-have-been-land," as Howells had recognized, writers tended to fit society to the Procrustean bed of their theories—just as influential spokesmen for

the industrial order had stretched and trimmed republicanism to *their* own purposes. As a consequence of this division between dreamers of "the potential world" and defenders of the existing social order, both sides developed reductive visions, and social debate was impoverished. The creative tension between republican ideology and industrial society threatened to lapse into simple contradiction.

Thus, utopian writers could express their sense of the unrealized possibilities of technology and republicanism, but they lacked any real leverage to implement their beliefs. While they attracted large audiences, as long as the cleavage between conviction and action remained, their ideas might gain assent without exerting meaningful influence. Their views could be accepted merely as expressions of benign intentions and their books consumed as an ethical tonic of republican spirits, sweetened with Christian molasses and laced with a reproving sulphur. Between the novelists' cosmic vision and the instrumentalities they proposed to attain it still yawned an immense gulf, for all their insistence in the feasibility of the passage. Though their message would continue to exert an important influence among progressive reformers in the decades to come, never again would the concept of republicanism possess the centrality and coherence that made it, from the Revolution through the nineteenth century, such an important shaping ideology in Americans' response to technology. Instead, new political strategies and categories of value would have to be formulated to address the enduring and elusive problem of civilizing the machine.

Notes

1. *The Emergence of Republican Technology*

1. On ideology, see Clifford Geertz, "Ideology as a Cultural System," in *Ideology and Discontent*, ed. David E. Apter (Glencoe, Ill., 1964), pp. 47-76. On republicanism in Revolutionary America, see especially: Bernard Bailyn, *The Ideological Origins of the American Revolution* (Cambridge, Mass., 1967); Gordon S. Wood, *The Creation of the American Republic, 1776-1787* (Chapel Hill, 1969); and Robert E. Shalhope, "Toward a Republican Synthesis: The Emergence of an Understanding of Republicanism in American Historiography," *William and Mary Quarterly*, 3d ser., 29 (January 1972), 49-80.
2. Bailyn, *Ideological Origins*, pp. 55-56; Wood, *Creation of the American Republic*, pp. 46-70.
3. Bailyn, *Ideological Origins*, pp. 94-143.
4. Bailyn, *Ideological Origins*, pp. 160-319. See also Howard Mumford Jones, *O Strange New World: American Culture: The Formative Years* (New York, 1964), pp. 327-50.
5. Wood, *Creation of the American Republic*, pp. 393-429. See also John R. Howe, Jr., "Republican Thought and the Political Violence of the 1790s," *American Quarterly*, 19 (Summer 1967), 147-65.
6. Richard Hofstadter, *America at 1750: A Social Portrait* (New York, 1971), pp. xi, 3-32, 131-79.
7. *De Officiis*, I, xii (Loeb trans.), quoted in A. Whitney Griswold, *Farming and Democracy* (New York, 1948), pp. 19-20. See also Paul H. Johnstone, "In Praise of Husbandry," *Agricultural History*, 11 (April 1937), 80-95; Bailyn, *Ideological Origins*, pp. 23-26.
8. J. Hector St. John de Crèvecoeur, *Letters from an American Farmer* (1782; rpt. London, 1908), pp. 78-79. On agrarian nationalism in eighteenth-century America, see three articles by Chester E. Eisinger: "The Freehold Concept in Eighteenth-Century American Letters," *William and Mary Quarterly*, 3d ser., 4 (January 1947), 42-59; "The Influence of Natural Rights and Physiocratic Doctrines on American Agrarian Thought During the Revolutionary Period," *Agricultural History*, 21 (January 1947), 13-23, and "Land and Loyalty: Literary Expressions of Agrarian Nationalism in

