

THE MANY FLAVORS OF RATIONAL CHOICE
(AND THE FATE OF SOCIOLOGY)

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Abstract: This paper argues that it is premature to judge the weaknesses and strengths of the rational choice approach without more clearly defining what we mean by "rational choice". In particular, it is important to go beyond the well-worn sociology vs. economics controversy and examine other academic disciplines. One then finds that there are contrasting "flavors" of rational choice present in political science, anthropology, psychology, philosophy, and even linguistics. In particular, these different versions can be contrasted along the following dimensions: (1) whether the purpose of rational choice models is viewed as primarily normative, predictive, or interpretive; (2) whether the approach is associated with formal, quantitative models or with informal, "common sense" models; (3) whether the approach is seen as depicting an optimizing or a heuristic procedure; and (4) whether it is "thick" in asserting certain preferences and beliefs or "thin" in leaving these unspecified. The disciplines embrace very different and contradictory views along these dimensions. Examining these differences in turn helps us to identify what, if anything, is the essence of the rational choice approach, as well as which aspects of it are worth retaining.

Introduction

It is an understatement to say that considerable debate in sociology in recent years has revolved around the merits and shortcomings of the rational choice theoretical approach. Throughout the 1980s and 90s, numerous major volumes and articles came out within the discipline, some praising and some attacking the approach.¹ Though the debate has become slightly less contentious in recent years, it remains in the forefront of disciplinary controversy.

My intention in this article is not so much to recapitulate this debate, whose contours are by now well-known, as to place it in a wider context. Much of the emotional temperature of the debate is due to the view of rational choice as being a force for theoretical hegemony and the elimination of theoretical diversity. There is still a tendency by both advocates and critics to view the rational choice as a more-or-less monolithic entity with a unified set of assumptions and methods that have to be accepted or rejected in their entirety. This is seen as a strength by its proponents, and a weakness by opponents.² Implicit in this is the notion that if rational choice were to be accepted as a preeminent theoretical approach, it would mean the decline or even disappearance of sociology as an independent academic discipline.

Indeed, the decade of the 1990s was plagued by the closing or downsizing of several sociology departments, and the apparent declining prestige of the field in comparison with other social science disciplines.³ Moreover, much of this decline was blamed on

¹ Examples of the former include Friedman and Coleman 1986, Coleman 1990, Hechter 1990, and Hechter and Kanazawa 1997, while examples of the latter include Etzioni 1988, Cook and Levi 1990, Zey 1990, March 1992, Smelser 1992, Ferber and Nelson 1993, Smelser 1998, Zey 1999, and Zafirovsky 1999. "Even-handed" works include Swedberg 1990, Coleman and Fararo 1992, and Baron and Hannah 1994.

² For a more detailed overview of this debate, see Chai 2001, chap. 1.

³ Flint 1990, Kantrowitz 1992, Coughlin 1992.

the encroachment of the rational choice approach throughout all parts of social science. Among other things, the largest universities where sociology departments had been shut down, Washington University in St. Louis and the University of Rochester, are also among the country's preeminent hotbeds of interdisciplinary rational choice social science. In both such cases, the assumption by administrators seemed to be that if rational choice was the way to go, then sociology must have very little to contribute.

Much of the contrasting fates of sociology vs. economics has been attributed to the presence of a core theoretical approach (rational choice) in economics and the lack of one in sociology (Crane and Small 1992). It is this core that is said to contribute to the greater prestige of economics. This has led in turn to much heated argument between proponents and (mostly) opponents about whether rational choice in sociology serves to make sociological thinking more rigorous, or whether it is simply a trojan horse for economic imperialism and ultimate hegemony.⁴

In this paper, I will argue that the question of whether rational choice is a positive or negative force is somewhat premature and misses the point. Indeed, before we talk about the advantages and disadvantages of the approach, we need to be much more careful in defining what it is. Furthermore, we need to address the fact that rational choice modeling takes many contradictory forms and is justified in many contradictory ways, particularly when one looks at it across the different social science disciplines. Examining the issue in this way so allows us to identify not only common concerns between sociologists and other social sciences, but also the characteristics that cause alarm among people in each field. One thing that I hope to show is that while rational choice theory is a subject of controversy across all social science disciplines (even economics), the reasons for this alarm are different, as are the portrayals of rational choice.

