

invisible hand. 'The invisible hand' was a metaphor used by Adam Smith to describe the principle by which a beneficent social order emerged as the unintended consequences of individual human actions. Although Smith used the specific term 'invisible hand' in this sense only twice in his writings, once in the *Theory of Moral Sentiments* and once in *The Wealth of Nations*, the idea the metaphor connotes permeates all of his social and moral theories. Indeed, it was the notion of the invisible hand that enabled Smith to develop the first comprehensive theory of the economy as an interrelated social system. It is not much of an exaggeration to say that the invisible hand made theoretical social science itself possible.

In the *Theory of Moral Sentiments*, Smith, expounding on how the desire for wealth and luxury spurs men to great industry and production, points out that those who become rich from all this effort are not much better off in the things of this world that really count than the poor who work for them. The rich landlord, for example, desires many trivial luxuries, but can only consume a modest portion of the food his efforts produce; the rest must be paid to those who serve him. Rich landlords:

... in spite of their natural selfishness and rapacity, though they mean only their own conveniency, though the sole end which they propose from the labours of all the thousands whom they employ be the gratification of their own vain and insatiable desires, they divide with the poor the produce of all their improvements. They are led by an invisible hand to make nearly the same distribution of the necessaries of life which would have been made had the earth been divided into equal portions among all its inhabitants; and thus, without intending it, without making it, advance the interest of the society, and afford means to the multiplication of the species (*Moral Sentiments*, IV, 1, pp. 304-5).

In the *Wealth of Nations*, Smith uses the term 'invisible hand' in the context of explaining why restrictions of imports or on the use of one's capital are unnecessary:

As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestick 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 publick interest, nor knows how much he is promoting it. By preferring the support of domestick 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 (*Wealth of Nations*, IV, ii, p. 456).

The underlying notion of unintended orders that the invisible hand captures was not new in Smith. There were glimmerings of the idea in the 17th century in the writings of Petty and Locke. One of the earliest 18th-century forerunners to Smith's invisible hand was Bernard Mandeville. While there is some controversy as to whether Mandeville had any concept of a self-ordering system comparable to Smith's, it is clear that his infamous statement that private vices of greed, luxury and avarice lead to public benefits of abundant wealth (*Fable of the Bees*, 1714) stirred a great deal of debate. The philosophers of the Scottish Enlightenment, of whom Smith was one, rejected Mandeville's sensational equating of self-interest with greed, but they developed as a major theme of their writing the underlying idea that private actions can have beneficial public effects that were not intended by the actors. Adam Ferguson, for instance, described private property and political institutions in general as 'the results of human action, but not the execution of any human design' (*An Essay on the History of Civil Society*, 1767). David Hume appealed to the same notion when he explained how a system of justice emerges as the by product of a series of individual self-interested decisions about the disposition of particular disputes, and when he argued that human institutions like money and language arose from the actions of individuals directed toward another end (*Treatise of Human Nature*, 1740).

Adam Smith, like Mandeville, Ferguson and Hume, based his system on the observation that man is motivated by self-love. To Smith, however, self-love was potentially an admirable human characteristic that reflected a man's concern for his honour as well as his material welfare. Even more importantly, for Smith, self-love was the 'principle of motion' in social theory much as attraction is the principle of motion in Newton's physics. Those who believed that government was free to make any laws it chose to regulate society, Smith believed did not understand a most basic feature of human nature. The 'man of system', as Smith called him,

seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board; he does not consider that the different pieces upon a chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislator might choose to impress upon it (*Theory of Moral Sentiments*, pp. 380–81).

The 18th century was, of course, the century immediately following Newton's great discovery. The scientific and moral consequences of Newton's universe were still being debated, and Newtonian ideas and patterns of thought were finding their way into all areas of intellectual activity. Not only was Adam Smith familiar with Newton's ideas but he had even written, early in his career, a history of astronomy, the last ten pages of which praised Sir Isaac Newton's system. Hence, it is plausible to see Adam Smith's economic system in a 'Newtonian' context as an attempt to explain a complex social order on the basis of a few simple principles of human action. The economic system that Smith in fact described is a product both of man's self-love and his peculiarly human propensity to 'truck, barter and exchange one thing for another' (*Wealth of Nations*, I, 2, p. 25). Exchange leads to the division of labour and the division of labour enables workers to take advantage of economies of scale with the unintended result that greater aggregate wealth is produced than if there were no exchange. Hence, the wealth of nations depends not on conscious

governmental planning, but on the freedom of individuals to exchange, specialize and extend their markets. Furthermore, the overall beneficial nature of Smith's 'simple system of natural liberty' depends not on the benevolence of individuals, but upon the operation of self-love in a system of free exchange. Smith points out that in an exchange, we obtain our ends neither from coercing our partner nor from appealing to his sense of charity, but by engaging his own self-love in the exchange process. Two people trade because there are mutual gains from trade. Or as Smith puts it:

... man has almost constant occasion for the help of his brethren, and it is vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favour, and show them that it is for their own advantage to do for him what he requires of them It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interests (*Wealth of Nations*, I, 2, p. 26).

