

CHAPTER 5

The Industrial Revolution



LACRIME GASWORKS, by Gustave Doré, 1872. This engraving, from Blanchard Jerold and Doré's *London: A Pilgrimage* (1872), shows the harsh conditions within industry during the latter half of the nineteenth century. At the time of this scene, most of the lighting in major cities like London was provided by gas.
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In the last part of the eighteenth century, as a revolution for liberty and equality swept across France and sent shock waves across Europe, a different kind of revolution, a revolution in industry, was transforming life in Great Britain. In the nineteenth century, the Industrial Revolution spread to the United States and to the European continent. Today, it encompasses virtually the entire world; everywhere the drive to substitute technology for human labor continues at a rapid pace.

After 1760, dramatic changes occurred in Britain in the way goods were produced and labor organized. New forms of power, particularly steam, replaced animal strength and human muscle. Better ways of obtaining and using raw materials were discovered, and a new form of organizing production and workers—the factory—came into common use. In the nineteenth century, technology moved from triumph to triumph with a momentum unprecedented in human history. The resulting explosion in economic production and productivity transformed society.

Rapid industrialization caused hardships for the new class of industrial workers, many of them recent arrivals from the countryside. Arduous and monotonous, factory labor was geared to the strict discipline of the clock, the machine, and the production schedule. Employment was never secure. Sick workers received no pay and were often fired; aged workers suffered pay cuts or lost their jobs. During business slumps, employers lowered wages with impunity, and laid-off workers had nowhere to turn for assistance. Because factory owners did not consider safety an important concern, accidents were frequent. Yet the Industrial Revolution was also a great force for human betterment. Ultimately it raised the standard of living, even for the lowest classes, lengthened life expectancy, and provided more leisure time and more possibilities for people to fulfill their potential.

The Industrial Revolution dramatically altered political and social life at all levels, but especially for the middle class, whose engagement in capitalist ventures brought greater political power and social recognition. During the course of the nineteenth century, the bourgeoisie came to hold many of the highest offices in Western European states, continuing a trend that had been fostered by the French Revolution.

Cities grew in size, number, and importance. Municipal authorities were unable to cope with the rapid pace of urbanization, and without adequate housing, sanitation, or recreational facilities, the exploding urban centers became another source of working-class misery. In preindustrial Britain, most people had lived in small villages. They knew where their roots were; relatives, friends, and the village church gave them a sense of belonging. The industrial centers separated people from nature and from their places of origin, shattering traditional ways of life that had given men and women a sense of security.

The plight of the working class created a demand for reform, but the British government, committed to laissez-faire economic principles

that militated against state involvement, was slow to act. In the last part of the nineteenth century, however, the development of labor unions, the rising political voice of the working class, and the growing recognition that the problems created by industrialization required government intervention speeded up the pace of reform. Rejecting the road of reform, Karl Marx called for a working-class revolution that would destroy the capitalist system.

1 Early Industrialization

Several factors help to explain why the Industrial Revolution began in Great Britain. That country had an abundant labor supply, large deposits of coal and iron ore, and capital available for investing in new industries. A large domestic middle class and overseas colonies provided markets for manufactured goods. Colonies were also a source for raw materials, particularly cotton for the textile industry. The Scientific Revolution and an enthusiasm for engineering fostered a spirit of curiosity and inventiveness. Britain had enterprising and daring entrepreneurs who organized new businesses and discovered new methods of production.

Edward Baines

BRITAIN'S INDUSTRIAL ADVANTAGES AND THE FACTORY SYSTEM

In 1835, Edward Baines (1800–1890), an early student of industrialization, wrote *The History of the Cotton Manufacture in Great Britain*—about one of the leading industries in the early days of the Industrial Revolution. In the passages that follow, Baines discusses the reasons for Britain's industrial transformation and the advantages of the factory system.

Three things may be regarded as of primary importance for the successful prosecution of manufactures, namely, water-power, fuel, and iron. Wherever these exist in combination, and where they are abundant and cheap, machinery may be manufactured and put in motion at small cost; and most of the processes of making

and finishing cloth, whether chemical or mechanical, depending, as they do, mainly on the two great agents of water and heat, may likewise be performed with advantage.

... A great number of streams . . . furnish water-power adequate to turn many hundred mills; they afford the element of water, indispensable for scouring, bleaching, printing, dyeing, and other processes of manufacture; and when collected in their larger channels, or employed to feed canals, they supply a superior

Edward Baines, *The History of the Cotton Manufacture in Great Britain* (London: Bisher and Jackson, 1835), pp. 84–89.

inland navigation, so important for the transit of raw materials and merchandise.

Not less important for manufactures than the copious supply of good water, is the great abundance of coal. . . . This mineral fuel animates the thousand arms of the steam-engine, and furnishes the most powerful agent in all chemical and mechanical operations.

In mentioning the advantages which Lancashire [the major cotton manufacturing area] possesses as a seat of manufactures, we must not omit its ready communication with the sea by means of its well-situated port, Liverpool, through the medium of which it receives, from Ireland, a large proportion of the food that supports its population, and whose commerce brings from distant shores the raw materials of its manufactures, and again distributes them, converted into useful and elegant clothing, amongst all the nations of the earth. Through the same means a plentiful supply of timber is obtained, so needful for building purposes.

To the above natural advantages, we must add, the acquired advantage of a canal communication, which ramifies itself through all the populous parts of this country, and connects it with the inland counties, the seats of other flourishing manufactures, and the sources whence iron, lime, salt, stone, and other articles in which Lancashire is deficient, are obtained. By this means Lancashire, being already possessed of the primary requisites for manufactures, is enabled, at a very small expense, to command things of secondary importance, and to appropriate to its use the natural advantages of the whole kingdom. The canals, having been accomplished by individual enterprise, not by national funds, were constructed to supply a want already existing: they were not, therefore, original sources of the manufactures, but have extended together with them, and are to be considered as having essentially aided and accelerated that prosperity from whose beginnings they themselves arose. The recent introduction of railways will have a great effect in making the operations of trade more intensely

active, and perfecting the division of labour, already carried to so high a point. By the railway and the locomotive engine, the extremities of the land will, for every beneficial purpose, be united.

In comparing the advantages of England for manufactures with those of other countries, we can by no means overlook the excellent commercial position of the country—intermediate between the north and south of Europe; and its insular situation, which, combined with the command of the seas, secures our territory from invasion or annoyance. The German ocean, the Baltic, and the Mediterranean are the regular highways for our ships; and our western ports command an unobstructed passage to the Atlantic, and to every quarter of the world.

A temperate climate, and a hardy race of men, have also greatly contributed to promote the manufacturing industry of England.

The political and moral advantages of this country, as a seat of manufactures, are not less remarkable than its physical advantages. The arts are the daughters of peace and liberty. In no country have these blessings been enjoyed in so high a degree, or for so long a continuance, as in England. Under the reign of just laws, personal liberty and property have been secure; mercantile enterprise has been allowed to reap its reward; capital has accumulated in safety; the workman has "gone forth to his work and to his labour until the evening;" and, thus protected and favoured, the manufacturing prosperity of the country has struck its roots deep, and spread forth its branches to the ends of the earth.

