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Rational Choice Theory and the Family

The very idea that the family and family members' behavior can be understood as "rational" behavior may appear an oxymoron. Indeed, families are the site of extreme emotion, attachment, and even violence. Families are where many of the seemingly "irrational" decisions of life are made. For example, it is currently estimated that the costs of raising one child to the age of 18 is about a quarter of a million dollars. So we invest our time, energy, and money in our children so they can grow up and leave us. That is considered parental success. Yet, as an economic decision, how can this be considered a "rational" choice? Children are clearly an economic liability, and the days when we could count on them for care of elderly parents appears all but vanished. Likewise, anyone observing sibling fights or marital discord is usually appalled at the level of discourse and language used. The volatility of these interactions fails to suggest that these are "rational" actors.

So who in a rational state of mind would propose rational choice theory as a possible explanation of family affairs? In fact, White and Klein (2002) point out there is a long list of scholars who would argue that this theory pertains to family phenomena. Certainly, Malthus's (1798/1872) original work on the relationship between fertility and food supply would count as an application of economic ideas to one area of family behavior. There are, however, more recent applications that provide examples of much broader applications (Nye, 1979; Sabatelli & Shehan, 1993). Nye (1979) called his approach "Choice and Exchange," and although he paid some passing homage to social norms such

as reciprocity, most of his theory focused on understanding family members' behavior as a function of the marginal utility or profit for the actor. For example, Nye provides theoretical propositions that attempt to explain gender differences in sexual behavior, such as marriage and prostitution, by focusing on the costs/rewards ratio for males and females. His theory is founded on the idea that any rational actor would desire to maximize rewards and minimize costs. So even in this intimate area of discourse Nye envisions actors behaving as though choices were arrived at rationally.

Probably the single clearest indication that rational choice theory does pertain to the family is the fact that Becker was awarded the Nobel Prize in economics in large part because of his extension of traditional economic thinking into the "emotional" and "irrational" area of the family. Becker's A Treatise on the Family (1981) extended rational economic theory into areas of the family such as fertility and consumption. Furthermore, his approach sparked other researchers to move into this area sometimes known as the "new home economics."

Becker's work has had a profound effect not just on economic theory but also on social theory. Coleman (1990) is one of those whose social theory has been most affected by Becker's ideas. Notably, Coleman spent six years as coleader with Becker of the Faculty Seminar in Rational Choice at the University of Chicago (p. xv). As a consequence of these seminars and his own theoretical training from his research supervisor Robert K. Merton, Coleman embarked on one of the most ambitious theoretical projects in recent social theory. Coleman's *Foundations of Social Theory* (1990) attempts to use a rational choice approach to explain the emergence of social organization and social institutions. His book provides extensive discursive treatment of social theory, and much of what is said is accompanied by the mathematical models that formalize the discursive theory. As social scientific theory goes, Coleman's work must stand as one of the outstanding efforts in the 20th century.

The topic of the family, so often relegated by other theorists as "any other social group," is especially singled out for theoretical treatment by Coleman (1990). Perhaps Coleman's previous work linking family contexts to child outcomes (Project Headstart) provided him with motive to focus some of his discussions on families and children. Even more importantly, Coleman identifies one of his central concepts and its properties, *social capital*, as a component in explaining aspects of family behavior. Finally, Coleman uses family as a backdrop for one of his most pertinent and interesting discussions regarding the emergence of the *corporate* actor and the contrast with the *natural* actor. Undoubtedly, the family is considered as part of the larger social theory, but few other social theorists have taken the family unit so seriously.¹

The organization of this chapter is designed to first discuss Coleman's theory as it pertains to the family and then to turn to a discussion regarding the critiques of this theory. The chapter begins with a discussion of Coleman's perspective on social theory and his unrepentant adoption of *methodological individualism*. Then the discussion turns to the manner by which Coleman sees social groups and norms as emerging from individual rational choices. This is, of course, a critical problem for social theorists who focus on the individual as an ontological "reality" (e.g., methodological individualism). Then the discussion moves to the concept of social capital and its properties. This concept is then applied to family structure and child outcomes, and the propositions Coleman argues follow from his application of social capital to families. Finally, we focus on Coleman's discussion of the natural versus the corporate actor and Coleman's surprising argument about the possibility that rational choice may be as much prescriptive as descriptive.

The next section of this chapter turns to critiques of rational choice. The major critiques come from three distinct areas: mathematical game theory, prospect theory, and metaphor theory. Taken together, these three critiques argue strongly that the rational choice theory works in part because of the prescriptive nature of the theory and that Coleman's worries regarding the corporate and natural actors may indeed be founded in the prescriptive nature of rational choice theory.