In general, the concept that the invisible hand so graphically captures – a concept Carl Menger restated as an ‘organic understanding of social phenomena’ ([1883] 1963, p. 127ff) and Hayek more recently referred to as a ‘spontaneous order’ (1973, vol. 1) – is composed of three logical steps. The first is the observation that human action often leads to consequences that were unintended and unforeseen by the actors. The second step is the argument that the sum of these unintended consequences over a large number of individuals or over a long period of time may, given the right circumstances, result in an order that is understandable to the human mind and appears as if it were the product of some intelligent planner. The third and final step is the judgement that the overall order is beneficial to the participants in the order in ways that they did not intend but nevertheless find desirable.

The first of these steps must have been obvious to human beings since they became capable of articulating their observations. The capriciousness of nature and the fallibility of human plans has been the theme of religious doctrine, philosophy and dramatic literature since the beginning of recorded time. It is only with the introduction of the notion that the independent actions of individual human beings can inadvertently give rise to an understandable and orderly social process that the unintended consequences of human plans become scientifically interesting. Clearly, without some notion of an invisible hand in human actions, social science would be impossible. The only alternative to describing social processes as the unintended by-products of purposeful human actions would be to view all social institutions and practices either as the predicted unfolding of conscious human plans or as the results of natural or supernatural phenomena beyond human experience. It is for this reason that Hayek has referred to spontaneous orders as a third category of phenomena between consciously planned organization and the physical world (1973, vol. 1, p. 20).

The third step in the 'invisible hand' formulation is not as uncontroversial as the other two nor is it even necessary to the description of a social order. To judge a spontaneous order to be benevolent, as Smith obviously did, is to judge it from a particular moral perspective and within a particular political and historical context. Smith's moral perspective was that of the participants in the system, and his judgement was that they would be better off under a predominantly free market system than under the system of mercantilist regulation that was still in force in 18th-century England. However, one could easily

imagine a spontaneous order in which people were led as if by an invisible hand to promote a perverse and unpleasant end. The desirability of the order that emerges as the unintended consequences of human action depends ultimately on the kind of rules and institutions within which human beings act, and the real alternatives they face.

Spontaneous orders can be thought of in two, related ways. They can describe a set of regularities in a social system that is self-organizing in some way within the context of a set of social rules. In this interpretation, the constraints in the system could well be set by human design and can work for good or ill. Alternatively, spontaneous orders can be thought of as evolved orders where the rules themselves are the unintended products of human actions. For example, we think of a market economy as functioning according to a set of 'rules of the game' that permit allocative errors to be self-correcting within the system. The rules (laws, customs, the dictates of political organizations, and property rights) would be thought of as products of conscious human plans as in specific legislation and constitutional design, or alternatively, they could be thought of as themselves the unintended products of human action aimed at specific and narrow ends. In Adam Smith's writings, both interpretations of spontaneous orders can be found. In his moral philosophy, in the same manner as David Hume, Smith argues that our moral rules gradually evolve from the accumulation of individual experiences and judgments of individuals in concrete situations, while the rules themselves as evolved have the unintended results of promoting social stability. In his economic theory described in the *Wealth of Nations*, money prices and profit and loss provide the signals that lead to corrections in resource misallocations and to economic growth, while the economic institutions of markets, money, and division of labour all emerged in an evolutionary process. How one views the institutions of society makes a difference not only to one's political views, but also to how one evaluates an economic system.

The notion of spontaneous order in the sense of a self-ordering system continued to provide the foundation of economic science and especially general equilibrium theory throughout the 19th century and up to the present. In the general equilibrium formulation, self-love is translated into preference orders defined over all goods (but not benevolence or honour), and the political and social institutions of society are alterable by government corrective action. In this view, the invisible hand still makes the system run, but the optimality of the result is not necessarily guaranteed. Indeed, if one follows the logic of the argument to its conclusion, the invisible hand is palsied at best since it really only operates benevolently under conditions that are impossible to meet in the real world (Hahn, 1982).

An alternative formulation of the invisible hand that found its way from Adam Smith to Carl Menger views the economic institutions of a society as the unintended by-products of self-interested economic behaviour and sees these institutions as crucial to the self-ordering process. Hence, instead of asking what institutions would be necessary to make the invisible hand work perfectly. This view poses the question, what are the economic reasons why existing market institutions emerged and what unperceived purposes do they serve. Here, the attempt is to show how existing market institutions arise as the unintended consequences of human action. This, together with the argument that such institutions serve more ends than are known by planners, makes one more chary of 'fixing up' market arrangements.

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