England has also gained by the calamities of other countries, and the intolerance of other governments. At different periods, the Flemish and French protestants, expelled from their native lands, have taken refuge in England, and have repaid the protection given them by practising and teaching branches of industry, in which the English were then less expert than their neighbours. The wars which have at different times desolated the rest of

Europe, and especially those which followed the French revolution, (when mechanical invention was producing the most wonderful effects in England) checked the progress of manufacturing improvement on the continent, and left England for many years without a competitor. At the same time, the English navy held the sovereignty of the ocean, and under its protection the commerce of this country extended beyond all former bounds, and established a firm connexion between the manufacturers of Lancashire and their customers in the most distant lands.

When the natural, political, and adventitious causes, thus enumerated, are viewed together, it cannot be [a] matter of surprise that England has obtained a preeminence over the rest of the world in manufactures.

A crucial feature of the Industrial Revolution was a new production system— the making of goods in factories. By bringing all the operations of manufacturing under one roof, industrialists made the process of production more efficient. Baines describes the factory system's advantages over former methods.

... Hitherto the cotton manufacture had been carried on almost entirely in the houses of the workmen; the hand or stock cards,¹ the spinning wheel, and the loom required no larger apartment than that of a cottage. A spinning jenny² of small size might also be used in a cottage, and in many instances was so used; when the number of spindles was considerably increased, adjacent work-shops were used. But the water-frame, the carding engine, and the other machines which [Richard] Arkwright

¹Prior to spinning, raw fibers had to be carded with a brushlike tool that cleaned and separated them. —Eds.

²The spinning jenny, which was hand-powered, was the first machine that spun fiber onto multiple spindles at the same time; that is, it produced more thread or yarn in less time than the single-thread spinning wheel. —Eds.

brought out in a finished state, required both more space than could be found in a cottage, and more power than could be applied by the human arm. Their weight also rendered it necessary to place them in strongly-built mills, and they could not be advantageously turned by any power then known but that of water.

The use of machinery was accompanied by a greater division of labour than existed in the primitive state of the manufacture; the material went through many more processes; and of course the loss of time and the risk of waste would have been much increased, if its removal from house to house at every stage of the manufacture had been necessary. It became obvious that there were several important advantages in carrying on the numerous operations of an extensive manufacture in the same building. Where water power was required, it was economical to build one mill, and put up one water-wheel, rather than several. This arrangement also enabled the master spinner himself to superintend every stage of the manufacture: it gave him a greater security against the wasteful or fraudulent consumption of the material: it saved time in the transference of the work from hand to hand; and it prevented the extreme inconvenience which would have resulted from the failure of one class of workmen to perform their part, when several other classes of workmen were dependent upon them. Another circumstance which made it advantageous to have a large number of machines in one manufactory was, that mechanics must be employed on the spot, to construct and repair the machinery, and that their time could not be fully occupied with only a few machines.

All these considerations drove the cotton spinners to that important change in the economy of English manufactures, the introduction of the factory system; and when that system had once been adopted, such were its pecuniary advantages, that mercantile competition would have rendered it impossible, even had it been desirable, to abandon it.

Adam Smith

THE DIVISION OF LABOR

Baines' emphasis on the division of labor in the expanding use of machinery can be traced to Adam Smith, who in the eighteenth century pioneered the study of economics. Adam Smith (1723–1790) was a bright and thoughtful academic who had attended Glasgow University in his native Scotland and then Oxford University in England before being appointed professor of logic at Glasgow at age twenty-eight and professor of moral philosophy a year later. After some years of travel on the Continent, Smith wrote over a span of years his masterpiece, *An Inquiry into the Nature and Causes of the Wealth of Nations*. This work (see also next section), published in 1776, made him instantly famous. He began *The Wealth of Nations* by analyzing the benefits of the division of labor—the system in which each worker performs a single set task or a single step in the manufacturing process.

The greatest improvement in the productive powers of Labour, and the greater skill, dexterity, and judgment with which it is anywhere directed, or applied, seem to have been the effects of the division of labour. . . .

This great increase of the quantity of work, which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances; first, to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many. . . .

To take an example, therefore, from a very trifling manufacture; but one in which the division of labour has been very often taken notice of, the trade of the pin-maker; a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery

employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head: to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor [craftsmen], and therefore but indifferently accommodated with the

Adam Smith, *An Inquiry into the Nature and Causes of The Wealth of Nations*, ed. J. R. McCulloch (London: Ward and Lock, 1813), pp. 19, 20, 22.

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necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had

all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations. . . .

REVIEW QUESTIONS

1. Apart from its natural resources, what other assets for industrial development did England possess?
2. What were the factory system's advantages over the domestic system of production?
3. How, according to Adam Smith, did the division of labor lead to increased productivity?

2 The New Science of Political Economy

The new spirit of scientific inquiry manifest in the seventeenth and eighteenth centuries extended also into the economic field, creating the new science of political economy. Its pioneer was Adam Smith, author of the classic book *The Wealth of Nations* (see also previous section). Smith was an optimist, in favor of leaving individuals' economic activities to their own devices. For that reason he condemned government interference in the economy—so common in his day under the protectionist government's mercantilism policy, which sought to increase the nation's wealth by expanding exports while minimizing imports. The "invisible hand," which according to Smith turned individual gain into social advantage, also favored free trade among nations, based on an international division of labor.

Adam Smith's optimistic assumptions were soon called into question by Thomas Robert Malthus (1766–1834). A Church of England clergyman and professor of history and political economy at a small college run by the East India Company, Malthus gave the study of political economy not only a moral but also a pessimistic twist, for he stressed the immutable poverty of nations. He contributed two books to the science of political economy. The first, *An Essay on the Principle of Population, as It Affects the Future Improvement of Society*, was published in 1798. It was followed in 1803 by a second and enlarged edition entitled *An Essay on the Principle of Population, or, a View of Its Past and Present Effects on Human Happiness*. In these works Malthus argued that population growth was the true reason for the misery of the poor.

Adam Smith

THE WEALTH OF NATIONS

The Wealth of Nations carries the important message of *laissez-faire*, which means that the government should intervene as little as possible in economic affairs and leave the market to its own devices. It advocates the liberation of economic production from all limiting regulation in order to benefit "the people and the sovereign," not only in Great Britain but in the community of countries. Admittedly, in his advocacy of free trade Smith made allowance for the national interest, justifying "certain public works and certain public institutions," including the government and the state. He defended, for instance, the Navigation Acts, which stipulated that goods brought from its overseas colonies into England be carried in British ships. Neither did he want to ruin established industries by introducing free trade too suddenly. Adam Smith was an eighteenth-century cosmopolitan who viewed political economy as an international system. His preference was clearly for economic cooperation among nations as a source of peace. In the passage that follows, Smith argues that economic activity unrestricted by government best serves the individual and society.

Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view. But the study of his own advantage, naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to the society. . . .

. . . As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value, every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible

hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. . . .

. . . The statesman who should attempt to direct private people in what manner they ought to employ their capitals, would not only load himself with a most unnecessary attention, but assume an authority which could safely be trusted, not only to no single person, but to no council or senate whatever, and which would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it. . . .

It is thus that every system which endeavours, either by extraordinary encouragements to draw towards a particular species of industry a greater share of the capital of the society than would naturally go to it, or, by extraordinary restraints, force from a particular species of industry some share of the capital which would otherwise be employed in it, is in reality subversive to the great purpose which it means to promote. It retards, instead of

Adam Smith, *An Inquiry Into the Nature and Causes of The Wealth of Nations*, ed. J. R. McCulloch (London: Ward and Lock, 1813), pp. 352, 354, 344-345.

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accelerating, the progress of the society towards real wealth and greatness; and diminishes, instead of increasing, the real value of the annual produce of its land and labour.

