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Rationality and Ideology in Economics

ROBERT HEILBRONER HAS HAD A LONG-STANDING INTEREST IN THE issues of rationality and ideology in shaping economic theory (see, particularly, Heilbroner, 1988, chaps. 1 and 8, and Heilbroner, 1999, chap. 11). Heilbroner argues that the conception of rationality underlying economic theory is specific to the emergence of capitalism as a mode of production and that economics as a science cannot avoid confronting issues (especially the distribution of material wealth and power) that are inherently political and ideological. This essay explores these issues in the spirit of Heilbroner's concerns.

RATIONALITY AND ECONOMICS

"Rationality" has played a central role in establishing the hegemony of contemporary mainstream economics. As the specific claims of robust neoclassicism fade into the history of economic thought, an orientation toward explaining economic phenomena as "rational" has become the touchstone by which mainstream economists recognize each other. This is not so much a question of adherence to any particular conception of rationality, but of taking the rationality of individual behavior as the unquestioned starting point of economic analysis. As we shall see, mainstream economics has room for various concepts of rationality ("full rationality," "bounded rationality," "substantive rationality," "procedural rationality," to list a few) and for vigorous debates over their relative merits.

The concept of rationality connects economics firmly to the Hobbesian-Lockean tradition of political philosophy, which purports

to explain the political and economic organization of modern society as the necessary outcome of the interaction of naturally constituted rational individuals confronting each other as competitors for scarce resources. To avoid the terrible consequences of anarchic struggle, these rational individual actors are supposed, according to this "just so" story, to agree to the institutions of property and political authority that constitute the framework of modern society. A hallmark of these institutions is that they are in principle democratic and egalitarian (everyone has an equal right to vote or to hold property) but lead inexorably to sharp inequalities in economic well-being. An economic science whose philosophical starting point was not rational individual action would create an embarrassing discord with this political tradition. The whole point of the Hobbes-Locke "discourse" (to use the jargon of postmodernism) is to *rationalize* real inequalities of power and economic well-being as unavoidable consequences of the interaction of naturally constituted rational individuals confronting each other as equals. Economic science has a place in this grand project only insofar as it can relate itself to the same philosophical foundations.

This *ideological* imperative imposes a series of unresolvable contradictions on rational-choice economics. Much of the energy of the most imaginative and energetic scholars who have been drawn to economics has been devoted to proposals for the (inevitably unsatisfactory) resolution of these contradictions. I would like to review this story and suggest where the fundamental source of these contradictions lies. The difficulty is that in seeking to explain how naturally constituted rational individuals might invent the institutional structures of modern society (largely capitalist structures of what Marx called "bourgeois" society, though that characterization has lost some of its sting with the passage of time), mainstream economics tells at best half the story. The other half, without which the whole project tends to become lost in a mass of unresolvable methodological problems, is to explain how modern society constitutes human beings as individuals who see themselves in conflict with others over scarce resources.

VARIETIES OF RATIONALITY

One of the tricky aspects of the discussion of rationality is that the word "rational" is used in many different ways. Economists use "rationality" in a rather peculiar and technical sense.

In ordinary language, to be "rational" means to act consistently and instrumentally to achieve some well-defined end. "Irrational" behavior is behavior that appears to be inherently self-defeating or pointless. Thus, it is rational to pile up stones to make a wall, if you want to build a wall, but irrational to pile stones up in one place simply in order to move them to another place, and then move them back again. The concept of "rationality" also connotes a reasonable orientation toward the real world, and an ability to explain one's actions to others in terms that they can understand.

This broad concept of rationality does not exclude inconsistency in action. Apparent inconsistencies in people's actions can be explained by a change in their intentions, or by conflicting intentions, or because they misunderstand the situation they find themselves in. We have all encountered these issues in our own lives at one time or another, and observe them in others without thinking that we ourselves or the others we observe are "irrational," out of touch with reality, or acting at random. It is also hard to see how the statement that people are broadly rational in this sense tells us much interesting about their behavior, or constitutes a very powerful explanatory hypothesis. It is difficult to argue that this general type of rationality limits people's actions to those that are in some sense in their self-interest. It is rational in this broad sense to take actions that are harmful to one's own interests, but promote a larger goal that one has in mind. Nor does it seem inconsistent with this kind of rationality to act to promote goals that are religious, or aesthetic.