⁴ For advocacy of such imperialism, see chapters in the edited volumes Radnitsky 1987 and 1992.

Dimensions of Variation among Rational Choice Models

There are a four basic dimensions along which different varieties of rational choice can be differentiated from one another. They are (1) predictive, prescriptive, or interpretative; (2) formal and quantitative or informal and qualitative; (3) optimizing or heuristic; (4) thick or thin. Each dimension will be covered in turn:

Prediction, Prescription, or Interpretation : In economics, sociology, and rational choice, the main application of rational choice theory is in the prediction of individual behavior. Indeed, proponents typically justify its prominence on the basis of its "deductive assumptions" and the resulting ability to generate testable hypotheses.⁵

However, the situation in philosophy is quite different. Rational choice as an empirical model is mostly viewed as outdated (see below), and its primary application is in generating normative models for prescribing ideal behaviors. This conception of why the approach is useful explicitly rejects the idea that rational choice can be used to predict actual behavior. In fact, its usefulness as a normative model is seen as arising directly out of the fact that it diverges so much from the way in which people really act.⁶

Finally, rational choice in anthropology is seen primarily as an interpretative strategy. Much of postwar cultural and social anthropology was predicated on the notion that researchers can enter the minds of their subjects by engaging in a kind of *verstehen* which seeks to view what sorts of rational justifications might be behind the subjects' action, then analyzing what sorts of cultural attitudes might be behind such justifications.⁷ More recently, this been the source of the biggest methodological controversy in cultural and

⁵ See Harsanyi 1969, Mitchell 1969, Holt and Turner 1975, Gray 1987.

⁶ Lyons 1995, Stein 1996.

⁷ See Wilson 1970, Horton and Finnegan 1973, Hollis and Lukes 1982, and Urey 1984.

social anthropology, over whether rational interpretation is an appropriate strategy for understanding. Critics from one side criticize rational interpretation for failing to recognize that subjects may fail to have *any* justification for their behavior, while critics from the other argue that imposing Western notions of justification on subjects is a kind of cultural imperialism.

Formal or Informal : It is taken for granted in sociology, economics, political science, and even psychology that the rational choice approach is inherently formal. Indeed, like predictive capability, this formality is seen by proponents of rational choice in these disciplines as another of its defining attributes and the source of much of its scientific rigor.⁸

It may very disorienting, then, for scholars in those disciplines to find out that in philosophy of mind, rational choice as an empirical model is largely viewed as a kind of "folk psychology" based upon informal intuition. As such, it is seen by many philosophers as an extremely unrigorous and unscientific form of empirical analysis. This lack of rigor is viewed as arising in part from the overreliance on natural human empathy, and the resulting reliance on unobservable concepts such as preferences and beliefs.⁹ Its only perceived advantage is that its intuitiveness allows untrained individuals to use it as a way of "simulating" the thought process of others.¹⁰ Because of this, many philosophers believe that rational choice analysis will gradually be phased out of social science and replaced by more rigorous models, notably connectionist models based upon neuroscience.¹¹

⁸ Becker 1976, Hirschleifer 1985.

⁹ See Stich 1993, Nilsson 1991.

¹⁰ Gordon 1986, 1992, Goldman 1989, 1992

¹¹ See Greenwood 1991.

