

Adam Smith was the great classical economist who wrote *An Inquiry into the Nature and Causes of the Wealth of Nations* and invoked the tantalizing image of an “invisible hand” that would organize the sum of (more or less) self-interested economic actions into common prosperity.

Everybody must be sensible how much labor is facilitated and abridged by the application of proper machinery. It is unnecessary to give any example. I shall only observe, therefore, that the invention of all those machines by which labor is so much facilitated and abridged seems to have been originally owing to the division of labor. Men are much more likely to discover easier and readier methods of attaining any object when the whole attention of their minds is directed toward that single object than when it is dissipated among a great variety of things. But because of the division of labor, the whole of every man’s attention naturally comes to be directed toward someone very simple object. It is natural to be expected, therefore, that one of those who are employed in each branch of labor should soon find out easier and readier methods of performing their own work, wherever the nature of it admits of such improvement.

A great part of the machines made use of in those manufactures in which labor is most subdivided were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts toward finding out easier and readier methods of performing it. Whoever has been much accustomed to visit such manufactures must frequently have been shown very pretty machines which were the inventions of such workmen in order to facilitate and quicken their own particular part of the work. In the first fire-engines, a boy was constantly employed to open and shut alternately the communication between the boiler and the cylinder, according as the piston either ascended or descended. One of those boys, who loved to play with his companions, observed that, by tying a string from the handle of the valve which opened this communication to another part of the machine, the valve would open and shut without his assistance, and leave him at liberty to divert himself with his playfellows. One of the greatest improvements that has been made upon this machine, since it was first invented, was in this manner the discovery of a boy who wanted to save his own labor. All the improvements in machinery, however, have by no means been the inventions of those who had occasion to use the machines. Many improvements have been made by the ingenuity of the makers of the machines, when to make them became the business of a peculiar trade; and some by that of those who are called philosophers or men of speculation, whose trade it is not to do anything, but to observe every-thing; and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects. In the progress of society, philosophy or speculation becomes, like every other employment, the principal or sole trade and occupation of a particular class of citizens. Like every other employment too, it is subdivided into a great number of different branches, each of which affords occupation to a peculiar tribe or class of philosophers; and this subdivision of employment in philosophy, as well as in every other business, improves dexterity, and saves time. Everyone becomes more expert in his own peculiar branch, more work is done overall, and the quantity of science is considerably increased by it. It is the great multiplication of the productions of all the different arts, because of the division of labor, which occasions, in a well-governed society, that universal opulence which extends itself to the lowest ranks of the people. Every workman has a great quantity of his own work to dispose of beyond what he himself has occasion for; and every other workman being exactly in the same situation, he is enabled to exchange a great quantity of his own goods for a great quantity, or, what comes to the same thing, for the price of a great quantity of theirs. He supplies them abundantly with what they have

occasion for, and they accommodate him as amply with what he has occasion for, and a general plenty diffuses itself through all the different ranks of society. Observe the accommodation of the most common artificer or day laborer in a civilized and thriving country, and you will perceive that the number of people of whose industry a part, though but a small part, has been employed in procuring him this accommodation, exceeds all computation. The woolen coat, for example, which covers the day laborer, as coarse and rough as it may appear, is the produce of the joint labor of a great multitude of workmen. The shepherd, the sorter of the wool, the wool-comber or carder, the dyer, the scribbler, the spinner, the weaver, the fuller, the dresser, with many others, must all join their different arts to complete even this homely production. How many merchants and carriers, besides, must have been employed in transporting the materials from some of those work-men to others who often live in a very distant part of the country! how much commerce and navigation in particular, how many ship-builders, sailors, sail-makers, rope-makers, must have been employed in order to bring together the different drugs made use of by the dyer, which often come from the remotest comers of the world! What a variety of labor too is necessary to produce the tools of the meanest of those workmen! To say nothing of such complicated machines as the ship of the sailor, the mill of the fuller, or even the loom of the weaver, let us consider only what a variety of labor is requisite to form that very simple machine, the shears with which the shepherd clips the wool. The miner, the builder of the furnace for smelting the ore, the feller of the timber, the burner of the charcoal to be made use of in the smelting-house, the brick-maker, the bricklayer, the workmen who attend the furnace, the millwright, the forger, the smith, must all of them join their different arts to produce them. Were we to examine, in the same manner, all the different parts of his dress and household furniture, the coarse linen shirt which he wears next his skin, the shoes which cover his feet, the bed which he lies on, and all the different parts which compose it, the kitchen grate at which he pre-pares his victuals, the coals which he makes use of for that purpose, dug from the bowels of the earth, and brought to him perhaps by a long sea and a long land carriage, all the other utensils of his kitchen, all the furniture of his table, the knives and forks, the earthen or pewter plates upon which he serves up and divides his victuals, the different hands employed in preparing his bread and his beer, the glass window which lets in the heat and the light, and keeps out the wind and the rain, with all the knowledge and art requisite for preparing that beautiful and happy invention, without which these north-ern parts of the world could scarce have afforded a very comfortable habitation, together with the tools of all the different workmen employed in producing those different conveniences; if we examine, I say, all these things, and consider what a variety of labor is employed about each of them, we shall be sensible that without the assistance and co-operation of many thousands, the very meanest person in a civilized country could not be provided, even ac-cording to what we very falsely imagine the easy and simple manner in which he is commonly accommodated. Compared, indeed, with the more extravagant luxury of the great, his accommodation must no doubt appear extremely simple and easy; and yet it may be true, perhaps, that the accommodation of a European prince does not always so much exceed that of an industrious and frugal peasant, as the accommodation of the latter exceeds that of many an African king, the absolute master of the lives and liberties of ten thousand naked savages.