Rational and moral action: a critical survey of rational choice theory

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CHAPTER VII

THE INVISIBLE HAND

1. Introduction

After having introduced rational choice theory in which the attention was focused on agents trying to realize their preferences, I will now turn to unintended and unforeseen consequences that actions of numerous agents may have. How can we be sure that these unintended consequences are not harmful and do not have negative consequences for the well-being of people? 116 The most obvious way to tackle this

116 Few scientists have written about unintended consequences. Merton has written two seminal articles about it. In the first article he defined unintended consequences and in the second he wrote about their latent functions. (see Merton, 1936 and 1968). On more than one occasion Popper said that the main task of the social sciences would be to uncover and analyze the unintended and unforeseen consequences of individual intentional actions. However, in rational choice theory this task was never quite taken on. Neither in Popper’s nor in Harsanyi’s theoretical program did the analysis of unintended consequences occupy a prominent position. Actually, they did not write about it at all, though -as
question is to approach it as an invisible hand phenomenon. In general, the concept of the invisible hand 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 consequences over a large number of individuals and over a long period of time may (...) 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 judgment that the overall order is beneficial to the participants in the order (...)" (Vaughn, 1989, 170) It is only with the acceptance of the idea that the independent actions of individual human beings can result in an orderly social process that the unintended consequences of human action become understandable and accessible to scientific investigation.

The third step is the least expected and most welcomed. It tells us that a system of laissez-faire leads to the common good. Economists have taken this up and upgraded it to The First Fundamental Theorem of Welfare Economics. This first theorem establishes that a competitive equilibrium is Pareto optimal. A state of affairs P is Pareto efficient or Pareto optimal iff no Pareto improvements are possible. Social state P is an equilibrium state. The state of equilibrium refers to a situation in which the actions of agents are mutually consistent. Each agent is able to carry out his intentions and no one can improve his/her position by engaging in new

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I said- Popper occasionally referred to it.

117 There is also a Second Fundamental Theorem of Welfare Economics, which states that every Pareto optimum can be obtained as a competitive general equilibrium given some distribution of initial endowments to economic agents. In both theorems externalities and public goods are absent, and there are no interdependencies, each agent acts as a solo performer. It should also be noted that laissez faire is immediately taken to refer to perfectly competitive markets instead to the absence of government control. For a thorough and critical discussion of these theorems see Blaug (2007).
transactions of exchange. In this situation the coordination of all individual plans is optimal, though each individual only cares about his own interests.

This idea of a spontaneous evolving benevolent social order has become central to economic thought. Arrow and Hahn expressed the widely held view, on the first page of their *General Competitive Analysis* (1971), that “The notion that a social system moved by independent actions in pursuit of different values is consistent with a final coherent state of balance, and one in which the outcomes may be quite different from those intended by the agents, is surely the most important intellectual contribution that economic thought has made to the general understanding of social processes.” (Arrow and Hahn, 1971, 1)

Invisible hand explanations are rare in microeconomic theory because the unintended consequences of intentional actions are seldom studied. However, there are two major exceptions: the formal proof of General Equilibrium Theory that a system of interrelated markets can reach a stable equilibrium (see the two Theorems) and the theoretical study of the emergence of market institutions which is central to the Austrian program. None is based on empirical studies. In this chapter I shall investigate the different meanings that are attached to the notion of the invisible hand.

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118 This formulation though often used is nevertheless not correct. A Pareto-optimum is not a state of affairs in which nobody can improve his situation. The correct formulation is that nobody can improve his situation under the current conditions. The incorrect formulation wrongly suggests that a Pareto-optimum is optimal in the sense that it is the best state of affairs for everyone.

119 Two concepts of equilibrium are a) the mutual consistency of plans, and b) the balancing of (opposing) forces. The description above refers to the first one. See also the concluding section of this chapter.
2. Invisible hand explanations

In the opinion of several theorists the invisible hand is more interesting than it is important. (Rothschild, 1994; Grampp, 2000) In saying this, they simply mean that it does not have a central place in *The Wealth of Nations* (WN). Smith was, like Condorcet, a political reformer, not a free marketer. Though he rejected a regulated economic order such as Mercantilism, he repeatedly stressed the need for government regulations to ensure the smooth workings of markets and to correct failures on crucial markets (like the corn market), when prices were not ‘reasonable’.