Optimization or Heuristics : Another contrast is between the notion of rationality as an optimizing procedure, or as a heuristic one. An optimizing procedure is one that is expected to generate the best feasible solution for the individual given the individual's utility function and the information available to him or her. A heuristic procedure, on the other hand, is one that simply provides a few "rules of thumb" for locating a solution to a problem, even if the solution is not necessarily the best one possible. As such, the notion of rationality as a heuristic procedure implicitly views humans as purposive, yet boundedly rational. Furthermore, the solutions they obtain are viewed as "satisficing" by the actors themselves.¹²

Traditionally, economics has viewed rational choice as a form of optimization, and political science has followed along the same route. Indeed, the conception of rational choice theory in these disciplines tends to put bounded rationality beyond the pale of rational choice. Hence many critiques of the approach in economics and political science focus on the unrealistic nature of the assumption that individuals can process all the information they have to make optimal choices. While bounded rationality models are increasingly finding their way into the mainstream of these two disciplines, they are generally viewed as an alternative to rational choice theory rather than a form of it.

The situation is more ambiguous in other social sciences. Critiques of rational choice models in sociology also tend to focus on the unrealistic nature of optimization assumptions¹³ Nonetheless, most work that is classified as sociological rational choice does involve bounded rationality, as is exemplified by the widespread use of evolutionary models. Furthermore, this is also reflected by the fact that formal analysis in sociological rational

¹² For definitions of bounded rationality and satisficing, see the Gilad and Kaish 1986, as well the early work of Herbert Simon and James March e.g. Simon 1947, 1955, March and Simon 1958.

¹³ Macy and Flache 1997.

choice tends to be based on computer simulations rather than on analytic mathematical solutions.

There is a similar kind of ambiguity in psychology. Early postwar psychological adaptations of rational choice theory, such as Expectancy Value analysis and the Theory of Reasoned Behavior, assumed that individuals were able to calculate optimal choices based upon their preferences. More recently, however, these models have been overtaken by the decision theory approach, which explicitly looks for flaws in the optimization view, while retaining the notion of purposive action.

Thick or Thin Preferences and Beliefs : Finally, varieties of rational choice can be distinguished by whether are "thick" or "thin" in their approach to preferences and beliefs. Thick models of rationality impute specific preferences and beliefs to individuals, often through blanket assumptions, while thin models leave preferences and beliefs unspecified. It is well known that the predictive ability of rational choice for human behavior depends on having a unified, thick model rather than a thin one. From this, it might seem to follow that thick conceptions of preferences and beliefs will be found in disciplines that use rational choice in predictive models, while thin conceptions will be found in disciplines that use rational choice in normative or interpretive models. While this is largely the case, there are interesting complications to this pattern, particularly with regards to preferences, which further shed light on the role of rational choice in each discipline.

Both economics and political science rational choice largely adopt thick conceptions of preferences and beliefs. Furthermore, assumptions about preferences are largely unidimensional, self-regarding, and isomorphic, while assumptions about beliefs are based on perception and logical inference.¹⁴ Furthermore, preferences are largely viewed as

¹⁴ Chai 2001, chapter 1.

materialistic. However, if one looks more closely, there is a great deal of variety within political science, in how an actor's material interests are defined. While political science largely rational choice largely adopts economics' assumptions of wealth-based utility functions at the individual level, its assumptions about preferences at aggregate levels are quite different and even contradictory to this. Most notably, political parties are assumed maximize votes, while states are assumed to maximize relative power.¹⁵ It is quite easy to think of instances in which a party maximizing votes may fail to maximize wealth for its members, or states maximizing power may fail to maximize wealth for members of the state apparatus. Given these contradictory assumptions at different levels, each version of rational choice, while predictive in its own right, generates contradictory predictions when combined with the other approaches.

Sociological rational choice in its early days was based largely within exchange theory, and thus had a thick conception of preferences and beliefs. However, its conception of preferences was typically based on the notions that individuals were seeking to maximize social status rather than wealth.¹⁶ Early psychological rational choice theories adopted similarly socially-based assumptions, particularly the Theory of Reasoned Behavior, which assumes that individuals seek to comply with the preferences of other actors within their peer group.¹⁷

More recently, both sociological and psychological rational choice have moved into the experimental laboratory, and in the case of sociology, into the world of computer-based simulations. In the laboratory, preference assumptions can be implicit rather than explicit, because the outcome space can be constricted so that there is only one or a few goods on offer that the subject might plausibly be assumed to desire. In the computer, things can

¹⁵ Downs 1956, Waltz 1979.