Methodological Individualism

I have previously discussed methodological individualism in regard to levels of analysis (see Chapter 4). In that discussion, I pointed out that methodological individualism is a theoretical assumption that the individual is the principal causal agent. There is, however, usually more to this assumption than such a characterization captures. Most social science theories assume "reality" resides at some level of analysis. For example, for Karl Marx the individual was not the ultimate level of reality; instead the historical processes and the forces it unleashed composed "reality." Individuals were, in the Marxist view, just particles blown by the winds of history. Other macroscopic theorists have also viewed the social system as the ultimate reality and individuals as simply carrying on the normative culture to the degree that they are properly socialized.

There is, however, a long tradition in the social sciences, especially psychology and education studies, arguing that the individual human being is the ultimate reality. This perspective might be called "ontological individualism" as easily as "methodological individualism" because the individual is imbued with a degree of reality that other levels of analysis cannot claim.

In this perspective, any claims about effects of groups or organizations must ultimately be reduced to the effects on individuals. For example, if there is the claim that a "lynch mob" has a "mob mentality," the methodological individualist would argue that if this is indeed the case then we should be able to find such a mentality residing in the individual members of the mob. The idea of there being any "emergent group phenomena" is seen as reducible to the individual members of the group.

To digress further for a moment, the traditional difficulty for social theorists adopting a stance of methodological individualism is that macroscopic phenomena such as social organization, norms, and culture, must all be reduced to the individual for both its production and demands. For example, if each individual is a rational actor acting so as to maximize profit, how is it possible to produce social norms that limit each individual's choices and hence, ability to fully profit. Individualistic theories that invoke a norm of reciprocity or a norm of equity clearly announce that these norms condition the individual's choices, and hence the individual is affected by something that might be at a societal level. Where do such norms come from, and how can they be explained by individual behavior? This is the production question.

In contrast the demand question poses the following: If each individual is a rational actor acting to maximize profit, then how does any social organization convince the individual to abide by informal norms such as turn taking, lining up, and so on? In other words, how is "the public good" seen as an individual profit? Imagine a long line of two lanes of traffic merging into one lane. The public good would be served by an orderly process that reduces conflict, such as taking turns merging into the one lane. However, a rational actor concerned with his or her own profit would simply "butt" in line at the first opportunity. Even if you were to answer that individuals are "socialized," the question would remain as to who or what is socializing people into norms that would be antithetical to individual profit. The Hobbesian solution of the social contract only works if behaving against the contract is sanctioned, yet there are few consequences for butting in line or transgressing the many informal norms of civil society.

The challenge to methodological individualism is to answer such questions as these while maintaining that all explanations must be reducible to, and in some sense, measurable on individuals. Because we are all individuals, the notion that the individual is more real than other aggregations such as social groups and institutions seems to fit our world view, especially in the individualistic cultures of the West. Usually theorists have no problem attracting adherents to this perspective. The problems reside rather in the ability to explain social and cultural realities such as normative behaviors, rituals, and traditions.

Coleman (1990) explains that his position is a variant of the traditional perspective on methodological individualism. Coleman states that his variant is mainly concerned with societal-level explanations rather than individual-level explanations. He notes that the major problem for social theorists proposing methodological individualism is the inability to move to the macroscopic levels of analysis. I think he quite insightfully uses the example of the widening gap and poor linkage between microeconomics and macroeconomics as "a weakness papered over with the idea of 'aggregation'" (p. 6).

The variant of methodological individualism assumed by Coleman (1990) is surprisingly familiar. He states,

The individual–level of action I will use in this book is the same purposive theory of action used in Weber's study of Protestantism and capitalism. It is the theory of action used implicitly by most social theorists and by most people in the commonsense psychology that underlies their interpretation of their own and other's actions. (p. 13)

Coleman goes on to add the specific and more precise notion of "rationality." He states he "will use the conception of rationality employed in economics, the conception that forms the basis of the rational actor in economic theory" (p. 14). In other words, he adopts the stance shared by Becker and others that human action is purposeful in that it seeks to maximize utility.