"In the WN, Smith writes of an invisible hand in the course of describing a particular condition that may or may not be present in a transaction on a competitive market. The condition is that in which a man who intends to benefit only himself in a particular way, in the act of procuring that benefit, produces a benefit of a different kind for everyone including himself. A merchant who instead of engaging in foreign trade (...) engages in domestic trade contributes to the defense of the nation. He does so because he adds to domestic capital; it is a source of military power, and that power is a benefit to everyone including the merchant". (Grampp, 2000, 443)

There is also an invisible hand in the *Theory of Moral Sentiments* (TMS) where it means something different, and there is another in the *Essay on Astronomy* where it has still another meaning. The idea of a ‘natural order’ occupies a large place in the TMS. "Here the invisible hand (...) is a component of the natural order and is not an idea superseded by it. As such it is a power for the good". (ib., 463) The invisible hand in TMS bears some resemblance with that in WN. In both books selfish agents are led to help others without any costs to themselves.

Usually, the invisible hand is associated with the spontaneous development of a social order. Spontaneous orders can be thought of in two related ways. "They can be described as a set of regularities in a social system that is self-
organizing in some way within the context of a set of social rules (..). Alternatively, spontaneous orders can be thought of as evolved orders where the rules themselves are the unintended products of human actions. In Adam Smith’s writing both interpretations of spontaneous orders can be found". (Vaughn, 1989, 171)

The notion of a spontaneous order as a self-regulating system remained the foundation of economic science and especially equilibrium theory. The alternative view was developed by the Austrian school (Carl Menger) that considered the emergence of (economic) institutions as the unintended results of the actions of self-interested agents. These institutions are regarded as crucial to the understanding of self-regulating economic processes.

The orderly functioning of a social order requires both good institutions and individuals who pursue their interests within the rules of well-defined strategies, and not by seeking to influence institutions or rules. On one view these good institutions are the outcome of policies, which withdraws from the sphere of the pursuit of self-interest those options that do not harmonize with the public good. On another view, they are the outcome of custom: institutions are good if they are themselves the unintended consequence of individual interest.

Grampp notes that there are at least nine interpretations of the invisible hand in the literature. The most quoted is that every individual, acting solely in the pursuit of private gain is “led by an invisible hand to promote an end which was no part of his intention.” But Smith never actually said that a man who acts in his own interest is led by an invisible hand to act also in the interests of others. A second, also common, interpretation is that "the invisible hand is the price mechanism. A force that brings all markets together into a state of harmony, or general equilibrium, and directs the economy in a way that maximizes the wealth of nations". (Grampp, 2000, 445) However, in Smith’s writings the price-
mechanism has nothing to do with the invisible hand.\footnote{Furthermore, there is the assertion that the invisible hand should be equated with (perfect) competition. But Smith did not in fact say this. And there is the no-nonsense view that the invisible hand is simply the mutual advantage there is in exchange. Smith did say that exchange yields a benefit to both buyers and sellers, but he did not attribute the benefit to an invisible power. He attributed it to the wisdom that is common to men. (Grampp, 2000, 447) See Grampp for more interpretations.}

As we have noticed, it was the notion of the invisible hand that enabled Smith to develop the first comprehensive theory of the economy as an interrelated and self-regulating social system. Thus, in a way, it can be said that the invisible hand made social science itself possible. The underlying notion of an unintended order that the invisible hand captures was not new in Smith. The philosophers of the Scottish Enlightenment, of whom Smith was one, developed as a major theme of their writing the underlying idea that private actions can have unintended \textit{beneficial} effects. Smith, like Ferguson and Hume, based his system on the observation that man is motivated by self-love. "To Smith, self-love was potentially an admirable human characteristic that reflected man’s concern for his honor as well for his material welfare". (Vaughn, 1989, 169) The beneficial nature of Smith’s system of ‘natural liberty’ depends not on the benevolence of individuals but upon the operation of self-love in combination with the propensity 'to truck, barter and exchange one thing for another. There are mutual gains to be earned from trade. “The invisible hand then is not an autonomous force. It is self-interest operating in particular circumstances. (...) [An individual] does not act in the public interest if acting in his own interest would be unprofitable.” (Grampp, 2000, 460)