Economists, however, have come to define rationality in a much narrower sense. The economist's rational decision maker *optimizes*, that is, pursues not just any action that promotes a goal, but the action that *best* promotes the goal. The economist's rational decision maker processes information according to the procedures of Bayesian statistics. Furthermore, the goals the economist's rational decision maker

pursues have to be reducible to the direct consumption of material goods and services. This is a "rationality of the belly" (which some people might reasonably regard as being rather irrational).

The contradictions and anomalies that arise from attempts to maintain the hypothesis of "full" (that is, optimizing, substantive rationality) have prompted some thoughtful economists to modify the assumption of rationality. For example, Herbert Simon developed the notion of "bounded rationality," the idea that human beings forego the aspiration to full optimality and pursue goals through "satisficing"—that is, "good enough" rules-of-thumb that may be suboptimal, but move toward the goal (see Simon, 1978, 1979, for a summary of Simon's views on rationality). Simon and James Buchanan also put forward the related concept of "procedural rationality," under which human actors are assumed to devise procedural methods (which might be rules-of-thumb) rationally, and accept whatever course of action the supposedly rational procedure leads to, without trying to work out the substantive consequences of the procedures in each case (see Brennan and Buchanan, 1985, for a mature statement of Buchanan's ideas). Procedural rationality in some versions is highly compatible with the "just so" story of a rational compact underlying the political, legal, and economic institutions of modern capitalist society, since these institutions appear largely in the guise of procedures and rules to begin with. Unfortunately, as Amartya Sen (1995) and others have pointed out, it is very difficult to maintain a sharp boundary between substantive and procedural rationality in practical applications.

The discourse of full, substantive rationality makes "rationality" appear to be an analytical component of a general theory of human action. But this turns out to be something of an illusion. In fact, the *only* theoretical setting in which it seems possible to maintain the hypothesis of full substantive rationality is fully attained competitive economic equilibrium. Under the assumed conditions of competitive equilibrium (full information, market-clearing prices, intense competition), the optimizing substantively rational

actor faces the problem of maximizing utility subject to a budget constraint, a problem that can, in some cases at least, be solved. (In some settings, the issue of the computability of the optimal demand bundle becomes problematic, as Peter Albin (1998) and Kumaraswamy Velupillai (2000) have pointed out.) As a result, competitive equilibrium appears to reconcile the conflicting goals of a large number of rational actors, and thus meet the larger philosophical requirements of rational-actor theory.

But when we relax any of the assumptions of attained competitive equilibrium, serious problems arise in defining substantive rationality. For example, if competition is not perfect, so that strategic interactions among agents are important, it becomes very difficult to give specific content to the assumption of rationality. (This is the realm of "game theory.") The difficulty is that rational action in strategic situations is conditioned on the actions of other agents, which involves an infinite regress. The currently most popular path through these problems involves the arbitrary and unmotivated assumption of "Nash equilibrium" (mutual best-response), which turns out tautologically to amount to the assertion that the state of the economy is compatible with the rational choices of the conflicting agents. Similar problems arise if we relax the assumption of market clearing, even when perfect competition is maintained. If prices do not actually clear markets, then the supposedly rational actor has to contend with the possibility of surpluses and shortages and institutional methods for rationing.

To address these issues the theorist either has to make strong "ad hoc" assumptions about the rationing process, which threaten to defeat the whole purpose of the theoretical exercise, or to introduce strategic interactions outside of equilibrium, leading back to the problems I have just outlined. Even small departures from the full-information assumption of perfectly competitive equilibrium lead to puzzles that appear to be unresolvable within the framework of rational-choice economics. Under the full-information assumption it is possible to imagine that all the agents interacting in the economy have reached the same poste-

rior probabilities over contingencies. But without full information, the theory has to contend with the problem of what agents can learn about each other's information from market behavior and market prices. This is not an easy problem to solve even if one rules out strategic manipulation to influence other agents' behavior.

