

Rational Choice and Sociology¹

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Rational-choice theorizing has a long tradition within sociology, but has always been controversial and contested. Yet it has influenced the theoretical vocabulary of the discipline at large and has made deep inroads into some important sociological areas such as social movements, social mobility, and religion. Most sociological rational-choice theories assume that actors act rationally in a broad sense, and focus on the aggregate outcomes that individual actors in interaction with one another are likely to bring about. This article reviews the most important contributions to the rational-choice tradition in sociology, and briefly discusses its historical past and its likely future.

Rational-choice sociology is the branch of sociology which is most thoroughly influenced by economic theory. Yet it is not simply an application of economic theory to the explanation of social phenomena. Rational-choice sociology consists of a diverse set of theories only some of which can be said to have been imported from economics. The common denominator of rational-choice sociologists is that they use explanatory models in which actors are assumed

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to act rationally, in a wide sense of that term. Unlike in many other sociological theories, actors are not assumed to be governed by causal factors operating behind their backs, but are seen as conscious decision makers whose actions are significantly influenced by the costs and benefits of different action alternatives.

Most rational-choice sociologists do not seek to explain the actions of single individuals. The focus instead is on explaining macro-level or aggregate outcomes such as the emergence of norms, segregation patterns, or various forms of collective action. To make sense of outcomes like these, however, rational-choice sociologists focus on the actions and interactions that brought them about.

The emergence of rational-choice sociology

Rational choice-inspired theorizing has a long tradition within sociology. Max Weber, one of the founders of sociology, argued for the importance of basing sociological explanations on clearly articulated ideas about rational action (Weber, 1922). Only since the 1980s, however, have we seen the emergence of a more clearly defined rational-choice approach within sociology. Given the constraints imposed by the format of this article, we are not able to give due attention to the range of work produced by rational-choice sociologists. We instead single out a few contributions that have been particularly important for the development of the approach.

Some of the contributions that proved important for the development of rational-choice sociology were not themselves based on rational-choice assumptions. One case in point is the work of George Homans (for example, 1958; 1964). At the height of his career Homans was a highly visible and influential sociologist who made many substantive and theoretical contributions to the discipline. Unlike many of his contemporaries he argued that sociological explanations should take the form of deductive arguments based on clearly explicated micro assumptions. In this respect he had much in common with current-day rational-choice sociologists. But unlike them he did not base his analyses on assumptions about rational actors. Instead he

maintained that sociological theories should be based on assumptions derived from behavioural psychology: 'the principles of behavioral psychology are the general propositions we use, whether implicitly or explicitly, in explaining all social phenomena' (Homans, 1969, p. 204). Despite these differences between Homans's type of sociology and contemporary rational-choice sociology, Homans's emphasis on precise and deductive actor-based explanations meant that he paved the way for what later was to become rational-choice sociology (see Coleman, 1990a).

Another early work which was important for the emergence of rational-choice sociology was Peter Blau's *Power and Exchange in Social Life* (1964). The book covers a range of topics, but Blau was particularly interested in what we today would call implicit contract theory, and he focused in particular on the role of reciprocity in explaining the patterns of social interactions that are likely to emerge within a group of individuals. He also was interested in how differences in power and status emerge over time as the result of such exchanges (see also Emerson, 1962; Cook and Emerson, 1978).

Also of considerable importance was the economist Mancur Olson's (1965) analysis of the logic of collective action. In the pre-Olson era, most sociological theories of social movements and collective action did not problematize the distinction between individual and collective interests. Using standard microeconomic theory to analyse individuals' decisions whether or not to join an organization for collective action, Olson showed that one often should expect rational individuals to be free riders even when they would have been better off had they all joined the organization. In the light of Olson's contributions, social movement researchers started to pay much more attention to the role of individual incentives, and as a consequence, rational-choice ideas came to have a great deal of influence. Hechter's (1987) influential book on the principles of group solidarity exemplifies this trend.

In European sociology, one of the key contributors to the rational-choice tradition is Raymond Boudon (for example, 1981; 2000; 2003). In

numerous publications he argued for the importance of explanations which assume that individuals act rationally. Boudon always has emphasized the importance of basing explanations on realistic theories of action, however. According to Boudon, it is important to recognize the cognitive limitations of real individuals. Individuals often act rationally in the sense of having good reasons for doing what they do, even if these actions may not necessarily be those prescribed by expected utility theory.

