

Frederick Engels on the Domestic Textile Industry and Its Industrialization, 1845

(Frederick Engels (1820-95), Karl Marx's friend and collaborator, was the son of a German textile manufacturer in the Rhineland. He came to work in his Father's Manchester factory and wrote his classic description of working-class life in 1844. Engels provided an idealized view of the domestic textile industry before industrialization and a gripping account of working conditions in the new factories and urban centers. Frederick Engels. *The Condition of the Working-Class in England* in 1844, English edn, 1892, trans Mrs F. K. Wischnewetzky, 1-5; in J. T. Ward, ed., *The Factory System, Vol. I, Birth and Growth* (New York: Barnes & Noble, 1970), pp. 64-68.)

The history of the proletariat in England begins with the second half of the last century, with the invention of the steam engine and of machinery for working cotton. These inventions gave rise, as is well known, to an industrial revolution, a revolution which altered the whole civil society; one, the historical importance of which is only now beginning to be recognised. England is the classic soil of this transformation, which was all the mightier, the more silently it proceeded; and England is, therefore, the classic land of its chief product also, the proletariat. Only in England can the proletariat be studied in all its relations and from all sides.

We have not, here and now, to deal with the history of this revolution, nor with its vast importance for the present and the future. Such a delineation must be reserved for a future, more comprehensive work. For the moment, we must limit ourselves to the little that is necessary for understanding the facts that follow, for comprehending the present state of the English proletariat.

Before the introduction of machinery, the spinning and weaving of raw materials was carried on in the working-man's home. Wife and daughter spun the yarn that the father wove or that they sold, if he did not work it up himself. These weaver families lived in the country in the neighbourhood of the towns, and could get on fairly well with their wages, because the home market was almost the only one, and the crushing power of competition that came later, with the conquest of foreign markets and the extension of trade, did not yet press upon wages. There was, further, a constant increase in the demand for the home market, keeping pace with the slow increase in population and employing all the workers; and there was also the impossibility of vigorous competition of the workers among themselves, consequent upon the rural dispersion of their homes. So it was that the weaver was usually in a position to lay by something, and rent a little piece of land, that he cultivated in his leisure hours, of which he had as many as he chose to take, since he could weave whenever and as long as he pleased. True, he was a bad farmer and managed his land inefficiently, often obtaining but poor crops; nevertheless, he was no proletarian, he had a stake in the country, he was permanently settled, and stood one step higher in society than the English workman of to-day.

So the workers vegetated throughout a passably comfortable existence, leading a righteous and peaceful life in all piety and probity; and their material position was far better than that of their successors. They did not need to over-work; they did no more

than they chose to do, and yet earned what they needed. They had leisure for healthful work in garden or field, work which, in itself, was recreation for them, and they could take part besides in the recreations and games of their neighbours, and all these games-bowling, cricket, football, etc., contributed to their physical health and vigour. They were, for the most part, strong, well-built people, in whose physique little or no difference from that of their peasant neighbours was discoverable. Their children grew up in the fresh country air, and, if they could help their parents at work, it was only occasionally; while of eight or twelve hours work for them there was no question.