5. *Technology and Utopia*

1. Robert H. Wiebe, *The Search for Order, 1877-1920* (New York, 1967), p. xiii.
2. Herbert G. Gutman, "Work, Culture, and Society in Industrializing America, 1815-1919," *American Historical Review*, 78 (June 1973), 555.
3. Andrew Carnegie, *Triumphant Democracy* (New York, 1886), p. 1.
4. Matthew Josephson, *Edison* (New York, 1959), p. 174. See also Thomas S. Kuhn, "The Relations Between History and History of Science," *Daedalus*, 100 (Spring 1971), 277, 283-84; and Oscar Handlin, "Science and Technology in Popular Culture," *Daedalus*, 94 (Winter 1965), 156-70.
5. Edward W. Byrn, *The Progress of Invention in the Nineteenth Century* (New York, 1900), pp. 4-6, 466.
6. George S. Morison, *The New Epoch as Developed by the Manufacture of Power* (1903; rpt. New York, 1972), esp. pp. 80-82.
7. Indeed one writer, David Hilton Wheeler, maintained in *Our Industrial Utopia and Its Unhappy Citizens* (1895) that late nineteenth-century America was utopia; only lack of "character" and desire for "superfluities" blinded people from recognizing the fact. Kenneth M. Roemer, "American Utopian Literature (1888-1900): An Annotated Bibliography," *American Literary Realism*, 4 (Summer 1971), 243.
8. Henry George, *Progress and Poverty*, 25th anniv. ed. (Garden City, N.Y., 1912), p. 8.
9. Norton to John Simon, Fall 1879, *Letters of Charles Eliot Norton*, ed. Sara Norton and M. A. DeWolfe Howe (Boston, 1913), II, 92; *Diary and Letters of Josephine Preston Peabody*, ed. Christina Hopkinson Baker (Boston, 1925), p. 73; Henry Adams, "A Letter to American Teachers of History," in *The Degradation of the Democratic Dogma* (New York, 1919), p. 195. See also John F. Kasson, "Medievalism in America during the Second Half of the Nineteenth Century" (B.A. honors essay, Harvard University, 1966).
10. Alvin Toffler, *Future Shock* (New York, 1970), p. 12.
11. Jay Martin, *Harvests of Change: American Literature, 1865-1914* (Englewood Cliffs, N.J., 1967), p. 142.
12. *The Education of Henry Adams* (Boston, 1918), p. 5.
13. Henry James, *The American Scene*, Indiana University Press Paperback (Bloomington, Ind., 1968), pp. 91, 156-57.
14. Lewis Mumford, *Technics and Civilization* (New York, 1934), p. 14.
15. *The Writings of Henry David Thoreau*, Walden ed. (Boston, 1906), II, 135, 130-31.
16. See Robert E. Riegel, "Standard Time in the United States," *American Historical Review*, 33 (October 1927), 84-89.
17. George M. Beard, *American Nervousness: Its Causes and Consequences* (New York, 1881), pp. 98-138.
18. See Roemer, "American Utopian Literature (1888-1900)," pp.