Other European sociologists who were important for the development of rational-choice sociology include Lindenberg (for example, 1985; 1990) and Opp (for example, 1986; 1989; see also Raub and Weesie, 1990; Abell, 1991). Lindenberg (a student of Homans) was one of the founders of the Interuniversity Center for Social Science Theory and Methodology (ICS), a Dutch graduate school built on the foundations of rational-choice theory, and he was also a driving force behind the establishment of rational-choice sections within the International Sociological Association (ISA) and the American Sociological Association (ASA).

Jon Elster is another social scientist who has been of considerable importance for rational-choice sociology. Elster's relation to rational-choice theory always has been somewhat ambivalent, however. On the one hand, he always has considered rational-choice theory to be the best available general theory of action (for example, Elster, 1986); on the other hand, most of his writings have been concerned with the limitations of rational-choice explanations. Much of his work since around 1980 has been concerned with the relationship between rationality, social norms, and emotions (for example, Elster, 1979; 1983; 1989; 1999). His writings in these areas have been widely read by sociologists and have established important links between sociological theory, the philosophy of action, and behavioural economics.

The single most important person to influence rational-choice sociology has been James Coleman. Coleman did early work on public choice theory (1966) and on the mathematics of collective action (1973), but his *Foundations of Social Theory* (1990b) is by far his most important

contribution (see also Coleman, 1986, which is an important programmatic statement of his rational-choice position). This treatise of nearly 2,000 pages summarizes and extends much of the work he did during the preceding two decades. In *Foundations*, he shows how a range of traditional sociological concerns such as norms, authority systems, trust, and collective action can be addressed from a rational-choice perspective. In the final third of the book he uses a slightly modified general equilibrium model borrowed from economics to formalize many of the ideas discussed in earlier parts of the book. It is often said that *Foundations* is a book admired by many but read by few, but to judge from Marsden's analyses of citation statistics we may not yet have seen its full impact: 'As of late 2004, more than 1850 indexed works have referenced it, the trend generally increasing over time' (Marsden, 2005, p. 18).

Empirical research

Sociology is an empirically oriented discipline in which the success of a theoretical approach ultimately depends upon its ability to inspire new empirical research and/or to explain important empirical observations. There is a long tradition of implicit use of rationality-like assumption in empirical research, but in some areas, most notably in those concerned with social movements, social mobility, and religion, explicit rational-choice theorizing is closely allied with empirical research, and in these areas rational-choice has become an important part of the intellectual agenda.

As mentioned above, sociological research on social movements was much influenced by the work of Olson (1965), and this is clearly the area of sociology in which rational-choice theories have made the deepest inroads. As a consequence, empirical research has paid a great deal of attention to the costs and benefits of participation when trying to explain the emergence and growth of social movements (see Udehn, 1993, for an overview). In sociology, such costs are often understood as being social in the sense that they depend upon the actions of those with whom individuals interact (for example, Opp and Gern, 1993; Hedström, 1994; Sandell and Stern, 1998).

An empirical regularity that has inspired a great deal of sociological research is the persistent influence of class background on educational choice. Boudon (1974) was an early attempt to use rational choice-inspired ideas to understand why this is so. Similarly, the educational choices of Italian youth was studied by Gambetta (1987) seeking to distinguish between the importance of choice-related factors and factors operating behind the back of the individuals.

Goldthorpe, one of the leading social mobility researchers of the last few decades, in an influential article argued for the importance of establishing closer ties between rational-choice theory and the type of statistical analyses that most social-mobility researchers were engaged in (Goldthorpe, 1996; see also Goldthorpe, 1998, and Blossfeld and Prein, 1998). Many others have followed in his path and rational-choice theory is now fairly central to this research community (for example, Breen, 1999; Jonsson, 1999; Morgan, 2002). Breen and Goldthorpe (1997), for example, developed a formal model aimed at explaining the class differential in educational attainment which assumed that families from different classes develop strategies which seek to minimize the risk of downwards mobility. This model has generated a great deal of empirical research (for example, Becker, 2003; Davies, Heinesen and Holm, 2002; Need and de Jong, 2001).