What the moral and intellectual character of this class was may be guessed. Shut off from the towns, which they never entered, their yarn and woven stuff being delivered to travelling agents for payment of wages-so shut off that old people who lived quite in the neighbourhood of the town never went thither until they were robbed of their trade by the introduction of machinery and obliged to look about them in the towns for work-the weavers stood upon the moral and intellectual plane of the yeomen with whom they were usually immediately connected through their little holdings. They regarded their squire, the greatest landholder of the region, as their natural superior; they asked advice of him, laid their small disputes before him for settlement, and gave him all honour, as this patriarchal relation involved. They were "respectable" people, good husbands and fathers, led moral lives because they had no temptation to be immoral, there being no grogeries or low houses in their vicinity, and because the host, at whose inn they now and then quenched their thirst was also a respectable man, usually a large tenant farmer who took pride in his good order, good beer, and early hours. They had their children the whole day at home, and brought them up in obedience and the fear of God; the patriarchal relations-hip remained undisturbed so long as the children were unmarried. The young people grew up in idyllic simplicity and intimacy with their playmates until they married; and even though sexual intercourse before marriage almost unfailingly took place, this happened only when the moral obligation of marriage was recognised on both sides, and a subsequent wedding made everything good. In short, the English industrial workers of those days lived and thought after the fashion still to be found here and there in Germany, in retirement and seclusion, without mental activity and without violent fluctuations in their position in life. They could rarely read and far more rarely write; went regularly to church, never talked politics, never conspired, never thought, delighted in physical exercises, listened with inherited reverence when the Bible was read, and were, in their unquestioning humility, exceedingly well-disposed towards the 'superior' classes. But intellectually, they were dead; lived only for their petty, private interest, for their looms and gardens, and knew nothing of the mighty movement which, beyond their horizon, was sweeping through mankind. They were comfortable in their silent vegetation, and but for the industrial revolution they would never have emerged from this existence, which, cosily romantic as it was, was nevertheless not worthy of human beings. In truth, they were not human beings; they were merely toiling machines in the service of the few aristocrats who had guided history down to that time. The industrial revolution has simply carried this out to its logical end by making the workers machines pure and simple, taking from them the last trace of independent activity, and so forcing them to think and demand a position worthy of men. As in France politics, so in England manufacture, and the movement of civil society in general drew into the whirl of history

the last classes which had remained sunk in apathetic indifference to the universal interests of mankind.

The first invention which gave rise to a radical change in the state of the English workers was the jenny, invented in the year 1764 by a weaver, James Hargreaves, of Standhill, near Blackburn in North Lancashire. This machine was the rough beginning of the later invented mule, and was moved by hand. Instead of one spindle like the ordinary spinning-wheel, it carried sixteen or eighteen manipulated by a single workman. This invention made it possible to deliver more yarn than heretofore. Whereas, though one weaver had employed three spinners, there had never been enough yarn, and the weaver had often been obliged to wait for it, there was now more yarn to be had than could be woven by the available workers. The demand for woven goods, already increasing, rose yet more in consequence of the cheapness of these goods, which cheapness, in turn, was the outcome of the diminished cost of producing the yarn. More weavers were needed, and weavers' wages rose. Now that the weaver could earn more at his loom, he gradually abandoned his farming, and gave his whole time to weaving. At that time a family of four grown persons and two children (who were set to spooling) could earn, with ten hours' daily work, four pounds sterling in a week, and often more if trade was good and work pressed. It happened often enough that a single weaver earned two pounds a week at his loom. By degrees the class of farming weavers wholly disappeared, and was merged in the newly arising class of weavers who lived wholly upon wages, had no property whatever, not even the pretended property of a holding, and so became working-men, proletarians. Moreover, the old relation between spinner and weaver was destroyed. Hitherto, so far as this had been possible, yarn had been spun and woven under one roof. Now that the jenny as well as the loom required a strong hand, men began to spin, and whole families lived by spinning, while others laid the antiquated, superseded spinning-wheel aside; and, if they had not means of purchasing a jenny, were forced to live upon the wages of the father alone. Thus began with spinning and weaving that division of labour which has since been so infinitely perfected.

Andrew Ure on the Philosophy of the Factory System, 1835

(Dr. Andrew Ure (1778-1857), a Professor of Chemistry and Natural Philosophy at Anderson's College, Glasgow, was one of the most enthusiastic and uncritical analysts of the new factory system. In his classic apology for the new factory system, based upon a several month tour, he attempts to explain how the factory system differed from more traditional industrial establishments. Andrew Ure, *The Philosophy of Manufactures: or, An Exposition of the Scientific, Moral, and Commercial Economy of the Factory System of Great Britain, 1835*, 5-8, 13-14, 17-19; in J. T. Ward, ed., *The Factory System, Vol. I, Birth and Growth* (New York: Barnes & Noble, 1970), pp. 140-43.)