- 227-54; and Allyn B. Forbes, "The Literary Quest for Utopia, 1880-1900," *Social Forces*, 6 (December 1957), 179-80.
19. Howells's book appeared in serialized installments in *Cosmopolitan Magazine* from November 1892 through October 1893.
20. In discussing the writing of *Looking Backward*, Edward Bellamy observed that he never doubted that he would write the work as fiction: "This was not merely because that was a treatment which would command greater attention than others. In adventuring in any new and difficult field of speculation I believe that the student often cannot do better than to use the literary form of fiction. Nothing outside of the exact sciences has to be so logical as the thread of a story, if it is to be acceptable." "How I Wrote 'Looking Backward,'" in *Edward Bellamy Speaks Again!* (Chicago, 1937), pp. 223-24.
21. Northrop Frye, "Varieties of Literary Utopias," in *The Stubborn Structure: Essays on Criticism and Society* (Ithaca, 1970), p. 109. On fiction and the sense of apocalypse, see Frank Kermode, *The Sense of an Ending: Studies in the Theory of Fiction* (New York, 1967), pp. 3-31.
22. The phrase "the imagination of disaster" is Henry James's; Walter B. Rideout applies it to Ignatius Donnelly in his Introduction to Donnelly's *Caesar's Column: A Story of the Twentieth Century*, John Harvard Library (Cambridge, Mass., 1960), p. xxxi. See also Susan Sontag's essay, "The Imagination of Disaster," on science fiction films since World War II, in *Against Interpretation and Other Essays* (New York, 1966), pp. 209-25.
23. Bellamy, "How I Wrote 'Looking Backward,'" pp. 227-28; Lewis Mumford, *The Myth of the Machine: The Pentagon of Power* (New York, 1970), p. 218; Sylvia E. Bowman, *The Year 2000: A Critical Biography of Edward Bellamy* (New York, 1958), p. 121. On Bellamy's influence on other utopian writers in the late nineteenth century, see W. Arthur Boggs, "Looking Backward at the Utopian Novel, 1888-1900," *New York Public Library Bulletin*, 64 (June 1960), 329-36.
24. On the Nationalistic movement, see John L. Thomas's Introduction to Bellamy, *Looking Backward, 2000-1887*, John Harvard Library (Cambridge, Mass., 1967), pp. 69-85; Arthur E. Morgan, *Edward Bellamy* (New York, 1944), pp. 245-98; and Bowman, *The Year 2000*, pp. 119-38.
25. Bellamy, "How I Wrote 'Looking Backward,'" p. 218.
26. [Edward Bellamy], "Overworked Children in Our Mills," *Springfield Daily Union*, June 5, 1873, p. 2.
27. "With the Eyes Shut" was first published in *Harper's Monthly* in October 1889; it was reprinted in Edward Bellamy, *The Blindman's World and Other Stories* (Boston, 1898), pp. 335-65.
28. Thomas A. Edison, "The Phonograph and Its Future," *North American Review*, 126 (May-June 1878), 527-36.
29. John L. Thomas notes this symbolism in his Introduction to *Looking Backward*, p. 52.
30. Bellamy, *Looking Backward*, p. 141; *The Education of Henry Adams*, pp. 209, 238.
31. Morgan, *Edward Bellamy*, pp. 44, 145.
32. Bellamy, *Looking Backward*, p. 171.

33. Bellamy, *Looking Backward*, pp. 253, 304.
34. See Frederick Winslow Taylor, *The Principles of Scientific Management* (New York, 1911).
35. Bellamy, *Looking Backward*, pp. 177, 218.
36. Bellamy, *Looking Backward*, pp. 230, 212.
37. Bellamy, *Looking Backward*, p. 221.
38. Bellamy, *Looking Backward*, p. 115. In later statements Bellamy emphasized that his Nationalistic program would check excessive urbanization and enhance village as well as city life. Edward Bellamy, "Looking Backward' Again," *North American Review*, 150 (March 1890), 359. One should also note that *Looking Backward* inspired the Englishman Ebenezer Howard in the development of the Garden City. See F. J. Osborn's Preface to Howard, *Garden Cities of To-morrow*, M.I.T. Press Paperback (Cambridge, Mass., 1965), pp. 20-21.
39. Paul and Percival Goodman, *Communitas: Means of Livelihood and Ways of Life*, Vintage Books (New York, 1960), p. 125. See also Bradford Peck, *The World a Department Store: A Story of Life Under a Coöperative System* (Lewiston, Me., 1900), a fictional utopia influenced by Bellamy and written by the head of a large department store. For Peck's attempt actually to realize his utopia, see Wallace Evan Davies, "A Collectivist Experiment Down East: Bradford Peck and the Coöperative Association of America," *New England Quarterly*, 20 (December 1947), 471-91.
40. Bellamy, *Looking Backward*, p. 157.
41. Cf. Muzak's use of Mood Stimulus Curves in Kenneth Allsop, "Music by Muzak," *Encounter*, 28 (February 1967), 58-61.
42. Lewis Mumford, "Utopia, the City, and the Machine," *Daedalus*, 94 (Spring 1965), 277. See also Mumford's comments on *Looking Backward* in *The Pentagon of Power*, pp. 215-19.
43. See for example Richard Michaelis, *Looking Further Forward* (Chicago, 1890); Francis A. Walker, "Mr. Bellamy and the New Nationalist Party," *Atlantic Monthly*, 65 (February 1890), 248-62; and William Morris, *News from Nowhere* (London, 1891). Against charges of excessive militarism, Bellamy denied that the industrial army meant oppressive discipline, though he continued to defend and glorify the military analogy. Bellamy, "'Looking Backward' Again," pp. 353-54, 357.
44. Bellamy to Howells, June 17, 1888, in Joseph Schiffman, "Mutual Indebtedness: Unpublished Letters of Edward Bellamy to William Dean Howells," *Harvard Library Bulletin*, 12 (1958), 370.
45. *Mark Twain-Howells Letters: The Correspondence of Samuel L. Clemens and William D. Howells, 1872-1910*, ed. Henry Nash Smith and William M. Gibson (Cambridge, Mass., 1960), II, 622n.
46. Sylvester Baxter, an enthusiastic supporter of Bellamy's Nationalism who accompanied him on his visit to Mark Twain's house, reviewed *A Connecticut Yankee* in the *Boston Sunday Herald* for December 15, 1889, and observed, "The record of [the Yankee's] adventures affords us another and very instructive sort of *Looking Backward*." Reprinted in Frederick Anderson, ed., *Mark Twain: The Critical Heritage* (New York, 1971), p. 151.

