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The Industrial Revolution:

A Document Study

Historical Setting:

At the end of the eighteenth century, an industrial revolution began in England and soon spread throughout Europe. This revolution was a technological one, replacing human and animal labor with machines, but it also had great social impact, permanently transforming European society. Included in the effects of industrialization were numerous problems that provoked a variety of responses and proposed solutions from politicians, political scientists and economists.

Directions:

The purpose of this assignment is to explore the effects of the Industrial Revolution and the responses to these effects through the use of historical documents. Like the historian, who reconstructs the past using evidence left by previous generations, you are to carefully analyze, interpret and synthesize the following documents to gain a greater understanding of the Industrial Revolution.

[1]

- How long have you been employed in a silk-mill?

More than thirty years.

- Did you enter it as a child?

Yes, betwixt five and six.

- How many hours a day did you work then?

The same thirty years ago as now.

- What are those hours?

Eleven hours per day and two over-hours: over-hours are working after six in the evening till eight. The regular hours are from six in the morning to six in the evening, and two others are two over-hours: about fifty years ago they began working over-hours.

- What are the intervals for meals?

In our factory twenty minutes for breakfast at eight o'clock, one hour for dinner at two, twenty minutes for tea at five o'clock . . .

- What are the effects of the present system of labour?

From my earliest recollections, I have found the effects to be awfully detrimental to the well-being of the operative; I have observed frequently children carried to factories, unable to walk, and that entirely owing to excessive labour and confinement. The degradation of the workpeople baffles all description: frequently have two of my sisters been obliged to be assisted to the factory and home again, until by-and-by they could go no longer, being totally crippled in their legs. And in the next place, I remember some ten or twelve years ago working in one of the largest firms in Macclesfield, (Messrs. Baker and Pearson,) with about twenty-five men, where they were scarce one half fit for His Majesty's service. Those that are straight in their limbs are stunted in their growth; much inferior to their fathers in point of strength. 3dly, Through excessive labour and confinement there is often a total loss of appetite; a kind of langour steals over the whole frame--enters to the very core--saps the foundation of the best constitution--and lays our strength prostrate in the dust. In the 4th place, by protracted labour there is an alarming increase of cripples in various parts of this town, which has come under my own observation and knowledge.

Testimony by John Wright, a worker in an English silk factory, made to the Parliamentary Commission for Inquiry into the Employment of Children in Factories, 1833

(3)

[2] The account of the physical condition of the manufacturing population in the large towns in the North-eastern District of England is less favourable. It is of this district that the Commissioners state, "We have found undoubted instances of children five years old sent to work thirteen hours a day; and frequently of children nine, ten, and eleven consigned to labour for fourteen and fifteen hours." The effects ascertained by the Commissioners in many cases are, "deformity," and in still more "stunted growth, relaxed muscles, and slender conformation:" "twisting of the ends of the long bones, relaxation of the ligaments of the knees, ankles, and the like." The representation that these effects are so common and universal as to enable some persons invariably to distinguish factory children from other children is, I have no hesitation in saying, an exaggerated and unfaithful picture of their general condition; at the same time it must be said, that the individual instances in which some one or other of those effects of severe labour are discernible are rather frequent than rare. . . .

Upon the whole, there remains no doubt upon my mind, that under the system pursued in many of the factories, the children of the labouring classes stand in need of, and ought to have, legislative protection against the conspiracy insensibly formed between their masters and parents, to tax them to a degree of toil beyond their strength.

In conclusion, I think it has been clearly proved that children have been worked a most unreasonable and cruel length of time daily, and that even adults have been expected to do a certain quantity of labour which scarcely any human being is able to endure. I am of opinion no child under fourteen years of age should work in a factory of any description for more than eight hours a day. From fourteen upwards I would recommend that no individual should, under any circumstances, work more than twelve hours a day; although if practicable, as a physician, I would prefer the limitation of ten hours, for all persons who earn their bread by their industry.