This island is pre-eminent among civilized nations for the prodigious development of its factory wealth, and has been therefore long viewed with a jealous admiration by foreign powers. This very pre-eminence, however, has been contemplated in a very different light by many influential members of our own community, and has been even denounced by them as the certain origin of innumerable evils to the people, and of revolutionary convulsions to the state. If the affairs of the kingdom be wisely administered, I believe such allegations and fears will prove to be groundless, and to proceed more from the envy of one ancient and powerful order of the commonwealth, towards another suddenly grown into political importance, than from the nature of things.

In the recent discussions concerning our factories, no circumstance is so deserving of remark, as the gross ignorance evinced by our leading legislators and economists, -gentlemen well informed in other respects, -relative to the nature of those stupendous manufactures which have so long provided the rulers of the kingdom with the resources of war, and a great body of the people with comfortable subsistence; which have, in fact, made this island the arbiter of many nations, and the benefactor of the globe itself. * Till this ignorance be dispelled, no sound legislation need be expected on manufacturing subjects....

The blessings which physico-mechanical science has bestowed on society, and the means it has still in store for ameliorating the lot of mankind, has been too little dwelt upon; while, on the other hand, it has been accused of lending itself to the rich capitalists as an instrument for harassing the poor, and of exacting from the operative an accelerated rate of work. It has been said, for example, that the steam-engine now drives the power-looms with such velocity as to urge on their attendant weavers at the same rapid pace; but that the hand-weaver, not being subjected to this restless agent, can throw his shuttle and move his treddles at his convenience. There is, however, this difference in the two cases, that in the factory, every member of the loom is so adjusted, that the driving force leaves the attendant nearly nothing at all to do, certainly no muscular fatigue to sustain, while it procures for him good, unfailing wages, besides a healthy workshop gratis: whereas the non factory weaver, having everything to execute by muscular exertion, finds the labour irksome, makes in consequence innumerable short pauses, separately of little account, but great when added together; earns therefore proportionally low wages, while he loses his health by poor diet and the dampness of his hovel. Dr. Carbutt of Manchester says, "With regard to Sir Robert Peel's assertion a few evenings

ago, that the hand-loom weavers are mostly small farmers, nothing can be a greater mistake; they live, or rather they just keep life together, in the most miserable manner, in the cellars and garrets of the town, working sixteen or eighteen hours for the merest pittance." **

The constant aim and effect of scientific improvement in manufactures are philanthropic, as to tend to relieve the workmen either from niceties of adjustment which exhaust his mind and fatigue his eyes, or from painful repetition of efforts which distort or wear out his frame. .

The term *Factory System*, in technology, designates the combined operation of many orders of work-people, adult and young, in tending with assiduous skill a series of productive machines continuously impelled by a central power. This definition includes such organizations as cotton-mills, flax-mills, silk-mills, woollen-mills, and certain engineering works; but it excludes those in which the mechanisms do not form a connected series, nor are dependent on one prime mover. Of the latter class, examples occur in iron-works, dye-works, soap works, brass-foundries, &c. Some authors, indeed, have comprehended under the title *factory*, all extensive establishments wherein a number of people co-operate towards a common purpose of art; and would therefore rank breweries, distilleries, as well as the workshops of carpenters, turners, coopers, &c., under the factory system. But I conceive that this title, in its strictest sense, involves the idea of a vast automaton, composed of various mechanical and intellectual organs, acting in un-interrupted concert for the production of a common object, all of them being subordinated to a self-regulated moving force. If the marshalling of human beings in systematic order for the execution of any technical enterprise were allowed to constitute a factory, this term might embrace every department of civil and military engineering,-a latitude of application quite inadmissible.....