Perhaps somewhat surprisingly, sociology of religion is another area of sociology in which rational-choice theory has had a great deal of influence. For years, it was believed that modern, 'rational' thinking and exposure to alternative religious views would lead people to question the validity of religious belief systems and that religion would lose its foothold (for example, Berger, 1969). The situation in Europe was cited as evidence. Rational-choice sociologists, however, pointed to the United States and suggested that pluralism of religious alternatives instead is likely to increase the appeal of religion. They assumed that there exists a market for religious goods which is similar to any other market in that competition can be expected to breed efficiency and entrepreneurial activity which in turn is likely to lead to a more attractive range of religious goods and to higher consumption levels. Rational

choice theorists suggested that the European situation with low religious participation was due to state regulation and 'lazy' religious monopolists running the churches, and these ideas have inspired a great deal of empirical research (for example, Iannaccone, Finke and Stark, 1997; Finke and Stark, 1992; Stark and Finke, 2000).

Economic sociology is another increasingly important sociological area in which rational-choice theory plays a significant, although not dominant, role. The best work in this tradition has a strong empirical grounding and explains social and economic outcomes in terms of actions constrained by the normative, institutional, and structural contexts in which the actors are embedded (see, in particular, Granovetter, 1985; Brinton and Nee, 1998).

The standing of rational-choice sociology within the discipline

Although many well-known sociologists work within the rational-choice tradition, rational-choice sociology remains controversial. In part this is because rational choice raises important questions about the very identity of sociology as an academic discipline. Classic sociologists such as Pareto (1915–16), Weber (1922), and Parsons (1937) sought to define the core identity of the discipline by contrasting it with economic theory in general, and with the micro-level assumptions of economic theory in particular. From such a perspective rational-choice sociology may appear more like an example of economic imperialism than as 'real' sociology, and as a consequence many contemporary sociologists consider the use of rational-choice assumptions to be a violation of a 'disciplinary taboo' (Baron and Hannan, 1994). The title of a recent book edited by Archer and Tritter, the former being an influential social theorist and past president of the International Sociological Association, describes the situation in a nutshell: *Rational Choice Theory: Resisting Colonisation* (Archer and Tritter, 2000). These concerns about the discipline being 'colonized' by rational-choice theorists appear unfounded, however. Currently there are only about 200 members in the rational-choice sections of the ASA and the ISA. Although rational-choice sociology has attracted many visible and productive

sociologists, these numbers suggest that rational-choice sociology is more of an endangered species than a species likely to invade the discipline at large. This is in sharp contrast to the situation in political science, where the reception of rational choice has been positive and this approach is now widespread especially in the United States.

A recurrent theme in the criticisms advanced against rational-choice sociology concerns the realism of its assumptions. Concerns for realism are also present among many of those close to the rational-choice tradition. As mentioned above, Boudon (for example, 2003) has always emphasized the importance of realistic assumptions about the individual's social situation, incentives, and cognitive abilities. Similarly, Hedström (2005) has argued that knowingly accepting false assumptions because they lead to better predictions or to more elegant models threatens the explanatory value of the rational-choice approach because it gives incorrect answers to why we observe what we observe. Far from all sociologists are concerned about this, however. Some rational-choice sociologists take a similar position to that of Friedman (1953) and argue that the realism of the assumptions are rather irrelevant (for example, Jasso, 1988), and others argue that deviations from rationality can be ignored because they tend to be like random error terms that cancel out in the aggregate (for example, Hernes, 1992; Goldthorpe, 1998).

Sociological and economic versions of rational-choice theory

In an often-cited paper, Duesenberry (1960, p. 233) described the difference between sociology and economics as follows: 'Economics is all about how people make choices. Sociology is all about why they don't have any choices to make.' Although this is an obvious exaggeration of the differences between the disciplines, and particularly the differences between economists and rational-choice sociologists, it captures an important difference between the disciplines. This difference can be described using Coleman's (1986) so-called micro-macro graph (see Figure 1).