Coleman then turns to some of the major criticisms of this perspective. A couple are especially worth noting. First, it can be argued that much, if not all, action is irrational, expressive, or impulsive. Coleman cites the work of Tversky (1972) and Kahneman, Slovic, and Tversky (1982) as demonstrating that irrational choices seem to be more the case than rational choices. Coleman's response to this criticism is that if we assume humans are rational actors and develop theory according to that assumption, then the degree to which the theory fails to explain and predict is the degree to which the assumption was wrong. The problem with this logic is, of course, that some other set of assumptions might be an even better explanation. Coleman also says that the assumption of rational action also accompanies much of Western moral and political thought, such as John Locke and Jeremy Bentham. He cites the view of man as "purposive and a responsible actor" as further justifying this assumption. Naturally, Coleman does not cite Nietzsche, Kierkegaard, or Heidegger as support.

A second critical objection is that an explanation assuming rational purpose is largely teleological. That is, "man does *X* so as to gain a rational outcome" assumes that behavior is not determined by antecedent states but in terms of future states. Indeed, causal direction is backward. Coleman's (1990)

response to the teleological criticism is instructive. First he acknowledges that teleological arguments at the societal level led directly to the problems with and eventual abandonment of "functional" explanations; however, he does not see his assumption as leading him to the same fate, for a very intriguing reason.

When the actions treated as purposive are actions of individuals, however, and the action to be explained is the behavior of a social system, behavior which derives only very indirectly from the actions of the individuals, then the explanation of system behavior is not in terms of final causes but in terms of efficient causes. (p. 16)

This is an interesting twist on the problem of teleology. Coleman is saying that because he is concerned with an aggregated effect that is at a different level of analysis, the assumption of rational action does not make for teleological explanations at the societal level where concepts as "norm" and "capital" are used rather than individual rational purpose. The only way to properly analyze this claim by Coleman is to understand how he moves from the individual actor to the societal level. Although Coleman uses the concept of maximization of utility for generating the mathematical models for the theory, he does note that it is not a necessary component of the theory in the way the rational actor assumption is necessary. He is quick to note, however, that when moving to the societal level of behavior, maximization of utility clearly assists in understanding how aggregates of individual behavior form macroscopic effects. For example, the overgrazing of sheep by one farmer clearly minimizes the range available to others and constrains their maximization of utility. This is called an "externality." So although Coleman clearly acknowledges the challenges to the assumption of methodological individualism, the rational actor, and maximization of utility, he is undeterred by these critiques and foresees great theoretical gains as a result of these assumptions.

Emergence of Organization and Norms

The explanation of social organization is critical to the success of any social theory, especially those dealing with the family group. Coleman approaches this problem in several ways. Among the more important ways in which Coleman addresses the construction of social organization are his discussions of exchange relationships and interdependency of actors, contracts, rights, and authority. However, none of these is as central to understanding the pervasiveness and enduring quality of social organization as the discussion of social norms.

Coleman recognizes that the discussion of social norms can be divided into the emergence of norms and the maintenance of norms. Although significant social theories may take social norms as given and proceed from that point (see Chapter 7), Coleman needs to demonstrate that social norms (macro) may be generated from the individual's maximization of utility (micro). As Coleman notes, "as much as any other concept in the social sciences, a norm is a property of a social system, not of an actor within it" (1990, p. 241). Coleman is adamant about the task of identifying the emergence of norms. He says, "I refuse to take norms as given: in this chapter I ask how norms can emerge and be maintained among a set of rational individuals" (p. 242).

Coleman defines norms as follows:

I will say that a norm concerning a specific action exists when the socially defined right to control the action is held not by the actor but by others. (p. 243)

This definition implies there is a consensus about the right to control the same action among a large number of actors. No norm can exist if an actor has the right to control the action. However, Coleman is quick to point out that when the actor internalizes a broadly held social norm, that internalization does not change the fact that the right to control that behavior is held by other actors. For example, I may believe that monogamy is the correct, normal, and moral type of marriage because I have internalized the teachings of church and Western society. That fact, however, does not remove the legal sanctions for bigamy nor make this totally an individual choice. Coleman points out that individual choice (microactions) are affected by the system-level norms in order to produce the individual-level action of conformity to the norm. Thus the interaction between the microlevels and macrolevels is most evident in regard to the normative system.

As previously mentioned, some of an individual's behavior only affects the individual, but much of individual behavior affects others. When behavior affects others either positively or negatively, it is said to have "externalities." For example, if one shovels the snow off the sidewalk in front of a house, that is a positive externality, and if one smokes cigarettes in a closed social space, that has negative externalities for the nonsmokers (Coleman, 1990, p. 249). Norms arise when a significant number of people experience an externality in the same way (good or bad) and no individual actor (e.g., monarchs) has the authority or control to change the behavior.