All systems either of preference or of restraint, therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man, or order of men. The sovereign is completely discharged from a duty, in the attempting to perform which he must always be exposed to innumerable delusions, and for the proper performance of which no human wisdom or knowledge could ever be sufficient; the duty of superintending the industry of private people, and of directing it towards the employments

most suitable to the interest of the society. According to the system of natural liberty, the sovereign has only three duties to attend to; three duties of great importance, indeed, but plain and intelligible to common understandings: first, the duty of protecting the society from the violence and invasion of other independent societies; secondly, the duty of protecting, as far as possible, every member of the society from the injustice or oppression of every other member of it, or the duty of establishing an exact administration of justice; and, thirdly, the duty of erecting and maintaining certain public works and certain public institutions which it can never be for the interest of any individual, or small number of individuals, to erect and maintain; because the profit could never repay the expense to any individual or small number of individuals, though it may frequently do much more than repay it to a great society.

Thomas R. Malthus

ON THE PRINCIPLE OF POPULATION

Malthus assumed that population tended forever to outgrow the resources needed to sustain it. The balance between population and its life-sustaining resources was elementally maintained, he gloomily argued, by famine, war, and other fatal calamities. As a clergyman, he believed in sexual abstinence as the means of limiting population growth. He also saw little need to better the condition of the poor, whom he considered the most licentious part of the population, because he believed that they would then breed faster and, by upsetting the population/resource balance, bring misery to all. This view—that poverty was an iron law of nature—buttressed supporters of strict laissez-faire who opposed government action to aid the poor.

POPULATION'S EFFECTS ON SOCIETY

I have read some of the speculations on the perfectibility of man and of society with great

pleasure. I have been warmed and delighted with the enchanting picture which they hold forth. I ardently wish for such happy improvements. But I see great and, to my understanding, unconquerable difficulties in the way to them. These difficulties it is my present purpose to state, declaring, at the same time, that so far from exulting in them, as a cause of triumphing over the friends of innovation, nothing would

Thomas Robert Malthus, *Essay on Population* (1789; reprinted for the Royal Economic Society, London: Macmillan & Co. Ltd., 1926), pp. 7, 11-14, 16-17.

give me greater pleasure than to see them completely removed. . . .

[These difficulties are]

First, That food is necessary to the existence of man.

Secondly, That the passion between the sexes is necessary and will remain nearly in its present state.

These two laws, ever since we have had any knowledge of mankind, appear to have been fixed laws of our nature; and as we have not hitherto seen any alteration in them, we have no right to conclude that they will ever cease to be what they are now, without an immediate act of power in that Being who first arranged the system of the universe, and for the advantage of His creatures, still executes, according to fixed laws, all its various operations. . . .

Assuming, then, my postulata as granted, I say that the power of population is indefinitely greater than the power in the earth to produce subsistence for man.

Population, when unchecked, increases in a geometrical ratio. Subsistence only increases in an arithmetical ratio. A slight acquaintance with numbers will show the immensity of the first power in comparison of the second.

By that law of our nature which makes food necessary to the life of man, the effects of these two unequal powers must be kept equal.

This implies a strong and constantly operating check on population from the difficulty of subsistence. This difficulty must fall somewhere and must necessarily be severely felt by a large portion of mankind. . . .

This natural inequality of the two powers of population and of production in the earth, and that great law of our nature which must constantly keep their efforts equal, form the great difficulty that to me appears insurmountable in the way to perfectibility of society. . . .

Consequently, if the premises are just, the argument is conclusive against the perfectibility of the mass of mankind.

POPULATION'S EFFECTS ON HUMAN HAPPINESS

The ultimate check to population appears then to be a want of food, arising necessarily from the different ratios according to which population and food increase. But this ultimate check is never the immediate check, except in cases of actual famine.

The immediate check may be stated to consist in all those customs, and all those diseases, which seem to be generated by a scarcity of the means of subsistence; and all those causes, independent of this scarcity, which tend prematurely to weaken and destroy the human frame.

These checks to population, which are constantly operating with more or less force in every society, and keep down the number to the level of the means of subsistence, may be classed under two general heads—the preventive and the positive checks.

The preventive check, as far as it is voluntary, is peculiar to man, and arises from that distinctive superiority in his reasoning faculties which enables him to calculate distant consequences. Man cannot look around him and see the distress which frequently presses upon those who have large families; he cannot contemplate his present possessions or earnings which he now nearly consumes himself, and calculate the amount of each share, when with a little addition they must be divided, perhaps, among seven or eight, without feeling a doubt whether, if he follow the bent of his inclinations, he may be able to support the offspring which he will probably bring into the world. . . .

The conditions are calculated to prevent, and certainly do prevent, a great number of persons in all civilized nations from pursuing the dictate of nature in an early attachment to one woman. . . .

The positive checks to population are extremely various, and include every cause,

This and subsequent excerpt are from Thomas Robert Malthus, *An Essay on the Principles of Population, or, a View of Its Past and Present Effects on Human Happiness*, 7th ed. (1798; London: Reeves and Turner, 1872), pp. 6–8.

whether arising from vice or misery, which in any degree contributes to shorten the natural duration of human life. Under this head, therefore, may be enumerated all unwholesome occupations, severe labor and exposure to the seasons, extreme poverty, bad nursing of children, great towns, excesses of all kinds, the whole train of common diseases and epidemics, wars, plague, and famine. . . .

POPULATION AND POVERTY

Almost everything that has been hitherto done for the poor, has tended, as if with solicitous care, to throw a veil of obscurity over this subject and to hide from them the true cause of their poverty. When the wages of labour are hardly sufficient to maintain two children, a man marries and has five or six. He of course finds himself miserably distressed. . . . He accuses his parish.

. . . He accuses the avarice of the rich. . . . He accuses the partial and unjust institutions of society. . . . In searching for objects of accusation, he never [alludes] to the quarter from which all his misfortunes originate. The last person that he would think of accusing is himself. . . .

We cannot justly accuse them (the common people) of improvidence [thriftlessness] and want of industry, till . . . after it has been brought home to their comprehensions, that they are themselves the cause of their own poverty; that the means of redress are in their own hands, and in the hands of no other persons whatever; that the society in which they live and the government which presides over it, are totally without power in this respect; and however ardently they [government] may desire to relieve them, and whatever attempts they may make to do so, they are really and truly unable to execute what they benevolently wish, but unjustly promise.

REVIEW QUESTIONS

1. What did Adam Smith say were the results of a laissez-faire policy?
2. What, according to Smith, were the duties of the sovereign under the system of natural liberty? Do you think there are other duties that should be added?
3. What are the "fixed laws" of human nature according to Thomas Malthus? For Malthus, how did the power of population growth compare with that of the means to increase food?
4. What distinction did Malthus draw between preventive and positive checks to population growth?
5. Why is Malthus considered to have been a pessimist?
6. Do any of Malthus' arguments apply to our world today?

3 The Dark Side of Industrialization

Among the numerous problems caused by rapid industrialization, none aroused greater concern among humanitarians than child labor in factories and mines. In preindustrial times, children had always been part of the labor force, indoors and out, a practice that was continued during the early days of the Industrial Revolution. In the cotton industry, for instance, the proportion of children and adolescents under eighteen was around 40–45 percent of the labor force; in some large firms the proportion was even greater. Employers discovered early that youngsters adapted more easily to machines and factory discipline than did adults, who were used to traditional handicraft routines. Child labor

took children away from their parents, undermined family life, and deprived children of schooling. Factory routines dulled their minds, and the long hours spent in often unsanitary environments endangered their health.