. . . In my recent tour, continued during several months, through the manufacturing districts, I have seen tens of thousands of old, young, and middle-aged of both sexes, many of them too feeble to get their daily bread by any of the former modes of industry, earning abundant food, raiment, and domestic accommodation, without perspiring at a single pore, screened meanwhile from the summer's sun and the winter's frost, in apartments more airy and salubrious than those of the metropolis in which our legislative and fashionable aristocracies assemble. In those spacious halls the benignant power of steam summons around him his myriads of willing menials, and assigns to each the regulated task, substituting for painful muscular effort on their part, the energies of his own gigantic arm, and demanding in return only attention and dexterity to correct such little aberrations as casually occur in his workmanship. The gentle docility of this moving force qualifies it for impelling the tiny bobbins of the lace-machine with a precision and speed inimitable by the most dexterous hands, directed by the sharpest eyes. Hence, under its auspices, and in obedience to Arkwright's polity, magnificent edifices, surpassing far in number, value, usefulness, and ingenuity of construction, the boasted monuments of Asiatic, Egyptian, and Roman despotism, have, within the short period of fifty years, risen up in this kingdom, to show to what extent capital, industry, and science may augment the resources of a state, while they meliorate the condition of its citizens. Such is the factory system, replete with prodigies in mechanics and political economy, which promises in its future growth to become the great minister of civilization to the terraqueous globe, enabling this country, as its heart, to diffuse along with its

commerce the life-blood of science and religion to myriads of people still lying "in the region and shadow of death.

* Even the eminent statesman lately selected by his Sovereign to wield the destinies of this commercial empire-Sir Robert Peel, who derives his family consequence from the cotton trade, seems to be but little conversant with its nature and condition....

**Letter of 3rd of May, 1833, to Dr. Hawkins in his Medical Report, Factory Commission, P.

Robert Owen on the social and moral implications of the factory system, 1815

(Robert Owen, *Observations on the Effect of the Manufacturing System* (1815); in J. F. C. Harrison, ed., *Society and Politics in England, 1780-1960*, New York: Harper & Row, 1965, pp. 66-70. Owen, 1771-1858, rose to become a wealthy cotton spinner at New Lanark, Scotland, where he established a famous model industrial community. In this pamphlet he explains the moral and social effect of the new manufacturing system. In subsequent years, he gave up his business interests and devoted himself to social reform, becoming the most influential British utopian socialist of his time.)

THOSE who were engaged in the trade, manufactures, and commerce of this country thirty or forty years ago formed but a very insignificant portion of the knowledge, wealth, influence, or population of the Empire.

Prior to that period, Britain was essentially agricultural. But, from that time to the present, the home and foreign trade have increased in a manner so rapid and extraordinary as to have raised commerce to an importance, which it never previously attained in any country possessing so much political power and influence. . . .

This change has been owing chiefly to the mechanical inventions which introduced, the cotton trade into this country, and to the cultivation of the cotton tree in America. The wants which this trade created for the various materials requisite to forward its multiplied operations, caused an extraordinary demand for almost all the manufactures previously established, and, of course, for human labour. The numerous fanciful and useful fabrics manufactured from cotton soon became objects of desire in Europe and America: and the consequent extension of the British foreign trade was such as to astonish and confound the most enlightened statesmen both at home and abroad.

The immediate effects of this manufacturing phenomenon were a rapid increase of the wealth, industry, population, and political influence of the British Empire; and by the aid of which it has been enabled to contend for five-and-twenty years against the most formidable military and immoral power that the world perhaps ever contained.

These important results, however, great as they really are, have not been obtained without accompanying evils of such a magnitude as to raise a doubt whether the latter do not preponderate over the former.

Hitherto, legislators have appeared to regard manufactures only in one point of view, as a source of national wealth.

The other mighty consequences which proceed from extended manufactures when *left to their natural progress*, have never yet engaged the attention of any legislature. Yet the political and moral effects to which we allude, well deserve to occupy the best faculties of the greatest and the wisest statesmen.

The general diffusion of manufactures throughout a country generates a new character in its inhabitants; and as this character is formed upon a principle quite unfavourable to individual or general happiness, it will produce the most lamentable and permanent evils, unless its tendency be counteracted by legislative interference and direction.

The manufacturing system has already so far extended its influence over the British Empire, as to effect an essential change in the general character of the mass of the people.