The recognition of these limits to rational-actor theory has been one of the chief motivations for the development of weaker assumptions of rationality. The hope that sustains "bounded rationality" and its variants is that some of the paradoxes and anomalies of full rationality can be avoided without giving up the connection of economics to the grand philosophical tradition of rationalization. These modified versions of rationality, however, tend to retain a basic orientation to the conception of full rationality. The typical bounded-rationality discourse concerns itself with the ways in which its particular assumptions lead to behavior different from that predicted by full substantive rationality, and thus can explain anomalies the full rationality theory encounters. In this sense bounded rationality is an epicyclic extension of rationality theory. Bounded rationality has had considerable success in explaining observed behavior. But there are too many possible ways in which full rationality might be modified to allow for a "unified" theory of bounded rationality, which instead tends to degenerate from an explanatory framework into a descriptive language. In its pragmatic focus on understanding and explaining how people actually behave in modern society, bounded rationality loses contact with the underlying project of *rationalizing* the institutions of modern society. For example, there really is no logical place in the discourse of bounded rationality for the fundamental theorems of welfare economics that purport to establish a connection between competitive market equilibrium and an efficient allocation of resources. Thus, despite its close adherence to and orientation toward the paradigm of rational actor theory, in particular in its adherence to the idea of explaining social phenomena by reducing them to instances of individual behavior, bounded rationality remains in a subordinate status in the pecking order of economics.

THE METHODOLOGICAL PITFALLS OF THE RATIONAL-ACTOR PROGRAM

Rational-actor theory presents itself as a way of explaining social phenomena by explaining the individual behavior that underlies those phenomena. (It aspires to be a *microfoundations* approach to social science.) But it is actually rather difficult to sustain a coherent account of this type of explanation, and to establish any substantive role for the hypothesis of rationality in it.

First, strong versions of substantive rationality are simply at odds with observable individual behavior. This fact has been immediately apparent to anyone who seriously considers the matter from the earliest attempts to expound rational-actor theory. People are routinely inconsistent in making choices and processing information. They act from multiple motives without having resolved the conflicts inherent in them, and these motives often include aspirations, identity issues, and religious values that are impossible to reduce to material consumption. John Conlisk (1996) summarizes the immense range of these anomalies that have been documented in the scholarly and scientific literature of the last few decades. The disconfirmation of rational-choice theory appears to be one of the few really robust results achieved by the human sciences.

To cope with this mass of contrary evidence, rational-actor theory has had to resort to a number of prevaricating strategies, such as the dubious philosophical proposition that it does not matter whether a theory's assumptions are themselves accurate as long as its predictions are somehow correct (the "F-twist" propounded by Milton Friedman, 1964), and a variety of "as-if" claims: that somehow individuals who behave at variance with the postulates of rationality in Daniel Kahneman's laboratory wind up acting as if they are rational when they actually hit the market place.

Unfortunately, these strategies to defend the "core" of rational actor theory gravely weaken its claims to be an explanatory framework. The difficulty is that these strategies multiply intervening auxiliary hypotheses, in the jargon of the philosophy of

science, which tend to remove the hypothesis of rationality further and further from the actual behavior observed. In this sense the claim of rationality tends to become the merely tautological claim that any observed behavior can be *rationalized* in an appropriate model. At the most abstract level of economic theory, this contradiction appears as the Debreu-Mantel-Sonnenschein theorems (see, for example, Varian, 1992), which show that any demand behavior consistent with a budget constraint can be seen as arising from the appropriately defined rational-actor economy.

The other side of this coin is the question of whether the hypothesis of rationality, even in its strong form, really has any testable implications. Economists such as Gary Becker (1976) have spun models within the general framework of rationality that can explain pretty much all human behavior, even seeming irrationalities (in the broad ordinary language sense of the term) such as substance addiction. This observation in turns raises the question of whether much of the debate about rationality is just shadow boxing, since as a scientific hypothesis rationality puts no real limits on theories. Looked at purely from the point of view of scientific practice, the economic fetish for rationality appears to be an essentially aesthetic preference (though it is used rigorously to filter scholarly contributions in prestigious journals, which routinely refuse to countenance papers that are not couched in the language of rational-actor theory). This aesthetic choice makes more sense once we understand that what is at stake is the representation of modern society as the rational outcome of the confrontation of independent, "naturally" constituted individuals with conflicting interests.