Sadler Commission REPORT ON CHILD LABOR

Due to concern about child labor, in 1832 a parliamentary committee chaired by Michael Thomas Sadler investigated the situation of children employed in British factories. The following testimony is drawn from the records of the Sadler Commission.

May 18, 1832

Michael Thomas Sadler, Esquire, in the chair.
Mr. Matthew Crabtree, called in; and Examined.

What age are you?—Twenty-two.¹

What is your occupation?—A blanket manufacturer.

Have you ever been employed in a factory?—Yes.

At what age did you first go to work in one?—Eight.

How long did you continue in that occupation?—Four years.

Will you state the hours of labour at the period when you first went to the factory, in ordinary times?—From 6 in the morning to 8 at night.

Fourteen hours?—Yes.

With what intervals for refreshment and rest?—An hour at noon.

Then you had no resting time allowed in which to take your breakfast, or what is in Yorkshire called your "drinking"?—No.

When trade was brisk what were your hours?—From 5 in the morning to 9 in the evening.

Sixteen hours?—Yes.

With what intervals at dinner?—An hour.

How far did you live from the mill?—About two miles.

Was there any time allowed for you to get your breakfast in the mill?—No.

Did you take it before you left home?—Generally.

During those long hours of labour could you be punctual, how did you awake?—I seldom did awake spontaneously. I was most generally awoke or lifted out of bed, sometimes asleep, by my parents.

Were you always in time?—No.

What was the consequence if you had been too late?—I was most commonly beaten.

Severely?—Very severely, I thought.

In whose factory was this?—Messrs. Hague & Cook's, of Dewsbury.

Will you state the effect that those long hours had upon the state of your health and feelings?—I was, when working those long hours, commonly very much fatigued at night, when I left my work, so much so that I sometimes should have slept as I walked if I had not stumbled and started awake again, and so sick often that I could not eat, and what I did eat I vomited.

Did this labour destroy your appetite?—It did.

In what situation were you in that mill?—I was a piecener [see following].

Report from the Committee on the Bill to Regulate the Labour of Children in the Mills and Factories of the United Kingdom, British Sessional Papers, 1831-1832, House of Commons, XV, pp. 95-96, 99-100.

¹In the original source, each paragraph was numbered; this reading includes paragraphs 2481-2519 and 2597-2604.—Bds.

Will you state to the Committee whether piecening is a very laborious employment for children, or not?—It is a very laborious employment. Pieceners are continually running to and fro, and on their feet the whole day.

The duty of the piecener is to take the cardings² from one part of the machinery, and to place them on another?—Yes.

So that the labour is not only continual, but it is unabated to the last?—It is unabated to the last.

Do you not think, from your own experience, that the speed of the machinery is so calculated as to demand the utmost exertions of a child, supposing the hours were moderate?—It is as much as they could do at the best; they are always upon the stretch, and it is commonly very difficult to keep up with their work.

State the condition of the children towards the latter part of the day, who have thus to keep up with the machinery?—It is as much as they can do when they are not very much fatigued to keep up with their work, and towards the close of the day, when they come to be more fatigued, they cannot keep up with it very well, and the consequence is that they are beaten to spur them on.

Were you beaten under those circumstances?—Yes.

Frequently?—Very frequently.

And principally at the latter end of the day?—Yes.

And is it your belief that if you had not been so beaten, you should not have got through the work?—I should not if I had not been kept up to it by some means.

Does beating then principally occur at the latter end of the day, when the children are exceedingly fatigued?—It does at the latter end of the day, and in the morning sometimes, when they are very drowsy, and have not got rid of the fatigue of the day before.

What were you beaten with principally?—A strap.

Any thing else?—Yes, a stick sometimes; and there is a kind of roller which runs on the top of the machine called a billy, perhaps two

or three yards in length, and perhaps an inch and a half, or more, in diameter; the circumference would be four or five inches, I cannot speak exactly.

Were you beaten with that instrument?—Yes.

Have you yourself been beaten, and have you seen other children struck severely with that roller?—I have been struck very severely with it myself, so much so as to knock me down, and I have seen other children have their heads broken with it.

You think that it is a general practice to beat the children with the roller?—It is.

You do not think then that you were worse treated than other children in the mill?—No, I was not, perhaps not so bad as some were. . . .

Can you speak as to the effect of this labour in the mills and factories on the morals of the children, as far as you have observed?—As far as I have observed with regard to morals in the mills, there is every thing about them that is disgusting to every one conscious of correct morality.

Do you find that the children, the females especially, are very early demoralized in them?—They are.

Is their language indecent?—Very indecent; and both sexes take great familiarities with each other in the mills, without at all being ashamed of their conduct.

Do you connect their immorality of language and conduct with their excessive labour?—It may be somewhat connected with it, for it is to be observed that most of that goes on towards night, when they begin to be drowsy; it is a kind of stimulus which they use to keep them awake; they say some pert thing or other to keep themselves from drowsiness, and it generally happens to be some obscene language.

Have not a considerable number of the females employed in mills illegitimate children very early in life?—I believe there are; I have known some of them have illegitimate children when they were between 16 and 17 years of age.

How many grown up females had you in the mill?—I cannot speak to the exact number that were grown up; perhaps there might be thirty-four or so that worked in the mill at that time.

²*Cardings* were woolen fibers that had been combed in preparation for spinning and weaving. —Eds.

How many of those had illegitimate children?—A great many of them, eighteen or nineteen of them, I think.

Did they generally marry the men by whom they had the children?—No, it sometimes

happens that young women have children by married men, and I have known an instance, a few weeks since, where one of the young women had a child by a married man.

James Phillips Kay MORAL AND PHYSICAL DISSIPATION

Rapid industrialization produced a drastic change of environment for workers, who moved from the casual, slow-paced English villages and small towns to large, congested, and impersonal industrial cities. The familiar social patterns and cherished values by which preindustrial people had oriented themselves grew weak or disappeared, for these patterns and values clashed with the requirements of the new industrial age. Many people in England, from the highest to the lowest classes, still felt wedded to the old ways and hated the congested industrial centers. In 1832 James Phillips Kay, a physician, published a pamphlet describing the moral and physical condition of the working class in Manchester. His study, excerpted below, provided additional evidence of the painful effects industrialization had on factory workers and their families.

The township of Manchester chiefly consists of dense masses of houses, inhabited by the population engaged in the great manufactories of the cotton trade. . . . Prolonged and exhausting labour, continued from day to day, and from year to year, is not calculated to develop the intellectual or moral faculties of man. The dull routine of a ceaseless drudgery, in which the same mechanical process is incessantly repeated, resembles the torment of Sisyphus²—the toil, like the rock, recoils perpetually on the wearied operative. The mind gathers neither stores nor strength from the constant extension and retraction of the same muscles. The intellect slumbers, in supine inertness; but the grosser parts of our nature attain a rank development. To condemn man to such severity of toil is, in some measure, to cultivate

in him the habits of an animal. He becomes reckless. He disregards the distinguishing appetites and habits of his species. He neglects the comforts and delicacies of life. He lives in squalid wretchedness, on meagre food, and expends his superfluous gains in debauchery. . . .