The emergence of norms is based not just on the externalities of the action but also based on the fact that no one actor can control the behavior. As a result, Coleman (1990) argues that

In the absence of an externally imposed solution to the public-good problem, some kind of combined action is necessary if a social optimum is to be attained. The combined action can be the mutual transfer of rights that constitutes establishment of a norm; but for the norm to be effective there must also be an effective sanction to enforce it, if any of the actors should give indications that he will not contribute. (p. 269)

It should be obvious that sanctions may be positive, such as rewarding certain behaviors, as well as negative punishments and costs.

Coleman's solution, then, is to see norms as emerging from common causes among a majority of social actors affected by the externalities or consequences of an act. Although this fits with somewhat similar proposals by political philosophers such as Hobbes and Locke, this solution also raises some critical questions. The major question is what has become known as the "second-order public good problem." Imagine that the emergence of norms really involves two steps. The first step is the identification of a rule or norm to constrain or promote the externalities of the behavior. So, for example, we might decide we would like everyone in the municipality to clear the walks in front of their property within 24 hours of a snowstorm. The second step is attaching sanctions that would reward those who do so and punish those who do not. The first step only involves consensus, whereas the second step involves enforcement.

It is this second step that provides the basis for the second-order problem. Coleman provides a splendid example from one of Aesop's fables. A mouse society is being plagued by the externalities of a vagrant cat who insists on eating the mice citizens. The mouse council reaches a consensus that a bell should be affixed around the neck of the cat so all can be warned of the approach and presence of danger. In other words, the council has in effect decided to sanction the cat for his deviant behavior. Now the second-order problem is, who will step up and volunteer to put the bell on the cat?

Now, the fable may seem disconnected to most human social norms, but the parallel is instructive. Imagine we are standing in line for concert tickets. A couple of people come "butt" in line ahead of us. Clearly the norms regarding "queuing" or "lining up" have been violated, but who will say anything or sanction the behavior? Those people not saying anything are termed "free riders" of the normative system because they receive the benefits but not the costs. In contrast, "zealots" are anxious to enforce any infraction of any norm regardless of how inconsequential the externalities. Coleman uses payoff matrices to predict when the costs of sanctioning outstrip the rewards the individual receives from the norm. Even without mathematical modeling, it is obvious that the costs of sanctioning an act should not exceed

the consequences or externalities of the original act, otherwise the costs would not warrant the norm. In the end, in Coleman's view, unenforceable norms are destined to have a short life as norms.

Coleman's view of norms, when coupled with his discussion of authority, rewards, and exchange, allows us a fairly comprehensive picture of the emergence and maintenance of social structures and organizations. However, Coleman's project is far from complete at this stage because the social structures that emerge then interact with the norms, forming networks of norms and sanctions as well as structures that impede or propel. Indeed, he points out that the second-order problem is more effectively resolved by group structures that have "closure" (explained in the next section). Furthermore, Coleman (1990) argues,

The social system has within it a potential, analogous to the potential in an electrical system. That is, when one actor carries out an action, thus experiencing costs, and others receive the benefits, the return that the actor experiences is not merely those benefits transmitted back to him through the social structure but those benefits amplified by this potential that exists in the structure. (p. 277)

Indeed, as we will find out in the next sections, these properties of social structures are especially relevant for understanding families.

Social Capital

Although Coleman's (1990) 950-page treatise on social theory contains considerable richness and conceptual sophistication, much of the literature citing Coleman mainly uses the notion of social capital found in his earlier work (Coleman, 1988). In many regards, Coleman's theoretical work is best known for the concept of social capital (although several other theoreticians, such as Bourdieu, 1986, may also lay claim to the idea). For Coleman, the idea of social capital helps further forge together his notions of social structure and norms. The idea of social capital is also one of the concepts most relevant to families.

Coleman begins by distinguishing among three types of capital: physical capital, human capital, and social capital. Physical capital is entirely physical and constituted as tools that are aimed at production, such as a computer. Human capital changes people by giving them skills, knowledge, and abilities so their actions are enhanced. Finally, social capital concerns the relations between people that change their activities.

Understanding the difference between physical capital and the other two forms is not difficult because physical capital is entirely physical. However, the difference between human and social capital is more difficult to understand. Both human and social capital change the individual's abilities. They do so in different ways. Coleman uses a triangular diagram to explain this. He points out that the points composing the vertices of the three angles represent human capital whereas the lines between the vertices represent social capital. Human capital is contained in the individuals (vertices); and social capital is the relationships between individuals. Coleman (1990) states,

if B is a child and A is an adult which is a parent of B, then for A to further the cognitive development of B, there must be capital in both the node and the link. There must be human capital held by A and social capital in the relation between A and B. (p. 304)

Coleman is quick to point out that the relationships of social capital are where person A controls some outcomes of interest to B and likewise B controls some outcomes of interest to A. So the relationship is an exchange relationship. He characterizes the relationships, and hence social capital, as having three properties: closure, stability, and ideology. These three components create variation in the degree of social capital available to an actor.