Testimony by a Commission of Medical Examiners
from northeastern England made to the
Parliamentary Commission for Inquiry in the
Employment of Children in Factories, 1833

[3] The last rays of the sun contending with clouds of smoke that drifted across the country, partially illumined a peculiar landscape. Far as the eye could reach, and the region was level, except where a range of limestone hills formed its distant limit, a wilderness of cottages, or tenements that were hardly entitled to a higher name, were scattered for many miles over the land; some detached, some connected in little rows, some clustering in groups, yet rarely forming continuous streets, but interspersed with blazing furnaces, heaps of burning coal, and piles of smouldering ironstone; while forges and engine chimneys roared and puffed in all directions, and indicated the frequent presence of the mouth of the mine, and the bank of the coal-pit. Notwithstanding the whole country might be compared to a vast rabbit warren, it was nevertheless intersected with canals, crossing each other at various levels; and though the subterranean operations were prosecuted with so much avidity that it was not uncommon to observe whole rows of houses awry, from the shifting and hollow nature of the land, still intermingled with heaps of mineral refuse, or of metallic dross, patches of the surface might here and there be recognised, covered, as if in mockery, with grass and corn. . . . But a tree or a shrub, such an existence was unknown in this dingy rather than dreary region.

Benjamin Disraeli, British novelist and Prime Minister (1804-1881), from his novel Sybil, or the Two Nations (1845)

[4] Much has been written about the effects of the industrial revolution on the workers. Some, impressed by the lot of those who went down in the struggle against the machine, have declared that technological change brought little but misery and poverty, and a statistician of repute has set on record his opinion that by the early years of the nineteenth century the standard of life of the British worker had been forced down to Asiatic levels. Mr. Colin Clark can hardly have looked at the statistics which more than a generation of research has produced. The careful studies of Mrs. Gilboy indicate that, over the eighteenth century, the material well-being of the labourer in the woollen area of the Southwest had, indeed, fallen, but that the lot of his fellow in the textile region of the North had steadily improved, and that the labourer of London more than held his own. It is true that the rise of prices after 1793 made many humble people poorer. But before the end of the war (as Professor Silberling has shown) industrial wages in England caught up with retail prices, and in the 'twenties the gain was pronounced. In 1831 the cost of living was 11 per cent higher than in 1790, but over this span of time urban wages had increased, it appears, by no less than 43 per cent.

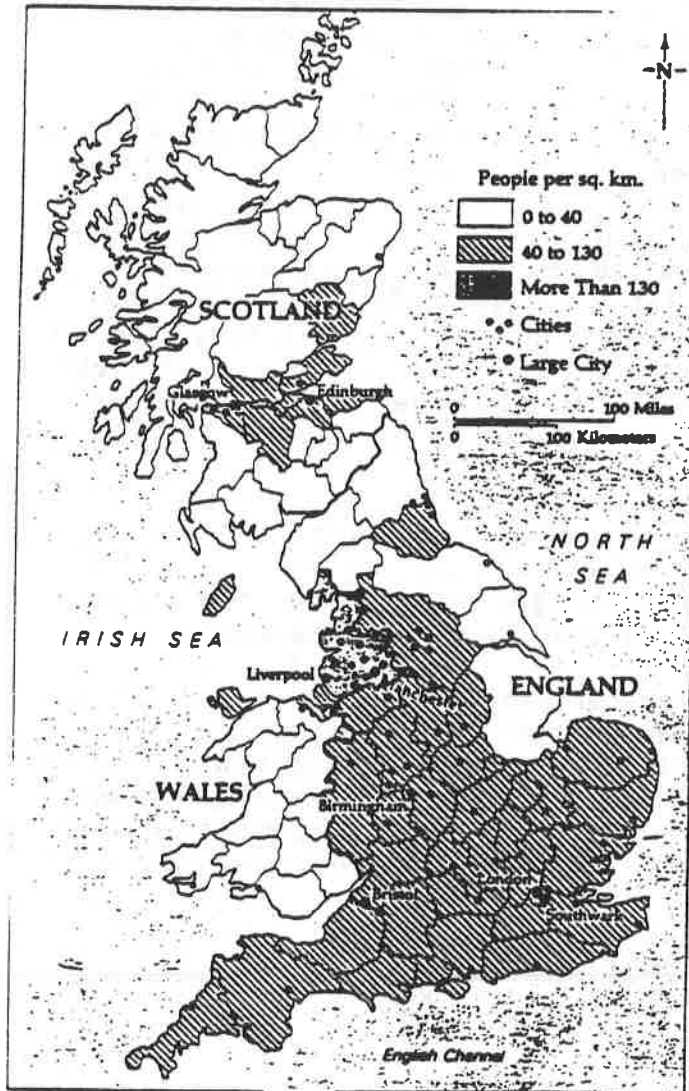
It would have been strange, indeed, if the industrial revolution had simply made the rich richer and the poor poorer . . . [but] the cotton and woollens, and food and drink, which now became available, were consumed not by the few, but by the masses. . . .