[T]he population. . . . is crowded into one dense mass, in cottages separated by narrow, unpaved, and almost pestilential streets; in an atmosphere loaded with the smoke and exhalations of a large manufacturing city. The operatives are congregated in rooms and workshops during twelve hours in the day, in an enervating, heated atmosphere, which is frequently loaded with dust or filaments of cotton, or impure from constant respiration, or from other causes. They are engaged in an employment which absorbs

James Phillips Kay, M. D., *Moral and Physical Condition of the Working Classes Employed in the Cotton Manufacture in Manchester* (London: James Ridgway, 1832), pp. 6–8, 10–11, 39.

²This refers to the myth of Sisyphus, a cruel king of Corinth, who was condemned in Hades to push a big rock up to the top of a hill, only to have it roll back down again.—Eds.

their attention, and unremittingly employs their physical energies. They are drudges who watch the movements, and assist the operations, of a mighty material force, which toils with an energy ever unconscious of fatigue. The persevering labour of the operative must rival the mathematical precision, the incessant motion, and the exhaustless power of the machine.

Hence, besides the negative results—the total abstraction of every moral and intellectual stimulus—the absence of variety—banishment from the grateful air and the cheering influences of light, the physical energies are exhausted by incessant toil, and imperfect nutrition. Having been subjected to the prolonged labour of an animal—his physical energy wasted—his mind in supine inaction—the artizan has neither moral dignity nor intellectual nor organic strength to resist the seductions of appetite. His wife and children, too frequently subjected to the same process, are unable to cheer

his remaining moments of leisure. Domestic economy is neglected, domestic comforts are unknown. A meal of the coarsest food is prepared with heedless haste, and devoured with equal precipitation. Home has no other relation to him than that of shelter—few pleasures are there—it chiefly presents to him a scene of physical exhaustion, from which he is glad to escape. Himself impotent of all the distinguishing aims of his species, he sinks into sensual sloth, or revels in more degrading licentiousness. His house is ill furnished, uncleanly, often ill ventilated, perhaps damp; his food, from want of forethought and domestic economy, is meagre and innutritious; he is debilitated and hypochondriacal, and falls the victim of dissipation. . . .

The absence of religious feeling, the neglect of all religious ordinances, we conceive to afford substantive evidence of so great a moral degradation of the community, as generally to ensure a concomitant civic debasement. . . .

Friedrich Engels

THE CONDITION OF THE WORKING CLASS IN ENGLAND

The miseries of the industrial towns distressed Friedrich Engels (1820–1895), a well-to-do German intellectual and son of a prosperous German manufacturer. In the early 1840s, Engels moved to Manchester, a great English industrial center, where he eventually established himself in business. In that decade, he also entered into a lifelong collaboration with Karl Marx, the founder of modern socialism (see page 195). Engels yearned for the fellowship and the pleasures of nature that he had experienced in preindustrial Germany. In the new urban centers, he found only alienation and human degradation—even in cosmopolitan London in 1844. The following passage is from his *Condition of the Working Class in England*.

. . . It is only when [a person] has visited the slums of this great city that it dawns upon him that the inhabitants of modern London have had

to sacrifice so much that is best in human nature in order to create those wonders of civilisation with which their city teems. The vast majority of Londoners have had to let so many of their potential creative faculties lie dormant, stunted and unused in order that a small, closely-knit group of their fellow citizens could develop

Friedrich Engels, *The Condition of the Working Class in England, to 1844*, ed. and trans. W. O. Henderson and W. H. Chaloner (London: Blackwell, 1958), pp. 30–31, 33.

to the full the qualities with which nature has endowed them. The restless and noisy activity of the crowded streets is highly distasteful, and it is surely abhorrent to human nature itself. Hundreds of thousands of men and women drawn from all classes and ranks of society pack the streets of London. Are they not all human beings with the same innate characteristics and potentialities? Are they not all equally interested in the pursuit of happiness? And do they not all aim at happiness by following similar methods? Yet they rush past each other as if they had nothing in common. They are tacitly agreed on one thing only—that everyone should keep to the right of the pavement so as not to collide with the stream of people moving in the opposite direction. No one even thinks of sparing a glance for his neighbour in the streets. The more that Londoners are packed into a tiny space, the more repulsive and disgraceful becomes the brutal indifference with which they ignore their neighbours and selfishly concentrate upon their private affairs. We know well enough that this isolation of the individual—this narrow-minded egotism—is everywhere the fundamental principle of modern society. But nowhere is this selfish egotism so blatantly evident as in the frantic bustle of the great city. The disintegration of society into individuals, each guided by his private principles and each pursuing his own aims has been pushed to its furthest limits in London. Here indeed human society has been split into its component atoms.

From this it follows that the social conflict—the war of all against all—is fought in the open. . . . Here men regard their fellows not as human beings, but as pawns in the struggle for existence. Everyone exploits his neighbour with the result that the stronger tramples the weaker

under foot. The strongest of all, a tiny group of capitalists, monopolise everything, while the weakest, who are in the vast majority, succumb to the most abject poverty.

What is true of London, is true also of all the great towns, such as Manchester, Birmingham and Leeds. Everywhere one finds on the one hand the most barbarous indifference and selfish egotism and on the other the most distressing scenes of misery and poverty. . . .

Every great town has one or more slum areas into which the working classes are packed. Sometimes, of course, poverty is to be found hidden away in alleys close to the stately homes of the wealthy. Generally, however, the workers are segregated in separate districts where they struggle through life as best they can out of sight of the more fortunate classes of society. The slums of the English towns have much in common—the worst houses in a town being found in the worst districts. They are generally unplanned wildernesses of one- or two-storied terrace houses built of brick. Wherever possible these have cellars which are also used as dwellings. These little houses of three or four rooms and a kitchen are called cottages, and throughout England, except for some parts of London, are where the working classes normally live. The streets themselves are usually unpaved and full of holes. They are filthy and strewn with animal and vegetable refuse. Since they have neither gutters nor drains the refuse accumulates in stagnant, stinking puddles. Ventilation in the slums is inadequate owing to the hopelessly unplanned nature of these areas. A great many people live huddled together in a very small area, and so it is easy to imagine the nature of the air in these workers' quarters.

REVIEW QUESTIONS

1. According to the testimony given the Sadler Commission, how young were the children employed in the factories? How many hours and at what times of day did they work?
2. What do you think were the reasons for the employment of children from the employers' point of view? From the parents' point of view?
3. What measures were employed in the factories to keep children alert at their tasks?

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4. According to James Phillips Kay, what harmful effects did industrialization have on factory workers and their families?
5. According to Friedrich Engels, how had the industrial city caused deterioration in the quality of human relationships? What did he mean by the statement that "human society has been split into its component atoms"?

4 Factory Discipline

For the new industries to succeed, workers needed to adopt the rigorous discipline exercised by the new industrial capitalists themselves. But adapting to labor with machines in factories proved traumatic for the poor, uneducated, and often unruly folk, who previously had toiled on farms and in village workshops and were used to a less demanding pace.

FACTORY RULES

The problem of adapting a preindustrial labor force to the discipline needed for coordinating large numbers of workers in the factory was common to all industrializing countries. The Foundry and Engineering Works of the Royal Overseas Trading Company, in the Moabit section of Berlin, issued the following rules in 1844. The rules aimed at instilling obedience and honesty as well as "good order and harmony" among the factory's workers. The rules not only stressed time-keeping (with appropriate fines for latecomers), but also proper conduct in all aspects of life and work in the factory.

In every large works, and in the co-ordination of any large number of workmen, good order and harmony must be looked upon as the fundamentals of success, and therefore the following rules shall be strictly observed.