Closure is a social system of relationships where all those affected by an actor's externalities are also in social relations with that person. This entails that every member of the social group must be related directly or indirectly (through another person) to every other actor. Closure is important in the development of trust because it involves intermediaries in the structure. Closure is important in generating and enforcing norms because the actors all bear the same externalities or consequences. For families, closure represents both trust and normative culture.

Social structures that can be maintained as stable organizations in the face of instability are said to be "stable." This is a second component of social capital. One way to achieve such stability is, of course, commitment of actors, such as in the family where marriage is for life. Another way to maintain stable relationships is to have positions that are related to other positions, and these relations are not dependent on the individual incumbents. Most modern social organizations function in this second way to maintain social capital.

The third component of social capital is the ideological demand that the actor relates for some purpose other than for the self. This could be a religious ideology or a collectivist ideology or a family estate. The negative side of ideology would be egoism or individualism to the extent that the actor is only acting for his or her own welfare. It is interesting to see how the

normative culture returns to affect this structural element of Coleman's theory. All three of these properties of social capital have ramifications for families.

Family Structure and Social Capital

For most children, the family is the single most important source of social capital. Indeed, the social capital of the family provides the child with choices in acquiring human capital. However, the inverse of this proposition is even more important; that is, the social capital inherent in the strong relation between an adult and a child is important or necessary for the development of the child (Coleman, 1990, p. 593).

The three properties of networks predict the amount or degree of social capital. A collectivist ideology would predict the concern and investment of other members in the child's well-being as part of the collective. The stability of the group clearly is important for the child's development of trust and feeling of security. The property of closure requires a more detailed analysis because it occupies a central role in regard to Coleman's propositions about the family.

Coleman (1990) describes the effects of network closure on children in the following passage:

Closure is present only when there is a relation between adults who themselves have a relation to the child. The adults are able to observe the child's actions in different circumstances, talk to each other about the child, compare notes, and establish norms. The closure of the network can provide the child with support and rewards from additional adults that reinforce those received from the first and can bring about norms and sanctions that could not be instituted by a single adult alone. (p. 593)

Coleman also points out that adults can and need to reinforce each other with patterns of discipline and rewards to strengthen approval and disapproval of the child's behavior. Closure becomes essential for the consistency and reinforcement of the child but also for the transmission of potential human capital to the child in the form of knowledge and skills.

Coleman (1990) argues that the degree of social capital can be measured in several ways. For example, Coleman offers the following proposition:

When both parents are present, there will be, if all else is equal, a stronger parent child relation than when only one parent is present. (p. 595)

He continues with four other propositions. He proposes that the greater the number of siblings the less the social capital, because social capital between the parent and child is diluted by more children. The more parents talk about personal matters with the child, the greater the parental interests in the child. The more a mother works outside the home before the child is in school, the less she is focused on the child as opposed to career. And finally, the greater the parental interest in the child attending university the greater the parental concern with the child's future.

It is extremely difficult to justify these five propositions as derived from the theory rather than expressing Coleman's previous empirical findings or simply cohort biases. However, Coleman argues that single-parent family structures lack the closure that is possible for dual-parent families. From the component of structural closure, Coleman "deduces" that the children of single-parent families are exposed to greater risks than children of dual-parent families. At times Coleman refers to these propositions as "measures" of social capital that have been derived from the concept, even though these would not necessarily be supported by his conceptual argument if taken in its entirety. Rather, most of this argument is founded on the closure aspect of social capital. Take, for example, the proposition regarding siblings. Certainly when siblings are spread out in ages, the oldest offer social capital to the youngest and the youngest provide social capital in terms of babysitting jobs and experience with young children, an asset for camp counselor jobs, coaching, and later parenting. Indeed, Coleman's view about only the parent-child relationship predicting social capital seems far-fetched in relation to closure, stability, and ideology in some large families.

Natural and Corporate Actors

Coleman (1990) summarizes the relation of the three major forms of capital as follows:

Throughout most of history persons have been born with some mix of three kinds of endowment: genetic endowments that, when developed, constitute their human capital; material endowments in the form of land, money or other goods, which constitute their physical capital; and the social context surrounding and supporting them, which constitutes their social capital. (p. 652)

He goes on to say that the change in social capital is perturbing.