The diet of the worker almost certainly improved: there was a substitution of "flower of wheat" for rye and oatmeal; and meat, which had been a rarity, became, with potatoes, the staple dish on the artisan's table. Not all the coal raised from the pits went to feed the furnaces and steam-engines: a warm hearth and a hot meal were of no small consequence to the man who came home wet from the fields.

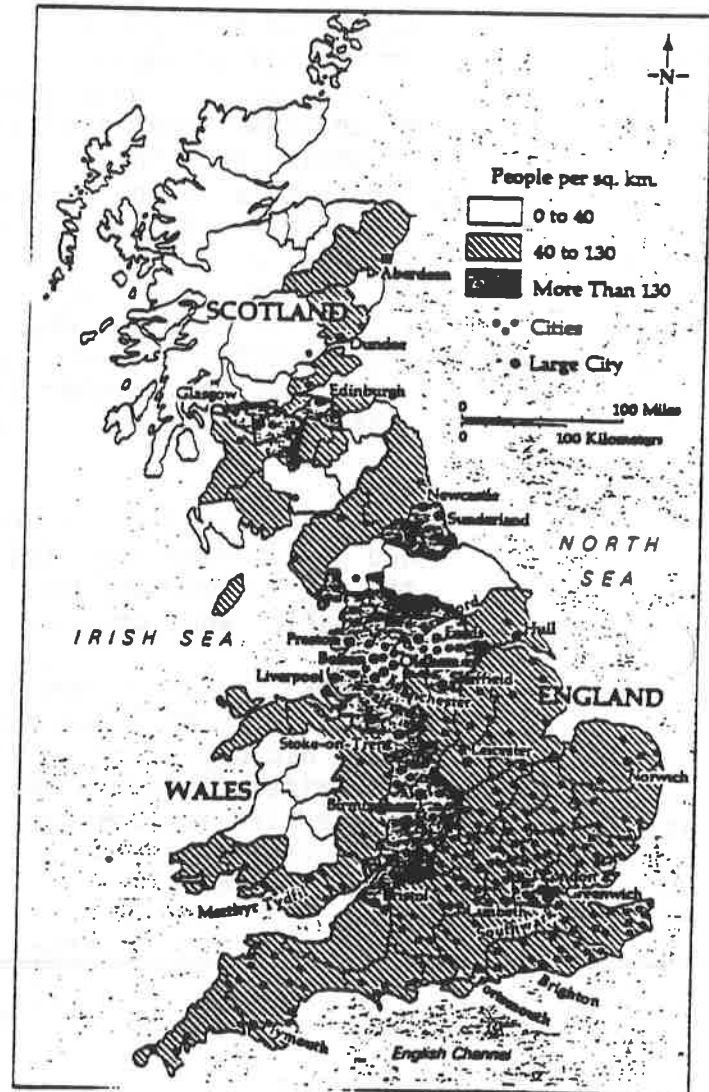
Thomas Ashton, British historian, from his work, The Industrial Revolution: 1760-1830 (1948)