Every man employed in the concern . . . shall receive a copy of these rules, so that no one can plead ignorance. Its acceptance shall be deemed to mean consent to submit to its regulations.

(1) The normal working day begins at all seasons at 6 A.M. precisely and ends, after the usual break of half an hour for breakfast, an hour for

dinner and half an hour for tea, at 7 P.M., and it shall be strictly observed.

Five minutes before the beginning of the stated hours of work until their actual commencement, a bell shall ring and indicate that every worker employed in the concern has to proceed to his place of work, in order to start as soon as the bell stops.

The doorkeeper shall lock the door punctually at 6 A.M., 8:30 A.M., 1 P.M. and 4:30 P.M.

Workers arriving 2 minutes late shall lose half an hour's wages; whoever is more than 2 minutes late may not start work until after the next break, or at least shall lose his wages until then. Any disputes about the correct time shall be settled by the clock mounted above the gatekeeper's lodge.

From A. Schroter and Walter Becker, *Die Deutsche Maschinenbau-Industrie in der industriellen Revolution* in S. Pollard and G. Holmes, *Documents of European Economic History*, pp. 554-556. Copyright © 1968 St. Martin's Press. Reprinted by permission of S. Pollard and Colin Holmes.

These rules are valid both for time- and for piece-workers, and in cases of breaches of these rules, workmen shall be fined in proportion to their earnings. The deductions from the wage shall be entered in the wage-book of the gatekeeper whose duty they are; they shall be unconditionally accepted as it will not be possible to enter into any discussions about them.

(2) When the bell is rung to denote the end of the working day, every workman, both on piece- and on day-wage, shall leave his workshop and the yard, but is not allowed to make preparations for his departure before the bell rings. Every breach of this rule shall lead to a fine of five silver groschen [pennies] to the sick fund. Only those who have obtained special permission by the overseer may stay on in the workshop in order to work.—If a workman has worked beyond the closing bell, he must give his name to the gatekeeper on leaving, on pain of losing his payment for the overtime.

(3) No workman, whether employed by time or piece, may leave before the end of the working day, without having first received permission from the overseer and having given his name to the gatekeeper. Omission of these two actions shall lead to a fine of ten silver groschen payable to the sick fund.

(4) Repeated irregular arrival at work shall lead to dismissal. This shall also apply to those who are found idling by an official or overseer, and refuse to obey their order to resume work.

(5) Entry to the firm's property by any but the designated gateway, and exit by any prohibited route, e.g. by climbing fences or walls, or by crossing the Spree [River], shall be punished by a fine of fifteen silver groschen to the sick fund for the first offences, and dismissal for the second.

(6) No worker may leave his place of work otherwise than for reasons connected with his work.

(7) All conversation with fellow-workers is prohibited; if any worker requires information about his work, he must turn to the overseer, or to the particular fellow-worker designated for the purpose.

(8) Smoking in the workshops or in the yard is prohibited during working hours; anyone caught smoking shall be fined five silver groschen for the sick fund for every such offence.

(9) Every worker is responsible for cleaning up his space in the workshop, and if in doubt, he is to turn to his overseer.—All tools must always be kept in good condition, and must be cleaned after use. This applies particularly to the turner, regarding his lathe.

(10) Natural functions must be performed at the appropriate places, and whoever is found soiling walls, fences, squares, etc., and similarly, whoever is found washing his face and hands in the workshop and not in the places assigned for the purpose, shall be fined five silver groschen for the sick fund.

(11) On completion of his piece of work, every workman must hand it over at once to his foreman or superior, in order to receive a fresh piece of work. Pattern makers must on no account hand over their patterns to the foundry without express order of their supervisors. No workman may take over work from his fellow-workman without instruction to that effect by the foreman.

(12) It goes without saying that all overseers and officials of the firm shall be obeyed without question, and shall be treated with due deference. Disobedience will be punished by dismissal.

(13) Immediate dismissal shall also be the fate of anyone found drunk in any of the workshops.

(14) Untrue allegations against superiors or officials of the concern shall lead to stern reprimand, and may lead to dismissal. The same punishment shall be meted out to those who knowingly allow errors to slip through when supervising or stocktaking.

(15) Every workman is obliged to report to his superiors any acts of dishonesty or embezzlement on the part of his fellow workmen. If he omits to do so, and it is shown after subsequent discovery of a misdemeanour that he knew about it at the time, he shall be liable to be taken to court as an accessory after the fact and the wage due to him shall be retained as punishment. Conversely,

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anyone denouncing a theft in such a way as to allow conviction of the thief shall receive a reward of two Thaler [dollar equivalent], and, if necessary, his name shall be kept confidential.—Further, the gatekeeper and the watchman, as well as every official, are entitled to search the baskets, parcels, aprons etc. of the women and children who are taking the dinners into the works, on their departure, as well as search any worker suspected of stealing any article whatever. . . .

(18) Advances shall be granted only to the older workers, and even to them only in exceptional circumstances. As long as he is working by the piece, the workman is entitled merely to his fixed weekly wage as subsistence pay;

the extra earnings shall be paid out only on completion of the whole piece contract. If a workman leaves before his piece contract is completed, either of his own free will, or on being dismissed as punishment, or because of illness, the partly completed work shall be valued by the general manager with the help of two overseers, and he will be paid accordingly. There is no appeal against the decision of these experts.

(19) A free copy of these rules is handed to every workman, but whoever loses it and requires a new one, or cannot produce it on leaving, shall be fined 2½ silver groschen, payable to the sick fund.

REVIEW QUESTIONS

1. Judging by the Berlin factory rules, what were the differences between preindustrial and industrial work routines?
2. How might these rules have affected the lives of families?

5 The Capitalist Ethic

The remarkable advance in industry and material prosperity in the nineteenth century has been hailed as the triumph of the middle class, or bourgeoisie, which included bankers, merchants, factory owners, professionals, and government officials. Unlike the upper classes, which lived on inherited wealth, middle-class people supported themselves by diligent, assiduous activity—what has been called “the capitalist (or bourgeois) ethic.” A vigorous spirit of enterprise and the opportunity for men of ability to rise from common origins to riches and fame help explain the growth of industrialism in England. These industrial capitalists adopted the attitude of medieval monks that “idleness is the enemy of the soul,” to which they added “time is money.”

The ideal of dedicated and responsible hard work directed by an internal rather than an external discipline was seen as the ultimate source of human merit and was widely publicized in the nineteenth century. It encouraged upward mobility among the lower classes and sustained the morale of ambitious middle-class people immersed in the keen competition of private enterprise. By shaping highly motivated private citizens, the capitalist ethic also provided a vital source of national strength.

Samuel Smiles

SELF-HELP AND THRIFT

Samuel Smiles (1812–1904) was the most famous messenger of the capitalist ethic at its best. His father, a Scottish papermaker and general merchant, died early, leaving his eleven children to fend for themselves. Samuel was apprenticed to a medical office, in due time becoming a physician in general practice. Turned journalist, he edited the local newspaper in the English city of Leeds, hoping to cure the ills of society by promoting the social and intellectual development of the working classes. Leaving his editorial office, he stepped into railroad management as a friend of George Stephenson, the inventor of the locomotive and promoter of railroads, whose biography Smiles wrote in 1857. Two years later he published *Self-Help*, which had grown out of a lecture to a small mutual-improvement society in which people sought each other's help in bettering their condition. The book was an instant success and was translated into many languages, including Japanese. Having retired after twenty-one years as a railway administrator and prolific author, Smiles suffered a stroke. Recovered, he traveled widely, writing more books about deserving but often unknown achievers. All along, he practiced in his personal life the virtues that he preached. The following selections reveal not only Samuel Smiles' philosophy of life but also the values inspiring the achievements of capitalism.