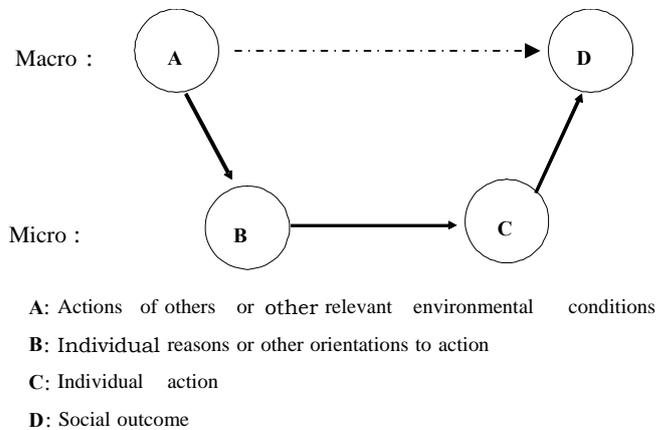


Figure 1 Coleman's (1986) micro–macro graph

As mentioned above, rational-choice sociologists are macro-oriented but they are methodological individualists in the same sense as economists are, that is, they seek to explain macro outcomes and correlations, such as outcome **A** or the relationship between **A** and **D** in Figure 1, in terms of the intended and unintended outcomes of individuals' actions. Typically this entails explicating three causal links: (a) how individuals' orientations to action – their beliefs, preferences, and so on – are influenced by the social environments in which they are embedded (**A** → **B**); (b) how these orientations to action influence how they act (**B** → **C**); and (c) how these actions bring about the social outcomes to be explained (**C** → **D**).

As suggested by Duesenberry, sociologists tend to pay more attention to the macro-to-micro link (**A** → **B**) than to the latter two links. Sociologists tend to focus on how networks, social norms, socialization processes, and so on influence how individuals act by shaping their preferences, beliefs, opportunities, and so on (for example, Boudon, 1988; Burt, 1992; Coleman, 1990b; Granovetter, 1985; Hedström, 2005; Raub and Weesie, 1990). This choice of focus does not mean that sociologists believe that choices are unimportant, however; it simply is the result of an analytical focus on those

aspects of the choice process which are closest to the intellectual heritage of the discipline, and therefore are perceived to be of particular sociological interest.

Another important difference between the disciplines concerns the ways in which one typically goes about analysing the type of processes described in Figure 1. While economic theory is highly mathematized, sociological theory, including sociological rational-choice theory, tends to be much more inductive and empirically oriented. For example, while most economists would specify some mathematical model in order to analyse these types of processes, most rational-choice sociologists rather would take their point of departure in the results of an empirical study. In the sociological analysis, the role of the rational-choice assumption would not be that of an assumption or a postulate of a formal model, but it would be a guide to the type of narrative used for interpreting the empirical results (see Goldthorpe, 1996, for a further discussion of this strategy).

These differences between the disciplines mean that rational-choice sociologists often use 'broader' notions of rational choice than economists typically do. As suggested by Camerer and Fehr (2006), the rationality assumption underlying most economic analyses consists of two components: (a) individuals are assumed to form, on average, correct beliefs about the world in which they are embedded, and (b) individuals are assumed to choose those actions that best satisfy their preferences, given these beliefs. In addition, it is typically assumed that the preferences are self-regarding, exogenously given, and stable through time. Given the sociological interest in how individuals' orientations to action – their beliefs, preferences, and so on – are influenced by the social environments in which they are embedded (the **A** → **B** link in Figure 1), assumptions about stable preferences and non-biased beliefs appear empirically problematic and they would seem to remove from the analysis some of the most interesting and intriguing aspects of the social sciences.

From the economic side of the fence, the more empirically and verbally oriented sociological approach may appear lacking in rigour, while from the

sociological side of the fence there is considerable scepticism about analytical results derived from models which, at least in part, are based on assumptions that lack firm behavioural foundations. It seems likely that these disciplinary differences will become less important in the years to come because of converging trends within each discipline. Within economics, there is a growing interest in traditional sociological concerns such as norms, social interactions, and social networks, and experimental approaches are becoming increasingly more important. And within sociology there is a growing recognition of the importance of the type of formal deductive modelling that currently characterizes so much of economic theory.

Concluding remarks

At this point in time it is difficult to tell whether rational-choice sociology is destined to become an influential force within sociology. It has established itself within the discipline, and more so in Europe than in the United States, but there are no indications, to judge by the size of the rational-choice sections of the ASA and the ISA, that the number of rational-choice sociologists is increasing. Nevertheless, rational-choice theory has had and continues to have an important influence on the discipline, at least in forcing dissenters to clarify better their theoretical tools. One indication of this is that the mainstream sociological vocabulary now includes a range of concepts originating in rational-choice theory, such as free-riders, transaction costs, and collective goods. In addition, largely because of the influence of rational-choice theory, empirically oriented sociologists increasingly acknowledge the need for solid micro theories, and sociologists in general are increasingly concerned with the role of incentives in explaining actions and the collective outcomes that these actions bring about.

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