Of particular note are an increase in physical capital resulting from economic abundance and a decrease in social capital provided by the primordial social organization of family and community. (p. 653)

Coleman (1990) views the holistic frame of reference used in the "primordial" relationships of the family as important in the successful maturation and development of children. Earlier he made this point by asserting "a child has a clear need for such a person or corporate actor" (p. 598). He argues that

one question for the social structure of the future, then, is this simple one: Who will take responsibility for the whole child: who will be in a position to "claim the body"? If the family disintegrates, with natural parents performing only the function of procreation and then disappearing into their own networks based on self-interest, there is no natural replacement. (p. 598)

To demonstrate the notion that these natural relations are qualitatively different than role-segmented relations of corporate actors, Coleman (1990) uses the metaphor of "claiming the body" when someone dies. Coleman's argument, that there are corporate and natural relationships and that family is a more primordial natural relationship, is similar to the "defunctionalization" argument of Parsons. In fact, Coleman states, "the primordial structure is unraveling as its functions are taken away by new corporate actors" (p. 585). Coleman's perspective on family structure is clearly that two-parent families will have better child outcomes. Yet the notion of closure would indeed allow for single parents to be involved in social networks with closure. However, this line of thinking remains unexamined by Coleman, and he pursues exclusively his proposition regarding family structure (dual versus single parent). Indeed, rational choice seems to make many of the same background assumptions as functionalists of the 1950s, even though the conceptual clothing of types of capital appears new.

Coleman (1990) sees the family as tied to an important dimension of social capital for children. He argues that social relations consist of role-segmented relations, such as doctor-patient and lawyer-client, on the one hand, and natural relations where one person relates to another as a whole person, on the other. He argues that this whole-person relation is found in primordial families and kinship and constitutes a valuable and increasingly endangered form of social capital in modern social systems dedicated to role-segmented corporate actors. For example, the mother relates as a natural person to the whole child whereas the day-care worker, babysitter, and teacher relate to the child as role segments. He argues that the role-segmented or corporate role structure in general fails to deal with the child as a whole person. However, in discussing future social change, Coleman speculates,

There appear to be two general strategies that can be employed to ensure that in the society of the future the child will be attended to as a whole person. One is the nurturing or strengthening of the primordial relations of kinship, which have constituted the principal source of such attention and responsibility. The second is explicit creation of purposive organizations—that is, modern corporate actors—structured so that persons do give attention to and take responsibility for the whole child. (p. 598)

Thus family and kinship represent natural or primordial relations where the child is treated as a whole person rather than a role segment. As closure, ideology, and stability of the child's family increase, so does the degree that the family network affords the child social capital. This social capital then is tied to the child's further acquisition of human and physical capital, all of which are associated with "success" in modern societies. The question clearly remains for Coleman as to whether a child can be successfully raised without this holistic primordial relationship being present.

Critiques of Rational Choice

White and Klein (2002) discuss several major critiques of microexchange and rational choice theories (pp. 53–57). Among these are two that apply particularly well to Coleman's formulation of rational choice theory. These two critiques focus on the assumption of "rational actors" and "methodological individualism." Both are germane to Coleman, although they must be modified somewhat to fit the particular formulation Coleman offers. Coleman is very aware of the many criticisms regarding the assumption of the "rational actor." He is especially aware of the criticisms launched by game theory and Kahneman and Tversky's (1979, 1983, 1984; Tversky & Kahneman, 1988) research, and he cites both areas of discourse. So discussing the assumption of the rational actor *a la* Coleman is going to require a more sophisticated treatment than the generic treatment offered by White and Klein (2002).

Rational Actor Assumption

As I indicated at the beginning of this chapter, there are three major critiques of rational choice theory originating from somewhat different perspectives (see Lakoff & Johnson, 1999).² The first critique is almost accidental because it originates from a school of thinking that is largely supportive of rational choice theory. This first source is *game theory*, and in particular

one family of games called the Prisoner's Dilemma. A second source is from what is known as *prospect theory* in psychology and economics and owes it foundation to the work by Kahneman and Tversky (1983, 1984; Tversky & Kahneman, 1974, 1988). This perspective questions the ability of humans to be rational and to make rational choices. The third and final source of criticism is from the theory of metaphor proposed by Lakoff and Johnson (1980, 1999). Lakoff and Johnson (1999) argue that although humans are not rational in some absolute sense, they may nonetheless demonstrate a form of contextual rationality. All three of these criticisms are interrelated and all the more compelling taken together.