47. Dixon Wecter, *Sam Clemens of Hannibal* (Boston, 1952), p. 50.
48. Albert Bigelow Paine, *Mark Twain, A Biography* (New York, 1912), pp. 14, 725-28, 1056-58, 1098-99, 1150-51; George Hiram Brownell, "Mark Twain's Inventions," *The Twainian*, 3 (January 1944), 1-5.
49. Justin Kaplan, *Mr. Clemens and Mark Twain* (New York, 1966), p. 285; Bruce Bliven, Jr., *The Wonderful Writing Machine* (New York, 1954), pp. 58-62.
50. Mark Twain's involvement with the Paige typesetter is recounted most completely in Kaplan, *Mr. Clemens*, pp. 280-306. See also Paine, *Mark Twain*, pp. 903-14, 962-68.
51. Richard E. Huss, *The Development of Printers' Mechanical Typesetting Methods, 1822-1925* (Charlottesville, 1973), p. 78.
52. Mark Twain to Joe T. Goodman, June 22, 1890, in *Mark Twain's Letters*, ed. Albert Bigelow Paine (New York, 1917), II, 534.
53. Kaplan, *Mr. Clemens*, p. 284; Mark Twain to Howells, October 21, 1889, *Mark Twain-Howells Letters*, II, 615; Mark Twain to Joseph T. Goodman, October 7, 1889, *Mark Twain's Letters*, II, 516.
54. Mark Twain to Orion Clemens, January 5, 1889, *Mark Twain's Letters*, II, 506-508.
55. James M. Cox, *Mark Twain: The Fate of Humor* (Princeton, 1966), p. 209; Henry Nash Smith, *Mark Twain's Fable of Progress: Political and Economic Ideas in "A Connecticut Yankee"* (New Brunswick, N.J., 1964), pp. 59-60.
56. "Two Unused Prefaces to *A Connecticut Yankee*," Paine notebook 91, *Mark Twain Papers*, University of California, Berkeley, quoted in Roger B. Salomon, *Twain and the Image of History* (New Haven, 1961), p. 103.
57. Mark Twain, *A Connecticut Yankee in King Arthur's Court* (New York, 1889), p. 20.
58. Mark Twain, *A Connecticut Yankee*, pp. 95-96.
59. Mark Twain, *A Connecticut Yankee*, p. 85.
60. Jurgen Ruesch and Gregory Bateson, *Communication: The Social Matrix of Psychiatry* (New York, 1951), pp. 204n-205n.
61. A similar scene occurs in H. Rider Haggard's *King Solomon's Mines* (London, 1885), pp. 172-87, and may have suggested the idea to Mark Twain. Howard Baetzhold, who unaccountably overlooks this instance, cites as other possible sources Washington Irving's *Life of Columbus* (1819) and Emerson Bennett's popular novel, *The Prairie Flower* (1849). Baetzhold, *Mark Twain and John Bull: The British Connection* (Bloomington, Ind., 1970), pp. 346-47.
62. Mark Twain, *A Connecticut Yankee*, p. 212. See esp. John Ruskin's chapter, "The Nature of Gothic," in *The Stones of Venice*, II (London, 1853), 153-231. In "The New Dynasty," a paper Mark Twain delivered in 1886 while writing *A Connecticut Yankee*, he heralded the rise of industrially educated workers as sovereigns of a new age in history, with knowledge superior to kings and nobles of former times. The essay is reprinted in Paul J. Carter, Jr., "Mark Twain and the American Labor Movement," *New England Quarterly*, 30 (September 1957), 383-88.
63. On this point and the problems it raises see Harry B. Henderson