SELF-HELP

"Heaven helps those who help themselves" is a well-tryed maxim, embodying in a small compass the results of vast human experience. The spirit of self-help is the root of all genuine growth in the individual; and, exhibited in the lives of many, it constitutes the true source of national vigour and strength. Help from without is often enfeebling in its effects, but help from within invariably invigorates. Whatever is done *for* men or classes, to a certain extent takes away the stimulus and necessity of doing for themselves; and where men are subjected to over-guidance and over-government, the inevitable tendency is to render them comparatively helpless.

Even the best institutions can give a man no active help. Perhaps the most they can do is, to leave him free to develop himself and improve

his individual condition. But in all times men have been prone to believe that their happiness and well-being were to be secured by means of institutions rather than by their own conduct. Hence the value of legislation as an agent in human advancement has usually been much over-estimated. . . . [N]o laws, however stringent, can make the idle industrious, the thriftless provident, or the drunken sober. Such reforms can only be effected by means of individual action, economy, and self-denial; by better habits, rather than by greater rights. . . .

National progress is the sum of individual industry, energy, and uprightness, as national decay is of individual idleness, selfishness, and vice. What we are accustomed to decry as great social evils, will, for the most part, be found to be but the outgrowth of man's own perverted life; and though we may endeavour to cut them down and extirpate them by means of Law, they will only spring up again with fresh luxuriance in some other form, unless the conditions of personal life and character are radically improved. If this view

Samuel Smiles, *Self-Help; with Illustrations of Conduct and Perseverance* (London: John Murray, 1897), pp. 1–3.

be correct, then it follows that the highest patriotism and philanthropy consist, not so much in altering laws and modifying institutions, as in helping and stimulating men to elevate and improve themselves by their own free and independent individual action.

It may be of comparatively little consequence how a man is governed from without, whilst everything depends upon how he governs himself from within. The greatest slave is not he who is ruled by a despot, great though that evil be, but he who is the thrall of his own moral ignorance, selfishness, and vice. . . .

Smiles' book *Thrift*, published in 1875, restates and expands on the themes stressed in *Self-Help*.

THRIFT

Every man is bound to do what he can to elevate his social state, and to secure his independence. For this purpose he must spare from his means in order to be independent in his condition. Industry enables men to earn their living; it should also enable them to learn to live. Independence can only be established by the exercise of forethought, prudence, frugality, and self-denial. To be just as well as generous, men must deny themselves. The essence of generosity is self-sacrifice.

The object of this book is to induce men to employ their means for worthy purposes, and not to waste them upon selfish indulgences. Many enemies have to be encountered in accomplishing this object. There are idleness, thoughtlessness, vanity, vice, intemperance. The last is the worst enemy of all. Numerous cases are cited in the course of the following book, which show that one of the best methods of abating the curse of Drink is to induce old and young to practice the virtue of Thrift. . . .

Samuel Smiles, *Thrift* (New York: A. L. Burt, n.d.), pp. 6, 14, 18, 21.

It is the savings of individuals which compose the wealth—in other words, the well-being—of every nation. On the other hand, it is the wastefulness of individuals which occasions the impoverishment of states. So that every thrifty person may be regarded as a public benefactor, and every thriftless person as a public enemy. . . .

. . . All that is great in man comes of labor—greatness in art, in literature, in science. Knowledge—"the wing wherewith we fly to heaven"—is only acquired through labor. Genius is but a capability of laboring intensely; it is the power of making great and sustained efforts. Labor may be a chastisement, but it is indeed a glorious one. It is worship, duty, praise, and immortality—for those who labor with the highest aims and for the purest purposes. . . .

. . . Of all wretched men, surely the idle are the most so—those whose life is barren of utility; who have nothing to do except to gratify their senses. Are not such men the most querulous, miserable, and dissatisfied of all, constantly in a state of *ennui* [boredom], alike useless to themselves and to others—mere cumberers [troublesome occupiers] of the earth, who, when removed, are missed by none, and whom none regret? Most wretched and ignoble lot, indeed, is the lot of the idlers.

Who have helped the world onward so much as the workers; men who have had to work from necessity or from choice? All that we call progress—civilization, well-being, and prosperity—depends upon industry, diligently applied—from the culture of a barley-stalk to the construction of a steamship; from the stitching of a collar to the sculpturing of "the statue that enchants the world."

All useful and beautiful thoughts, in like manner, are the issue of labor, of study, of observation, of research, of diligent elaboration. . . .

By the working-man we do not mean merely the man who labors with his muscles and sinews. A horse can do this. But *he* is pre-eminently the working-man who works with his brain also, and whose whole physical system is under the influence of his higher faculties. The man who paints a picture, who writes a book, who makes a law, who creates a poem, is a working-man

of the highest order: not so necessary to the physical sustainment of the community as the plowman or the shepherd, but not less important as providing for society its highest intellectual nourishment. . . .

But a large proportion of men do not provide for the future. They do not remember the past.

They think only of the present. They preserve nothing. They spend all that they earn. They do not provide for themselves; they do not provide for their families. They may make high wages, but eat and drink the whole of what they earn. Such people are constantly poor, and hanging on the verge of destitution. . . .

REVIEW QUESTIONS

1. What, according to Samuel Smiles, were the key values that should guide the individual?
2. How did Smiles define success in life?
3. What, in his opinion, were the enemies of individual and national achievement?
4. Do Smiles' writings offer good advice to the poor in the United States today? Explain why or why not.

6 Reformers

Rapid industrialization created numerous hardships for factory hands, including long hours, harsh discipline, unsafe working conditions, and child labor. The distress of workers, which was publicized by parliamentary investigating committees and enlightened intellectuals, spurred a demand for reform. Early socialists like Robert Owen proposed establishing model communities for workers and their families. Other reformers urged parliamentary reforms that would give workers a voice in the political process.

Robert Owen *A NEW VIEW OF SOCIETY*

In 1799, Robert Owen (1771–1858) became part owner and manager of the New Lanark cotton mills in Scotland. Distressed by the widespread mistreatment of workers, Owen resolved to improve the lives of his employees and show that it was possible to do so without destroying profits. He raised wages, upgraded working conditions, refused to hire children under ten, and provided workers with neat homes, food, and clothing, all at reasonable prices. He set up schools for children and for adults. In every way, he demonstrated his belief that healthier, happier workers produced more than the less fortunate ones. Owen believed that industry and technology could and would enrich humankind if they were organized according to the proper principles. Visitors came from all over Europe to see Owen's factories.

Just like many philosophes during the Enlightenment, Owen was convinced that the environment was the principal shaper of character—that the ignorance,

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alcoholism, and crime of the poor derived from bad living conditions. Public education and factory reform, said Owen, would make better citizens of the poor. Owen came to believe that the entire social and economic order must be replaced by a new system based on harmonious group living rather than on competition. He established a model community at New Harmony, Indiana, but it was short-lived.

In the following selection from *A New View of Society* (1813), Owen proposes the establishment of a model community that would ameliorate the plight of the poor and unemployed.

The immediate cause of the present distress is the depreciation of human labour. This has been occasioned by the general introduction of mechanism into the manufactures of Europe and America, but principally into those of Britain, where the change was greatly accelerated by the inventions of Arkwright¹ and Watt².