Prisoner's Dilemma

The Prisoner's Dilemma is a classic game-theory model with two players. It originally was part of a story about two prisoners in a Russian court. The prisoners were both accused of the same crime, and each claimed the other had committed the crime. The judge decided he would offer an incentive for the truth and punishment for lying. He told the two prisoners (A and B) that if one of them confessed, thereby showing that the other one was telling the truth, the confessor would receive a sentence of 5 years and the truthful person would go free. If, however, both continued to say the other one did it and no one confessed, then each would get a 7-year sentence. Finally, if both confessed, they would both receive 10-year sentences. Now the actual story is designed to make the rational actors tell the truth. Both prisoners were sent back to their cells to decide whether to confess or not and had no communication with the other prisoner.

The "payoff" offered by the judge presents a complex set of contingencies. The person (A) that committed the crime would receive the lightest sentence by telling the truth and a heavier sentence by maintaining the lie of innocence. The truthful person (B), however, has a dilemma because if the guilty person (A) behaved irrationally and continued to lie, the truthful person could receive a 7-year sentence. The truthful person (B) could reduce this by confessing to the crime he did not commit, but only if the guilty person (A) continued to claim that he did not do it. However, if the guilty person (A) decided to confess and the nonguilty person (B) decided to confess, they would both receive a maximum sentence of 10 years.

Even the early experiments using the Prisoner's Dilemma yielded a diversity of responses. Certainly some actors behaved as though they might be rational, but others clearly defined the context of the game as so competitive that they would rather everyone lose than let anybody have a superior outcome to themselves. Thus there were guilty parties who would continue to

lie even though they would spend two more years in prison than if they told the truth. This was true even when outcomes were positive. (See Sprey, 1979, pp. 148–150, for an application to marriages.)

The nature of the Prisoner's Dilemma depends in part on the players' interpretation of the context. For example, is the context basically one of trust and cooperation or, in contrast, is the context interpreted as a "dog-eat-dog world" where the ultimate "win" is "sticking it to the other player before he can stick it to you." Sprey (1979) reports several studies conducted by Epstein and Santa Barbara (1975; Santa Barbara & Epstein, 1974) using married couples in games of Prisoner's Dilemma and Chicken. Four personality types emerged in this study, and the most aggressive were what they termed "Hawks." Sprey (1979) notes that "Epstein and Santa Barbara report that Hawks tended to be more suspicious and defensive than all others, and also exhibited a high degree of rigidity" (Sprey, 1979, p. 150). Clearly the fact that different personalities react differently in assessing payoffs can only be accommodated in game theory if, on average, people behave rationally. Certainly in the context of marriage there exists some doubt.

So in the end, although Coleman and other rational choice theorist present the mathematical representation of "payoff" matrices and predict the ways in which rational actors would behave, this seems more of an assumption, an abstract model, than an actual way in which actors would compute their behavior. I will return shortly to further discussion of the context of "rationality."

Kahneman and Tversky

It is interesting that Coleman's work was guided and influenced by the work of 1992 Nobel Prize laureate and economist Gary S. Becker. It is even more interesting that one of the major criticisms of the assumptions shared by Becker and Coleman derives from the work of the psychologist Daniel Kahneman, a Nobel Prize winner in economics (2002) for the work that he and his colleague Amos Tversky produced over a period of 20 years. Even when Coleman wrote his major theoretical work (1990), he cited Kahneman and Tversky's work in several places.

Coleman recognized that Kahneman and Tversky's work represented a threat to the assumption of rationality. Indeed, he used very strong language—such as "have conclusively shown"—to refer to the antirationalist findings and conclusions of Kahneman and Tversky. He states that "Kahneman, Tversky and others (see for example, Kahneman, Slovic, and Tversky, 1982) have shown conclusively that persons, when intending to act rationally, have systematic biases that lead their actions to be less than

rational, according to some objective standard" (p. 14). In addition, Coleman notes that using maximization of utility (profit) as a basic theoretical component is even more difficult to defend than the more general assumption of "rational actors."

Coleman (1990) defends his adherence to these suspect assumptions in several ways. One way he defends his assumptions is to argue that when we make such suspect assumptions "it then becomes an empirical question whether a theory so constructed can mirror the functioning of actual social systems which involve real persons" (p. 18). This is to say that if we make these assumptions and they produce empirically accurate predictions, then we can accept them even though we know them to be incorrect. The problem with Coleman's logic here is that it commits the "fallacy of affirming the consequent." He is saying that if we cannot empirically reject rational choice theory then the assumptions are warranted. Yet failing to reject empirical predictions would not mean that the theory is true but only that the theory is among the set of theories that would produce such predictions. In most cases this could be a very large number of existing theories.