III, *Versions of the Past: The Historical Imagination in American Fiction* (New York, 1974), pp. 175-97.

64. Mark Twain, *A Connecticut Yankee*, pp. 120, 157, 160, 242.
 65. Mark Twain, *A Connecticut Yankee*, pp. 97, 102, 395.
 66. Mark Twain, *A Connecticut Yankee*, pp. 71, 95, 103. See Chadwick Hansen, "The Once and Future Boss: Mark Twain's Yankee," *Nineteenth-Century Fiction*, 28 (June 1973), 62-73.
 67. Mark Twain, *A Connecticut Yankee*, p. 119.
 68. Mark Twain, *A Connecticut Yankee*, p. 120.
 69. For other volcanic metaphors in the book, see Allen Guttman, "Mark Twain's *Connecticut Yankee*: Affirmation of the Vernacular Tradition?" *New England Quarterly*, 33 (June 1960), 235. The sloppy layout and numerous manual typesetting errors in the excerpts of the newspaper the Yankee provides carried a special humor for Mark Twain, who was still eagerly supporting the Paige typesetter.
 70. Thomas Blues, *Mark Twain and the Community* (Lexington, Ky., 1970), pp. 49-50.
 71. Mark Twain, *A Connecticut Yankee*, pp. 355, 498.
 72. Mark Twain, *A Connecticut Yankee*, p. 513.
 73. Such analogies were underscored by Dan Beard's illustrations for the first edition, including one portraying Jay Gould as a slave driver with his boot on the throat of a manacled and prostrate woman; *A Connecticut Yankee*, p. 465.
 74. Mark Twain, *A Connecticut Yankee*, p. 535.
 75. Mark Twain read some of the relevant passages from *A Connecticut Yankee* to the West Point cadets on January 11, 1890. Mark Twain to Howells, December 23, 1889, *Mark Twain-Howells Letters*, II, 625.
 76. The use of land mines in the Yankee's "Battle of the Sand Belt" recalls their similar use by other "Yankees" against the Confederates in the battle of Petersburg, Virginia, of July 1864. Ulysses S. Grant later described the "wild rumors" among the people of Petersburg during the siege in language similar to Hank Morgan's volcanic image of his industrial civilization: "They said that we had undermined the whole of Petersburg; that they were resting upon a slumbering volcano and did not know at what moment they might expect an eruption." Interestingly, Grant concluded that the effort was "a stupendous failure." *Personal Memoirs of U. S. Grant*, II (New York, 1886), 314. Mark Twain was undoubtedly familiar with this description, since he personally read Grant's manuscript and proofs and published the *Memoirs* through his publishing company in 1885-86, just as he was beginning *A Connecticut Yankee*. Kaplan, *Mr. Clemens*, p. 274.
 77. Paul Wahl and Donald R. Toppel, *The Gatling Gun* (New York, 1965), pp. 12, 42. Mark Twain's report of his visit to the Colt arms works is reprinted in *The Twainian*, 7 (September-October 1948), 4. For examples of popular reports on the new technological warfare, see John Millis, "Electricity in Land Warfare," *Scribner's*, 6 (October 1889), 424-425; and William R. Hamilton, "American Machine Cannon and Dynamite Guns," *Century*, 36 (October 1888), 885.