THE ANTINOMIES OF RATIONALITY

Amartya Sen (1995) compactly outlines the purely logical antinomies that are inherent in the rational-actor project. Sen starts, shrewdly enough, with the most difficult problem for rational-actor theory: the problem of social choice, or the aggregation of conflicting individual goals into a social preference. This is a critical point for the discourse

of rationality, because it does not help very much to rationalize the contradictions of modern society to claim that the interactions of fully rational individuals lead to a socially irrational outcome. Yet that is precisely the conclusion of one path through the logical maze of rational-actor theory.

The difficulty Sen identifies is the "Arrow paradox": a society of individuals with conflicting preferences cannot have a consistent preference ordering that respects the preferences of the individuals (for example, when their preferences all agree, as in the case of Pareto-improving changes) but does not degenerate into the preference ordering of any one of them. This paradox arises because the imaginary individuals who make up this imaginary society have no concrete properties at all except the opposition of their interests. Thus precisely those features that in real conflict situations allow for compromise—for example, the commitment of the parties to an ongoing framework of interaction and the existence of a complex web of dependencies that characterize their real relationship—are abstracted from in the rational-choice scenario.

The case of social choice points up the dilemmas of the rational-actor approach sharply, but there is real reason to doubt that there are any problems for which it provides a convincing solution. The rational-actor program is *methodologically individualistic,* in that it accepts explanations of social phenomena only if they arise as the outcome of individually explicable interactions. The only setting in which this program appears to be implementable, as I have argued already, is attained competitive equilibrium, where the conflicting aims of the individuals have been reconciled by the emergence of market-clearing prices. But on closer inspection, it is not at all clear that general equilibrium theory satisfactorily explains how this can happen. Because general equilibrium theory has no dynamic counterpart, it provides no account of how rational individuals can reach equilibrium prices. If individual agents are allowed to set prices, the equilibrium will no longer be fully competitive (because the price setters can take strategic advantage of their price-setting power). General equilibrium theory resorts to another "just so" story to provide a quasi dynamics for price formation, Walras's auctioneer (see Foley, 1994). But is a picture of a social interaction

(competitive equilibrium) that can be sustained only by the all-powerful intervention of an imaginary centralized agent genuinely individualistic? Isn't competitive equilibrium as much a picture of a centralized resource allocation mechanism as it is a plausible account of the emergence of a social outcome from the interaction of individually rational agents?

When we look at the history of general equilibrium theory, this strange ambivalence at its heart becomes more understandable. One important strand of general equilibrium theory was the theory of "market socialism" of Oskar Lange (1948) and Abba Lerner (1944). The whole point of this discourse is to represent competitive market equilibrium and the socialist allocation of resources in terms in which the two systems cannot be distinguished. We can read this economic rune in either direction. It tries to prove that a socialist economy can achieve the same allocation of resources as a capitalist economy, and (with perhaps even more ideological force) that a capitalist economy achieves the same allocation of resources as a theoretical socialist economy. (That is, in terms of efficiency. But the theory of market socialism provides no more guidance to issues of distribution under socialism than neoclassical economic theory does for capitalism.)

These logical antinomies mark rational-actor theory as firmly located in the Kantian tradition. Indeed, the theoretical discourse of economics might just as well be seen as a branch of Kantian philosophy (which is where some of its ablest practitioners, such as Sen, are clearly disposed to move it).

BEHIND THE VEIL OF IGNORANCE

A favorite conceit of rational-actor theory is to suppose that the individuals who will make up society agree on the rules by which social interactions will be governed behind a "veil of ignorance" as to which social role each of them will concretely play. (These rules always turn out to be some approximation to the rules of modern capitalist societies, a mixture of property rights within a framework of democratic political institutions that will reproduce the uneasy mixture of formal equality and substantive inequality that characterizes our world.) But why should we suppose

that there are any conflicts of interest behind this veil of ignorance, since the rational agents who meet there could not have any socially determined characteristics that would put them in conflict?