This alteration is still in rapid progress; and ere long, the comparatively happy simplicity of the agricultural peasant will be wholly lost amongst us. It is even now scarcely anywhere to be found without a mixture of those habits which are the offspring of trade, manufactures, and commerce.

The acquisition of wealth, and the desire which it naturally creates for a continued increase, have introduced a fondness for essentially injurious luxuries among a numerous class of individuals who formerly never thought of them, and they have also generated a disposition which strongly impels its possessors to sacrifice the best feelings of human nature to this love of accumulation. To succeed in this career, the industry of the lower orders, from whose labour this wealth is now drawn, has been carried by new competitors striving against those of longer standing, to a point of real oppression, reducing them by successive changes, as the spirit of competition increased and the ease of acquiring wealth diminished, to a state more wretched than can be imagined by those who have not attentively observed the changes as they have gradually occurred. In consequence, they are at present in a situation infinitely more degraded and miserable than they were before the introduction of these manufactories, upon the success of which their bare subsistence now depends. . . .

The inhabitants of every country are trained and formed by its great leading existing circumstances, and the character of the lower orders in Britain is now formed chiefly by circumstances arising from trade, manufactures, and commerce; and the governing principle of trade, manufactures, and commerce is immediate pecuniary gain, to which on the great scale every other is made to give way. All are sedulously trained to buy cheap and to sell dear; and to succeed in this art, the parties must be taught to acquire strong powers of deception; and thus a spirit is generated through every class of traders, destructive of that open, honest sincerity, without which man cannot make others happy, nor enjoy happiness himself.

Strictly speaking, however, this defect of character ought not to be attributed to the individuals possessing it, but to the overwhelming effect of the system under which they have been trained.

But the effects of this principle of gain, unrestrained, are still more lamentable on the working classes, those who are employed in the operative parts of the manufactures; for most of these branches are more or less unfavourable to the health and morals of adults. Yet parents do not hesitate to sacrifice the well-being of their children by putting them to occupations by which the constitution of their minds and bodies is rendered greatly inferior to what it might and ought to be under a system of common foresight and humanity. . . .

In the manufacturing districts it is common for parents to send their children of both sexes at seven or eight years of age, in winter as well as summer, at six o'clock in the morning, sometimes of course in the dark, and occasionally amidst frost and snow, to enter the manufactories, which are often heated to a high temperature, and contain an atmosphere far from being the most favourable to human life, and in which all those employed in them very frequently continue until twelve o'clock at noon, when an hour is allowed for dinner, after which they return to remain, in a majority of cases, till eight o'clock at night.

The children now find they must labour incessantly for their bare subsistence: they have not been used to innocent, healthy, and rational amusements; they are not permitted

the requisite time, if they had been previously accustomed to enjoy them. They know not what relaxation means, except by the actual cessation from labour. They are surrounded by others similarly circumstanced with themselves; and thus passing on from childhood to youth, they become gradually initiated, the young men in particular, but often the young females also, in the seductive pleasures of the pot-house and inebriation: for which their daily hard labour, want of better habits, and the general vacuity of their minds, tend to prepare them.

Such a system of training cannot be expected to produce any other than a population weak in bodily and mental faculties, and with habits generally destructive of their own comforts, of the well-being of those around them, and strongly calculated to subdue all the social affections. Man so circumstanced sees all around him hurrying forward, at a mail-coach speed, to acquire individual wealth, regardless of him, his comforts, his wants, or even his sufferings, except by way of a *degrading, parish charity*, fitted only to steel the heart of man against his fellows, or to form the tyrant and the slave. To-day he labours for one master, to-morrow for a second, then for a third, and a fourth, until all ties between employers and employed are frittered down to the consideration of what immediate gain each can derive from the other.

The employer regards the employed as mere instruments of gain, while these acquire a gross ferocity of character, which, if legislative measures shall not be judiciously devised to prevent its increase, and ameliorate the condition of this class, will sooner or later plunge the country into formidable and perhaps inextricable state of danger.