[5]

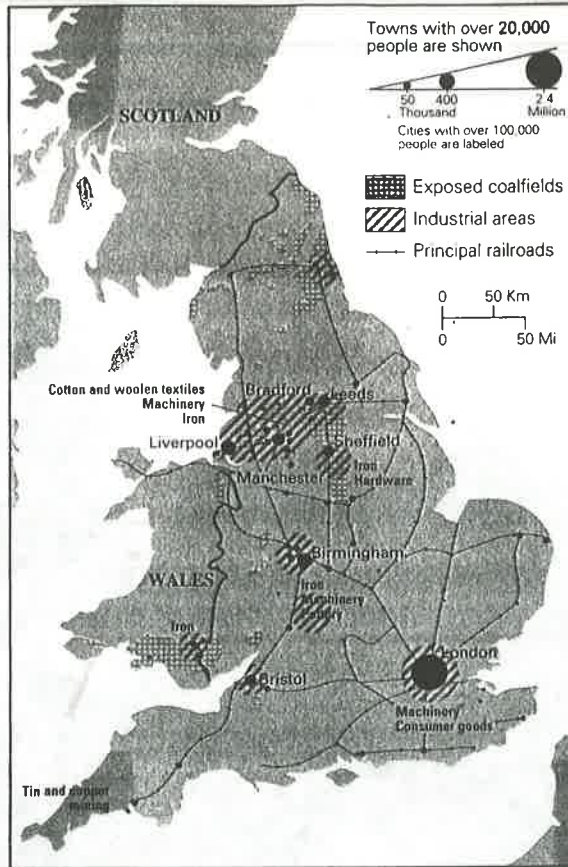
a. Population Density:
England, 1801



b. Population Density:
England, 1851



c. Concentration of Industry in England, 1851



[6]

The Crystal Palace The Great Exhibition of 1851 attracted more than six million visitors, many of whom journeyed to London on the newly built railroads. Companies and countries displayed their products and juries awarded prizes in the strikingly modern Crystal Palace. Are today's malls really different? (Courtesy of the Trustees of the British Museum)



[7]



"The Lunch Hour" (1909) drawing by German artist
Kathe Kollwitz

PART II:

Responses to the Industrial Revolution

- [8] "Heaven helps those who help themselves" is a well tried 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 vigor 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.

Samuel Smiles, British physician and author,
from his book, Self-Help (1859)

- [9] Like all other contracts, wages should be left to the fair and free competition of the market, and should never be controlled by the interference of the legislature.

The clear and direct tendency of the poor laws is in direct opposition to these obvious principles: it is not, as the legislature benevolently intended, to amend the condition of the poor, but to deteriorate the condition of both poor and rich; instead of making the poor rich, they are calculated to make the rich poor; and whilst the present laws are in force, it is quite in the natural order of things that the fund for the maintenance of the poor should progressively increase till it has absorbed all the net revenue of the country, or at least so much of it as the state shall leave to us, after satisfying its own never-failing demands for the public expenditure. . . .

It is truth which admits not a doubt that the comforts and well-being of the poor cannot be permanently secured without some regard on their part, or some effort on the part of the legislature, to regulate the increase of their numbers, and to render less frequent among them early and improvident marriages.

David Ricardo, British economist (1772-1823),
from his work, Principles of Political Economy
and Taxation (1817)

[10] I have never omitted an opportunity of asserting the claim I ventured to put forward nearly eleven years ago; and I return, therefore, this evening, to my original proposition. Sir, I assume as one ground of the argument, that, apart from considerations of humanity, which, nevertheless, should be paramount, the State has an interest and a right to watch over, and provide for the moral and physical well-being of her people: the principle is beyond question; it is recognised and enforced under every form of civilised Government. . . .