Despite the arid and abstract character of rational-actor economics (and its obsessive interest in working out the interactions of imaginary agents in an imaginary world), it does awaken a dim sense of recognition of situations we have actually experienced. The imaginary rational actors deciding how to share their imaginary cake are shadowy representations of real human beings acting in the real context of capitalist social institutions. These real human beings have to share markets or politically determined subsidies rather than imaginary cake. These real human beings, however, are not operating behind a veil of ignorance. Each of them has been formed by real personal experience in a definite social context, determined by a particular historical moment. They are emphatically not "naturally" constituted individuals.

As the classical political economists knew, the context in which real agents exist is a constantly developing division of labor organized through the exchange of products as commodities. Once we acknowledge this fact (which is evident enough, despite its remarkable absence from the discourse of rational-actor theory), it is not hard to see why concrete human actors have conflicts of interest. They have different roles in the complex division of labor, and, with the emergence of capitalist relations of production, different class positions. Thus the hidden content of rational-actor theory is the real historical development of modern capitalism. Both the inevitability of clashes of interest and the real possibility of reconciling them are much more understandable in the context of history than in the context of abstract rational-actor theory. The division of labor has both a cooperative and interdependent moment, since it is impossible for any part of it to prosper without the rest, and a conflictual, oppositional moment, since the interests of any sector or class never coincide immediately with those of any other.

The calculating, selfish behavior rational-actor theory puts in the center of its discourse is a product of the social relations of modern capitalist society, as Heilbroner explains. The emergence of commodi-

ties and money as the medium through which the social division of labor sustains and develops itself imposes an inherently quantitative aspect on human activity. The imperative to calculate from a definite point of view, self-interest, is equally the product of these social relations. The logic of the capitalist social division of labor requires the assertion of self-interest in order to reach any outcome at all. Attempts to ignore the boundaries of self-interest in actual economic interactions are self-defeating and conflict creating. The logic of "what's mine is mine and yours is yours," on the other hand, provides the basis for regulating social interactions, forming prices, carrying out exchanges, and moving forward. Adjustments due to values like altruism (the decision that a particular part of social wealth should belong to someone else) and philanthropy (the insight that the world will be a better place with a building bearing one's name) occur after the resolution of these more fundamental questions.

RATIONALITY AND IDEOLOGY

The concept of rationality, to use Hegelian language, represents the relations of modern capitalist society one-sidedly. The theme of rational-actor theory is that "naturally" constituted individuals facing existential conflicts over scarce resources would rationally impose on themselves the institutional structures of modern capitalist society, or something approximating them. But this way of looking at matters systematically neglects the ways in which modern capitalist society and its social relations constitute the "rational," calculating individual. The well-known limitations of rational-actor theory, its static quality, its logical antinomies, its vulnerability to arguments of infinite regress, its failure to develop a progressive concrete research program, can all be traced to this one-sidedness.

Ideology enters here insofar as rational-actor theory attempts to reconcile us to the institutions of modern capitalist society as inevitable. Louis Althusser (1972) characterizes the ideological moment as the "interpellation" or summoning of the individual subject. Ideology addresses us directly to offer us an imaginary account of our relation

to social reality. Rational-actor theory addresses us as subjects, flattering us as "rational," but persuading us that we have no choice but to accept the world as it presents itself to us, since it is, to a better or worse approximation, the world we would have constructed freely if we had the chance (which of course, we don't).

It will not be easy to create a social science that transcends the antinomies and limitations of rational-actor theory. Certainly we cannot depend on the "usual" processes of scientific self-criticism to accomplish much in this direction. No accumulation of its empirical anomalies or demonstration of its logical inadequacies will somehow magically dispel the power of rational-actor theory. Its power does not rest in the last instance on the adequacy of its explanations or the consistency of its logic. The creation of a more fertile economics will require us to live differently. As Hegel points out, this means essentially to think differently, since those who think differently are already living a different life.

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