

# Adam Smith: The Origin of the Division of Labor

Richard Ibekwe

Prof. Sally Haslanger  
Dr. Rachel McKinney

Adam Smith argues that the fundamental cause of the division of labor is the human propensity to exchange goods and services with one another, and that the division of labor is developed as the best way to maximize the satisfaction of that propensity. In this paper I will argue that the relationship between trade and the division of labor is the other way around: the division of labor arises directly because of the increase in productivity it facilitates, and the satisfaction of the desire to trade is only one of many secondary consequences. I will begin by summarizing Adam Smith's discourse on the division of labor. I will show that, while his argument is frequently true, there are many cases in both human and non-human societies of the division of labor arising in the absence of the desire to trade, and instances of human trade activity in which the division of labor is deliberately eschewed.

Adam Smith begins *The Wealth of Nations* with a chapter describing the benefits of the division of labor. He uses the manufacture of the pin as an example. The pin is a simple object, but one that must be manufactured in multiple stages. First, the wire from which it is made must be drawn and cut, then straightened, then one end sharpened and the other blunted; the pins must finally be packaged. Smith notes that in all there are eighteen distinct processes involved in the making of a pin. This analysis could be applied to any manufactured object. One can imagine, given how complicated the making of an object as simple as the pin is, the even greater complexity of making other useful things like cars or nuclear reactors, not to mention the great mesh of interdependent activities involved in providing the food, clothing and upbringing of the people who in turn make all these things. Smith observes that, given the complexity of the manufacturing process, one person (even a skilled blacksmith) will encounter great

difficulty in making even one pin singlehandedly; in a day that person cannot hope to produce very many, and the pins that are produced are not likely to be very good.

Smith then notes the significant improvements he observed in the quantity and quality of the pins produced when a dedicated worker with the aid of machines carried out each individual process, the so-called “division of labor”. One worker would draw the wire and pass it on to another worker, who would cut it and in turn pass it on to another worker, who would straighten it, and so on. In this way the productivity of each worker was increased by orders of magnitude: far more pins could be produced with fewer workers, and the pins were both better quality and cheaper. Smith gives three reasons for this increase in productivity: firstly, the increase in the dexterity and speed of each worker caused by repeatedly doing the same simple task; secondly, the saving of time that would be wasted in moving from one task to another if a single person were doing all the tasks; thirdly, the use of machines that efficiently carry out repetitive or strenuous parts of each process, optimized by workers and engineers intimately familiar with their specific task. A look at almost any object will quickly show that our society is an intricate web of such specialized workers, each contributing to a specific part of a specific thing. Many of the things we need and enjoy are only possible because of the division of labor.

In view of these advantages, Smith asks why the division of labor originally came about. He asserts that it is “not originally the effect of any human wisdom.... It is the necessary... consequence of a certain propensity in human nature... to truck, barter, and exchange one thing for another.”<sup>1</sup> His account is that we all need certain things to live, such as food, but that it is not practical that everyone should make everything they need by themselves. Smith’s example is that it might happen that I am a poor hunter, but I am

---

<sup>1</sup> Adam Smith, *The Wealth of Nations*, London, 1776, p. 29

very good at making bows and arrows; my neighbor is an excellent hunter, but is very bad at making anything. We each, therefore, have something that the other wants. By trading my bow and arrows for some of his game we both have more to eat than if we each tried the entire hunting operation separately. If we each dedicate ourselves entirely to the task we are good at, we can sell what we produce to others in our town and thus a whole opulent society will develop. Therefore, the division of labor is essential to the prosperity of our society, but the primary motivation is the desire of people to trade what they can make for what other people have – it is all driven fundamentally by one’s self-interest and by appealing to the self-interest of others. The increasing specialization of workers gives a corresponding increase in the quantity, diversity and quality of goods, and thus in the general prosperity of society.

Is the desire to trade with one another really the fundamental cause of the division of labor? This premise leads to at least four corollaries, the first of which I will show to be true and the other three to be false; thus I will show that Smith’s theory is not universally true. Firstly, the premise suggests that the division of labor should be observed in non-human animals that display an awareness of the trade of goods and services (if such awareness is possible); secondly, that the division of labor should be absent in animals that do not display a concept of trade; thirdly, that in human societies the division of labor should only be observed in the context of trade; fourthly, that there should be no examples of human trade that do not use the division of labor when their production could be improved by it.