The introduction of mechanism into the manufacture of objects of desire in society reduced their price; the reduction of price increased the demand for them, and generally to so great an extent as to occasion more human labour to be employed after the introduction of machinery than had been employed before. . . .

A little reflection will show that the working classes have now no adequate means of contending with mechanical power; one of three results must therefore ensue:—

1. The use of mechanism must be greatly diminished; or,
2. Millions of human beings must be starved, to permit its existence to the present extent; or,
3. Advantageous occupation must be found for the poor and unemployed working classes, to whose labour mechanism must be rendered subservient, instead of being applied, as at present, to supersede it. . . .

It would . . . be a . . . sign of barbarism, and an act of gross tyranny, were any government to permit mechanical power to starve millions of human beings. The thought will

Robert Owen, *A New View of Society* (New York: Bliss & White, 1825), pp. 145-55.

not admit of one moment's contemplation; it would inevitably create unheard-of misery to all ranks. . . .

Under the existing laws,³ the unemployed working classes are maintained by, and consume part of, the property and produce of the wealthy and industrious, while their powers of body and mind remain unproductive. They frequently acquire the bad habits which ignorance and idleness never fail to produce; they amalgamate with the regular poor, and become a nuisance to society.

Most of the poor have received bad and vicious habits from their parents; and so long as their present treatment continues, those bad and vicious habits will be transmitted to their children and, through them, to succeeding generations.

Any plan, then, to ameliorate their condition, must prevent bad and vicious habits from being taught to their children, and provide the

¹Richard Arkwright (1732-1792) invented the water frame, a spinning machine powered by water that speeded up production. Now it was more efficient to bring many workers together rather than sending out work to individuals in their homes, a development that marked the beginning of the factory system. —Bds.

²James Watt (1736-1819), a Scottish engineer, developed the steam engine in the 1760s. Because steam power ran on coal or wood, textile mills were no longer restricted to power supplied by rivers and streams; they could be built anywhere. — Bds.

³The Poor Law was established in 1601 and taxed all householders in each parish to provide relief to the aged, sick, and infant poor in the parish, as well as employing the able-bodied poor in the workhouse. The law was supplemented in the late eighteenth century to provide allowances to workers who received wages beneath subsistence level. This proved to be so expensive that in the Poor Law reform in 1834, pauperism was stigmatized as a moral failing, and the only relief provided was employment in the workhouse. — Bds.

means by which only good and useful ones may be given to them. . . .

Under this view of the subject, any plan for the amelioration of the poor should combine means to prevent their children from acquiring bad habits, and to give them good ones—to provide useful training and instruction for them—to provide proper labour for the adults—to direct their labour and expenditure so as to produce the greatest benefit to themselves and to society; and to place them under such circumstances as shall remove them from unnecessary temptations, and closely unite their interest and duty.

The plan represented is on a scale considered to be sufficient to accommodate about 1,200 persons.

And these are to be supposed men, women, and children, of all ages, capacities, and dispositions; most of them very ignorant; many with bad and vicious habits, possessing only the ordinary bodily and mental faculties of human beings, and who require to be supported out of the funds appropriated to the maintenance of the poor—individuals who are at present not only useless and a direct burthen on the public, but whose moral influence is highly pernicious, since they are the medium by which ignorance and certain classes of vicious habits and crimes are fostered and perpetuated in society.

It is evident that while the poor are suffered to remain under the circumstances in which they have hitherto existed, they and their children, with very few exceptions, will continue unaltered in succeeding generations.

In order to effect any radically beneficial change in their character, they must be removed from the influence of such circumstances, and placed under those which, being congenial to the natural constitution of man and the well-being of society, cannot fail to produce that amelioration in their condition which all classes have so great an interest in promoting.

Such circumstances, after incessant application to the subject, I have endeavoured to combine in the arrangement of the establishment represented in the drawings, so far as the

present state of society will permit. These I will not attempt to explain more particularly.

Each lodging-room within the squares is to accommodate a man, his wife, and two children under three years of age; and to be such as will permit them to have much more comforts than the dwellings of the poor usually afford.

It is intended that the children above three years of age should attend the school, eat in the mess-room, and sleep in the dormitories; the parents being, of course, permitted to see and converse with them at meals and all other proper times;—that before they leave school they shall be well instructed in all necessary and useful knowledge;—that every possible means shall be adopted to prevent the acquirement of bad habits from their parents or otherwise;—that no pains shall be spared to impress upon them such habits and dispositions as may be most conducive to their happiness through life, as well as render them useful and valuable members of the community to which they belong.

It is proposed that the women should be employed—

First,—In the care of their infants, and in keeping their dwellings in the best order.

Second,—In cultivating the gardens to raise vegetables for the supply of the public kitchen.

Third,—In attending to such of the branches of the various manufactures as women can well undertake; but not to be employed in them more than four or five hours in the day.

Fourth,—In making up clothing for the inmates of the establishment.

Fifth,—In attending occasionally, and in rotation, in the public kitchen, mess-rooms, and dormitories; and, when properly instructed, in superintending some parts of the education of the children in the schools.

It is proposed that the elder children should be trained to assist in gardening and manufacturing for a portion of the day, according to their strength; and that the men should be employed, all of them, in agriculture, and also in manufactures, or in some other occupation for the benefit of the establishment.

The ignorance of the poor, their ill-training, and their want of a rational education make it necessary that those of the present generation should be actively and regularly occupied through the day in some essentially useful work; yet in such a manner as that their employment should be healthy and productive. The plan which has been described will most amply admit of this. . . .

It is impossible to find language sufficiently strong to express the inconsistency, as well as the injustice, of our present proceedings towards the poor and working classes. They are left in gross ignorance; they are permitted to be trained up in habits of vice, and in the commission of crimes; and, as if purposely to keep them in ignorance and vice, and goad them on to commit criminal acts, they are perpetually surrounded with temptations which cannot fail to produce all those effects. . . .

The poor and unemployed working classes, however, cannot, must not, be abandoned to their fate, lest the consequences entail misfortune on us all. Instead of being left, as they now are, to the dominion of ignorance, and to the influence of circumstances which are fatal to their industry and morals—a situation in which it is easy to perceive the inefficacy, or rather the injuriousness, of granting them a provision in a mere pecuniary shape—they should, on the contrary, be afforded the means of procuring a certain and comfortable subsistence by their labour, under a system

which will not only direct that labour and its earnings to the best advantage, but, at the same time, place them under circumstances the most favourable to the growth of morals and of happiness. In short, instead of allowing their habits to proceed under the worst influence possible, or rather, as it were, to be left to chance, thus producing unintentionally crimes that render necessary the severities of our penal code, let a system for the prevention of pauperism and of crimes be adopted, and the operation of our penal code will soon be restricted to very narrow limits.

The outlines of such a plan, it is presumed, have been, however imperfectly, suggested and sketched in this Report. . . .

The principles and plan are now more fully before the public. If the former contain error, or the latter be impracticable, it becomes the duty of many to expose either. If, however, the plan shall prove, on investigation, to be correct in principle, to be easy of practice, and that it can relieve the poor and unemployed of the working classes from the grievous distresses and degradation under which they suffer, it becomes equally the duty of all who profess to desire the amelioration of the lower orders, to exert themselves without further delay to carry it into execution, in order that another year of extensive and unnecessary suffering and demoralization, from the want of a sufficiency of wholesome food and proper training and instruction, may not uselessly pass away.

REVIEW QUESTION

What bad habits did Owen attribute to the poor? How did he propose to remedy the situation?