



Adam Smith THE DIVISION OF LABOR

Baines's 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* (see also page 113), 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 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. . . .

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 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 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, 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.

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Modern History Sourcebook:

David Ricardo:

The Iron Law of Wages, 1817

David Ricardo (1772-1823), an English banker was also an important early economist. His most well-known argument was that wages "naturally" tended towards a minimum level corresponding to the subsistence needs of the workers. The attraction of this idea for factory owners is evident. It also influenced Marx in his early pessimistic views about the possibility of workers benefiting from capitalism. Ricardo's views on the "labor theory of value" were also important in Marx's economic thought.

From David Ricardo. *On Wages*

Money, from its being a commodity obtained from a foreign country, from its being the general medium of exchange between all civilized countries, and from its being also distributed among those countries in proportions which are ever changing with every improvement in commerce and machinery, and with every increasing difficulty of obtaining food and necessaries for an increasing population, is subject to incessant variations. In stating the principles which regulate exchangeable value and price, we should carefully distinguish between those variations which belong to the commodity itself, and those which are occasioned by a variation in the medium in which value is estimated, or price expressed.

A rise in wages, from an alteration in the value of money, produces a general effect on price, and for that reason it produces no real effect whatever on profits. On the contrary, a rise of wages, from the circumstance of the labourer being more liberally rewarded, or from a difficulty of procuring the necessaries on which wages are expended, does not, except in some instances, produce the effect of raising price, but has a great effect in lowering profits. In the one case, no greater proportion of the annual labour of the country is devoted to the support of the labourers; in the other case, a larger portion is so devoted.

Labour, like all other things which are purchased and sold, and which may be increased or diminished in quantity, has its natural and its market price. The natural price of labour is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution.

The power of the labourer to support himself, and the family which may be necessary to keep up the number of labourers, does not depend on the quantity of money which he may receive for wages, but on the quantity of food, necessaries, and conveniences become essential to him from habit, which that money will purchase. The natural price of labour, therefore, depends on the price of the food, necessaries, and conveniences required for the support of the labourer and his family. With a rise in the price of food and necessaries, the natural price of labour will rise; with the fall in their price, the natural price of labour will fall.

With the progress of society the natural price of labour has always a tendency to rise, because one of the principal commodities by which its natural price is regulated, has a tendency to become dearer, from the greater difficulty of producing it. As, however, the improvements in agriculture, the discovery of new markets, whence provisions may be imported, may for a time counteract the tendency to a rise in the price of necessaries, and may even occasion their natural price to fall, so will the same causes produce the correspondent effects on the natural price of labour.

The natural price of all commodities, excepting raw produce and labour, has a tendency to fall, in the progress of wealth and population; for though, on one hand, they are enhanced in real value, from the rise in the natural price of the raw material of which they are made, this is more than counterbalanced by the improvements in machinery, by the better division and distribution of labour, and by the increasing skill, both in science and art, of the producers.

The market price of labour is the price which is really paid for it, from the natural operation of the proportion of the supply to the demand; labour is dear when it is scarce, and cheap when it is plentiful. However much the market price of labour may deviate from its natural price, it has, like commodities, a tendency to conform to it.

It is when the market price of labour exceeds its natural price, that the condition of the labourer is flourishing and happy, that he has it in his power to command a greater proportion of the necessaries and enjoyments of life, and therefore to rear a healthy and numerous family. When, however, by the encouragement which high wages give to the increase of population, the number of labourers is increased, wages again fall to their natural price, and indeed from a reaction sometimes fall below it.

When the market price of labour is below its natural price, the condition of the labourers is most wretched: then poverty deprives them of those comforts which custom renders absolute necessities. It is only after their privations have reduced their number, or the demand for labour has increased, that the market price of labour will rise to its natural price, and that the labourer will have the moderate comforts which the natural rate of wages will afford.

Notwithstanding the tendency of wages to conform to their natural rate, their market rate may, in an improving society, for an indefinite period, be constantly above it; for no sooner may the impulse, which an increased capital gives to a new demand for labour, be obeyed, than another increase of capital may produce the same effect; and thus, if the increase of capital be gradual and constant, the demand for labour may give a continued stimulus to an increase of people....

Thus, then, with every improvement of society, with every increase in its capital, the market wages of labour will rise; but the permanence of their rise will depend on the question, whether the natural price of labour has also risen; and this again will depend on the rise in the natural price of those necessaries on which the wages of labour are expended....

As population increases, these necessaries will be constantly rising in price, because more labour will be necessary to produce them. If, then, the money wages of labour should fall, whilst every commodity on which the wages of labour were expended rose, the labourer would be doubly affected, and would be soon totally deprived of subsistence. Instead, therefore, of the money wages of labour falling, they would rise; but they would not rise sufficiently to enable the labourer to purchase as many comforts and necessaries as he did before the rise in the price of those commodities....

These, then, are the laws by which wages are regulated, and by which the happiness of far the greatest part of every community is governed. 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.

This pernicious tendency of these laws is no longer a mystery, since it has been fully developed by the able hand of Mr. Malthus; and every friend to the poor must ardently wish for their abolition.