The first point – that it seems to follow from Smith’s central premise that the division of labor should be observed in non-human animals that engage in trade – can be

confirmed with examples from nature, which support Smith's thesis in a way that he did not himself think possible. The desire to exchange goods is, he argues, "common to all men, and to be found in no other race of animals, which seem to know neither this nor any other species of contracts." He sardonically observes, "Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog."<sup>2</sup> But Smith fails to account for animals that do display behavior similar to this, albeit not so sophisticated. For instance, take cleaner fish, a range of species of small fish that eat dead skin and parasites on the skin of larger fish. In return, the large fish do not eat the cleaner fish and instead protect them from predators. It is debatable whether this exchange of services could properly be called "deliberate", but it does seem that at some basic level the fish understand that their cooperation (though it is motivated by self-interest) is mutually beneficial. The cleaner fish dedicate their lives to eating detritus on the large fish and the large fish spend some of their time warding off other large fish, and both are better off than they separately would have been. This is very similar to Smith's example of the fletcher and hunter, and it is interesting that Smith rules out this natural demonstration of the division of labor stimulated by trade, which supports his thesis.

However, the second point – the corollary that there should not be found in nature the division of labor among animals that do not display trading behavior – can be shown to be false by again looking to nature. Consider bees and ants. In their beehives and anthills one sees a very clear and powerful illustration of the division of labor. Some of the bees and ants are exclusively concerned with finding food, which they bring back to the colony; others carefully protect the queen and nurse the offspring that she produces. Each individual is dedicated to its job its entire life. This division of labor greatly increases the

---

<sup>2</sup> Smith, p. 29

production of ants and bees. But I argue that it cannot properly be described as trade, for nothing really is being traded (they render services not to each other but to the general population, and there is no real personal gain since other similar insects live solitary lives in safety and satisfaction) and the motivation is not self-interest. The individuals are almost entirely selfless and readily sacrifice themselves for the wellbeing of all, which is behavior more accurately described as gift than trade. It is, then, quite different from the example of the cleaner fish or of the fletcher and hunter. The division of labor in this example seems to exist for the direct reason that it gives the greatest possible increase in the number of bees and ants.

A similar point can be drawn from investigating the third corollary of Smith's premise – that in human society the division of labor should only be observed in the context of trade. Again, this can be shown to be false. I will provide a personal example. A few years ago England experienced some of its heaviest rain and most severe flooding since records began. At my boarding school there was a real danger that the river running behind my house would burst its banks and cause irreparable damage to the house's fourteenth century buildings, some of which contained some priceless original wooden paneling. Some of the pupils were given the task of helping to build up the embankments of the river to protect the buildings. Sandbagging, as anyone who has done it will know, is impractically tiring and slow if one worker attempts to do every stage of the process. The division of labor, therefore, quickly arose to increase the productivity of each worker, increasing the overall production of sandbags and improving the chances of defeating the rising water. One person would hold open the bag while another shoveled in sand. Another person would tie the bag closed and pass it to the start of a chain of people

ending at the riverbank. The people shoveling the sand and tying the bags would rotate to reduce fatigue. In this way we were able to build up the embankment much more quickly than if we were filling, tying and carrying the sandbags individually. No one was paid for his work and the cost in fatigue outweighed any tangible personal benefit. The work was done primarily for the preservation of the buildings – that is, for the general good – and not to increase trade in the service of self-interest. The division of labor was used entirely because it increased the number of sandbags and the speed with which they were produced. This is generally true of charitable human activities.

Investigation of the fourth corollary – that there should be found no human trade that does not use the division of labor when its productivity would be increased by it – gives another instance showing that the division of labor is not related to trade as straightforwardly as Smith asserts. Take the example of Swiss mechanical watches. Their manufacture requires the making and assembling of an intricate array of tiny gears and springs. To this day the manufacture of a complete watch from start to finish is often the painstaking work of a single highly skilled watchmaker; this means that it takes a very long time to make each watch, the quantity of watches made is relatively small and the watches are very expensive. The division of labor (which has been adopted in other watchmaking industries) would reduce the time spent making each Swiss watch, increase production and reduce the price of each watch without much affecting the quality of the primary timekeeping function, but its implementation has been resisted. The reason is quite clear: it is *because* of the restriction of production caused by current manufacturing practices, and the fact that more labor than was necessary was put into the watches' production, that the watches are so desirable. The propensity to exchange goods in this

case is better satisfied by eschewing the division of labor. There are many other examples in human trade like this.

The sum, then, of what I have argued is this: the maximal satisfaction of the human propensity to exchange goods and services is only a specific case of the effects of the division of labor, and one that is not always best served by it. A more general motivation for the division of labor is simply that it increases productivity, which will typically benefit any activity that needs the goods or services produced. Adam Smith uses considerable space describing the benefits of the division of labor; he need not have used much more searching for a more fundamental motivation, because these benefits in themselves are sufficient motivation for its existence.



MIT OpenCourseWare  
<https://ocw.mit.edu>

24.201 Topics in the History of Philosophy: Justice & Political Economy  
Spring 2016

For information about citing these materials or our Terms of Use, visit: <https://ocw.mit.edu/terms>.