¹⁶ Homans 1958, 1961

¹⁷ Fishbein and Ajzen 1975, Ajzen and Fishbein 1980.

be abstracted even further, with virtual actors seeking a "good" that need not be defined in terms of any real-world object. At least in the virtual world, then, thin conceptions of preferences can be consistent with prediction.

Finally, while philosophers rarely use rational choice to examine behavior empirically, much less predict it, their conception of preferences is often quite thick. This is because, as part of the enterprise to develop normative rational models of behavior, there is an attempt among theorists to develop concepts of "rational preferences". Rational preferences are viewed as those preferences which serve certain objective needs of every human being, such as self-preservation, or those than allow human being to play a constructive role in society.¹⁸

What is Rational Choice?

It was noted at the beginning that this paper will not seek to recapitulate the debate on the whether the rational choice approach serves sociology for good or for evil. Nor do I seek to judge which of the different "flavors" of rational choice is the best. It goes without saying that each variety has its own advantages and disadvantages in terms of generality, decisiveness, and accuracy.¹⁹

Instead, to conclude, I would like to make some speculative remarks about what the term "rational choice" means, more generally, outside the particular forms it takes within the subliterations attached to each discipline. Given the great extent to which the meaning varies across these elements, it is far from trivial to determine whether the approach in fact has a "core". Indeed, contrary to the portrayal of many of the anti-economic imperialists,

¹⁸ Gauthier 1986.

¹⁹ Chai 2001, ch. 2.

one of rational choice's notable characteristics as a theoretical approach across the social sciences is not so much its tendency to impose uniform assumptions on all actors, but rather its fragmentation. The characteristics of rational choice that are praised or cursed are for the most part accoutrements that have been attached to it within each discipline, not part of any core.

Given this, what, if anything, is rational choice in essence? Arguably there is only one thing that binds all these contradictory theories together. This is the sense that actions may be viewed as purposive, i.e. that they are the product of goal-oriented decision-making. As such, they all rational choice theories analyze action as intentional, i.e. an effect of the interaction of preferences and beliefs.

Isolated from all the auxiliary assumptions, does this view of human action serve any useful theoretical purpose? If so, what? Without proposing a definitive answer to these questions, I would like to first propose that the ubiquity of this purposive, intentional view is largely due to its consistency with the way that humans tend to predict, predict, and interpret other people's action in everyday life.

Even when this type of analysis is obscured / enhanced by overlays such as a formal technical apparatus and / or assumptions about superhuman cognitive capabilities or narrow, materialistic goals, there is still something intuitive about this view of action. It is not "natural" to us as humans to look at other's behavior without invoking abstract entities such as preferences and beliefs.

Given this, any evaluation of the rational choice approach as an aggregate scholarly enterprise should center around the advantages or disadvantages of such "naturalness". Indeed, the overlays mentioned above, as different as they may be from ordinary human

thinking, nonetheless seek only to refine the this natural of human nature in order to make the resulting theories more decisive,²⁰ rather than contradicting them altogether.

Getting back to the point, what is the theoretical usefulness of rational choice? For better or worse, I propose that the main advantage of rational choice as a general approach is the way that it attempts to bring together *verstehen* (empathetic understanding) and impartial social science analysis. While this may seem either like a contradiction in terms or folk psychology revisited, what is unique about the rational choice approach is the way in which it attempts to take the principles that operate in our empathy and to rework them, in various ways, into scientific language. In doing so, it attempts to give us the best of both worlds - an extremely rigorous, yet extremely human, way of thinking about ourselves and others.

²⁰ See Chai 2001, ch. 2

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