Now, if foreign powers consider it a matter both of duty and policy thus to interpose on behalf of their people, we, surely should much more be animated by feelings such as theirs, when we take into our account the vast and progressively increasing numbers who are employed in these departments of industry. See how it stands: in 1818, the total number of all ages, and both sexes, employed in all the cotton factories, was 57,323. In 1835, the number employed in the five departments--cotton, woollen, worsted, flax, and silk, was 354,684. In 1839, the number in the same five departments was 419,590: the total number of both sexes under eighteen years of age, in the same year, was 192,887. Simultaneously, however, with the increase of numbers has been the increase of toil. The labour performed by those engaged in the processes of manufacture, is three times as great as in the beginning of such operations. Machinery has executed, no doubt, the work that would demand the sinews of millions of men; but it has also prodigiously multiplied the labour of those who are governed by its fearful movements. . . .

The Earl of Shaftsbury, British politician and member of the House of Commons (1801-1885), from a speech given in the House of Commons (1844)

[11] The immediate aim of the Communists is the same as that of all the other proletarian [workers] parties: formation of the proletariat into a class, overthrow of the bourgeois [owners] supremacy, conquest of political power by the proletariat.

The theoretical conclusions of the Communists are in no way based on ideas or principles that have been invented, or discovered, by this or that would-be universal reformer.

They merely express, in general terms, actual relations springing from an existing class struggle, from a historical movement going on under our very eyes. The abolition of existing property relations is not at all a distinctive feature of Communism. . . .

The distinguishing feature of Communism is not the abolition of property generally, but the abolition of bourgeois property. But modern bourgeois private property is the final and most complete expression of the system of producing and appropriating products, that is based on class antagonisms, on the exploitation of the many by the few. . . .

The Communists disdain to conceal their views and aims. They openly declare that their ends can be attained only by the forcible overthrow of all existing social conditions. Let the ruling classes tremble at a Communist revolution. The proletarians have nothing to lose but their chains. They have a world to win.

Workingmen of all countries, unite!

Karl Marx, German political scientist (1818-1883), and Friedrich Engels, British political scientist (1820-1895), from their work "The Communist Manifesto" (1848)

[12]

THE INTERNATIONAL

Arise, ye pris'ners of starvation!
Arise, ye wretched of the earth,
For Justice thunders condemnation,
A better world's in birth.
No more tradition's chain shall bind us.
Arise, ye slaves; No more in thrall!
The earth shall rise on new foundations,
We have been naught, we shall be all.

Eugene Pottier, French poet (1816-1887),
from his poem "The International"

[13] In the present Socialist movement these two streams are united: advocates of social reconstruction have learnt the lesson of Democracy, and know that it is through the slow and gradual turning of the popular mind to new principles that social reorganization bit by bit comes. All students of society who are abreast of their time, Socialists as well as Individualists, realize that important organic changes can only be (1) democratic, and thus acceptable to a majority of the people, and prepared for in the minds of all; (2) gradual, and thus causing no dislocation, however rapid may be the rate of progress; (3) not regarded as immoral by the mass of the people, and thus not subjectively demoralizing to them; and (4) in this country at any rate, constitutional and peaceful. Socialists may therefore be quite at one with Radicals in their political methods. Radicals, on the other hand, are perforce realizing that mere political levelling is insufficient to save a State from anarchy and despair. Both sections have been driven to recognize that the root of the difficulty is economic; and there is every day a wider census that the inevitable outcome of Democracy is the control by the people themselves, not only of their own political organization, but, through that, also of the main instruments of wealth production; the gradual substitution of organized cooperation for the anarchy of the competitive struggle; and the consequent recovery, in the only possible way, of what John Stuart Mill calls "the enormous share which the possessors of the instruments of industry are able to take from the produce." The economic side of the democratic idea is, in fact, Socialism itself.

Sidney Webb, British socialist (1859-1947),
from his work Fabian Essays in Socialism
(1889)