The appeal of the invisible hand is not that individual actions do have consequences that are not foreseen (which is a rather trivial proposition), but the claim that these
consequences usually are positive for society at large. This is not always the case; in situations in which free riding is the rational strategy, the outcome of the interaction is just the opposite of the one just described by Adam Smith. Instead of spontaneously harmonizing in an efficient scheme, their interaction breaks down into non-optimal outcomes. The question is this: "either it is intuitively obvious that people can only cooperate if they are interested in their fellow’s well-being and try intentionally not to harm them, in which case the invisible hand is a paradox and, [for example] the prisoners’ dilemma is not; or we are intuitively sure that people who are mainly led by their self-interest can (unintentionally) bring about a working social order [and in this case the prisoners’ dilemma is a paradox and the invisible hand is not]". (Andreozzi, 2004, 11) The problem indicates that probably there is no such thing as a shared common intuition concerning the way in which the metaphor of the invisible hand should be interpreted.

As one of the members of the Scottish school of Enlightenment, Smith was acquainted with the doctrine of ‘natural rights’ and ‘natural order’. In this political-philosophical tradition, it is assumed that a kind of hypothetical social contract evolves as a reaction to the Hobbesian natural order of war of all against all. This view later became the program of the Austrian school, which, because of its commitment to radical subjectivism, had to introduce institutions to explain the feasibility of an orderly society. Smith, however, wrote about the possibility of a self-regulating order in a time in which government regulation was still a dominant and widely practiced doctrine.

The Wealth of Nations could be read as a plea for an economic order without interference by the government. Adam Smith, however, was not a free marketer, though some schools of thought have interpreted him as if he was one. Instead of taking as their point of departure the economic order as being social embedded and trying to explain its functioning, economists of these schools still felt the need to prove that departing from a natural order and self-interested
human beings, it could be shown that under fairly restrictive conditions an optimal allocation of resources judged in terms of Pareto optimality is possible. It is as if they perceived that for many people it is paradoxical that a market populated by greedy people could achieve a coordinated outcome. To persuade them of the viability of a self-regulating order these theorists used formal models in which they "postulated the limiting case of perfectly self-interested people living in an atomistic society and showed that there exists equilibrium in principle, so a fortiori real people in real society could coordinate in principle. The existence proof is a way of obtaining theoretical and political reassurance for the feasibility of a decentralized economic system". (Hoover, 1995b, 732) Economists only had to admit that in the sphere of those public goods, which satisfied the criteria of non-exclusion and non-rivalry, the invisible hand failed.

A drawback of these existence proofs is that they usually assume smooth functioning markets and thereby neglect or deny the possibility of coordination failures. Coordination failures can cause that more or less enduring states exists in which not all the agent can carry out their plans, as a result of which economic resources are not fully utilized. The presence/absence of coordination failures was the main point of disagreement between the Keynesian and the neoclassical schools of thought.

3. Conclusion

In economics the metaphor of the invisible hand was taken up as the search for the conditions of a stable equilibrium. In the next two chapters I shall discuss two ways in which the claim that the independent actions of self-regarding agents unintentionally serve the common good is adopted in economic science. The first equates the invisible hand with

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121“Typically, the rhetoric of equilibrium suggests images of order or balance, while its real content has concerned the properties of formalistic models.” (Lawson, 2005, 431)
the price mechanism in perfect competitive markets and claims that under these conditions economic processes spontaneously evolve toward an equilibrium state. As is a common usage in economic theories, this approach takes a (Hobbesian) natural state as point of departure, a state that is populated with selfish, atomistic people without relations and obligations that extend beyond the nuclear family. Consequently, price-taking anonymous buyers and sellers people markets. Because there is no society beyond the mere groupings of human beings, the only reality to be studied is that of individuals. This ontological claim is connected with the epistemological claim that all the phenomena economic science studies must be deduced from actions of individuals. Therefore I shall discuss this version of an invisible hand approach in combination with the micro-foundations’ debate. The image of equilibrium presented in this approach suggests a balance of forces, as if economics still deals with systemic forces, but in fact it deals with properties of formal models. The concept of equilibrium seems to denote the notion of the invisible hand, while in fact it is merely a solution concept relevant to a system of equations of a particular model. This transformation shall be discussed in the next chapter.

The second approach, which will be discussed in chapter IX, takes the view that institutions have emerged as the unintended consequences of the attempts of economic agents to regulate and coordinate their activities. The invisible hand has taken the guise of (economic) institutions and in this way it is attempted to prove that a spontaneous and efficient order is possible.