78. See for example the discussion of firearms in Byrn, *Progress of Invention*, pp. 394-95.
 79. Wahl and Toppel, *Gatling Gun*, pp. 80-82, 85.
 80. Mark Twain, *A Connecticut Yankee*, pp. 178, 40.
 81. Cf. the goal of an "electronic battlefield" in the Vietnam war and the problem of restraint it raised; Raphael Littauer and Norman Uphoff, eds., *The Air War in Indochina*, revised ed. (Boston, 1972), pp. 149-66.
 82. Mark Twain, *A Connecticut Yankee*, pp. 542, 543. Cf. the London *Times* military correspondent's report on preparations for the Ashanti war in 1873 where he speaks of treating "a good mob of savages... to a little Gatling music"; reprinted in Wahl and Toppel, *Gatling Gun*, p. 67.
 83. Mark Twain, *A Connecticut Yankee*, pp. 564, 554-56.
 84. For my discussion of "psychic numbing" and unresolved guilt as responses to technological atrocity, I am indebted to the work of Robert Jay Lifton. See his essay "Beyond Atrocity," in *Crimes of War*, ed. Richard A. Falk, Gabriel Kolko, and Robert Jay Lifton (New York, 1971), pp. 15-27; *Death in Life: Survivors of Hiroshima* (New York, 1968); *History and Human Survival* (New York, 1970); and *Home from the War: Vietnam Veterans: Neither Victims nor Executioners* (New York, 1973).
 85. Mark Twain, *A Connecticut Yankee*, p. 570.
 86. On images of restoration, see Lifton, *Home from the War*, p. 367; and Lifton, "Images of Time," in *History and Human Survival*, pp. 58-80. On nostalgic elements in *A Connecticut Yankee* and their link with Mark Twain's recollections of his own childhood, see Henry Nash Smith, *Mark Twain: The Development of a Writer* (Cambridge, Mass., 1962), pp. 155-57.
 87. Mark Twain, *A Connecticut Yankee*, p. 574.
 88. *Mark Twain: The Critical Heritage*, pp. 149-50.
 89. *Harper's Monthly*, 80 (January 1890), 320. Howells to Mark Twain, August 15, 1908, *Mark Twain-Howells Letters*, II, 833-34.
 90. For different views of Mark Twain's attitudes toward *A Connecticut Yankee*, see James M. Cox, "A Connecticut Yankee in King Arthur's Court: The Machinery of Self-Preservation," *Yale Review*, 50 (Autumn 1960), 89-102; Charles S. Holmes, "A Connecticut Yankee in King Arthur's Court: Mark Twain's Fable of Uncertainty," *South Atlantic Quarterly*, 61 (Autumn 1962), 462-72; Smith, *Mark Twain's Fable of Progress*; and William K. Spofford, "Mark Twain's Connecticut Yankee: An Ignoramus Nevertheless," *Mark Twain Journal*, 15 (Summer 1970), 15-18.
 91. D. H. Lawrence, *Studies in Classic American Literature*, Viking Compass (New York, 1964), p. 1.
 92. On Donnelly's career, see Martin Ridge, *Ignatius Donnelly: The Portrait of a Politician* (Chicago, 1962).
 93. On this subject, see Norman Pollack's interesting if at times strained argument in *The Populist Response to Industrial America: Midwest Populist Thought* (New York, 1962).
 94. Ridge, *Ignatius Donnelly*, pp. 295-96.

95. Rideout, Introduction to Donnelly, *Caesar's Column*, p. xix; Ridge, *Ignatius Donnelly*, pp. 265-67.
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