A second argument that Coleman (1990) uses in defense of the assumption of rationality is that the assumption is consistent with political and philosophical thought regarding the human nature: "In a certain range of scholarly endeavor, including ethics, moral philosophy, political philosophy, economics, and law, theory is based on an image of man as a purposive and responsible actor" (p. 17). He argues further that "social theory which uses that base stands to profit from the intellectual discourse this common ground makes possible" (p. 17). There are two problems with this argument. One is that consistency with foolishness is no asset. The fact is that although some theorists have used the rational actor approach, especially from Locke to Bentham, others such as Nietzsche and Heidegger have not done so. Certainly Western law is largely founded on the thought of John Locke, but there is extensive philosophical writing both in the East and West that would not adopt the rational assumption so easily (e.g., American pragmatism in the hands of Peirce, James, Dewey, Rorty, and Haack). So to argue that the assumption is justified by being consistent with the political philosophers and economic theorists that one likes versus those one does not like is hardly compelling.

One final argument that Coleman (1990) raises in defense of the rationality assumption is that "much of what is ordinarily described as nonrational or irrational is merely so because the observers have not discovered the point of view of the actor, from which the action *is* rational" (p. 18). The argument seems to be that if we simply change perspective we will encounter how an act is rational and hence the assumption is indeed warranted. The

problem with this argument is that if rationality is indeed "in the eye of the beholder," it would then lack any of the intersubjective (objective) nature that is usually tied to scientific theory and is the reason behind science (nomothetic laws). Naturally if rationality is so relativistic, then no one has a privileged position as to the correct interpretation of an act as rational or irrational. It is my guess this is not the theoretical outcome Coleman envisaged or desired.

Rational Actor as Prescriptive Rather Than Descriptive

It is this perspective that "rationality is in the eye of the beholder" that Lakoff and Johnson (1999) so ably address in their critique of rational choice theories. Most importantly, Lakoff and Johnson point out that the great success of the rational actor model may not be in the theoretical prediction of behavior so much as in supplying a *moral framework* of how corporations and the actors within them *should* operate.

[S]o institutions have been constructed according to the rational-actor model. Contemporary economic markets are such institutions. . . . "Rational action" for a firm in a market is sometimes defined as nothing more than acting so as to maximize wealth, that is, to maximize profits and minimize costs and losses. (p. 530)

Lakoff and Johnson (1999) illustrate their point using the perspective of rational actors toward the environment. They first point out that the environment is, from the standpoint of the rational actor, perceived as a "resource" because it is not a rational actor but something in the state of nature. As a result, pollution is not seen as a cost to the environment because it is not a rational actor. Totally consistent with this view is the perspective that when corporations are forced to clean up pollution it becomes a reward. Even worse, money spent to clean up pollution is added to the gross national product and to the profits of the corporations doing the cleanup. Pollution then becomes a source of benefit—a good (p. 531).

Lakoff and Johnson argue that the use of rational choice theory to guide and justify any course of action is not science but morality. It is the invocation of one set of moral values over other moral perspectives.

The choices of what such values should be are moral choices, not "rational" (i.e., interest-maximizing) choices. In short, any use of a rational-choice model to change the world, to make it more "rational," is a moral choice. (p. 533)

It may have been this value-laden quality that Coleman sensed in the latter parts of his *Foundations of Social Theory* (1990). Certainly there is some unease expressed by Coleman with the replacement of the natural actor with the rational, corporate actor.

Methodological Individualism and the Natural Actor

It is somewhat confusing for any reader of Coleman to spend approximately 300 pages establishing that from individual "rational actors" we can move to social norms and social organization. Indeed, Coleman pays serious attention to the theoretical move from microlevel analysis to macrolevel. It is, then, a great surprise to find the concept of the natural actor emerge late in the book and furthermore to find that this concept is not derived from the individualistic assumptions of rational choice theory. As Coleman (1990) points out, the natural actor is derived from "primordial" relationships.

Of particular note are an increase in physical capital resulting from economic abundance and a decrease in social capital provided by the primordial social organization of family and community. The latter change (discussed in Chapter 22) reflects the growth of purposive corporate actors, which have replaced the household and community for an ever increasing range of functions and have thereby weakened those primordial corporate actors. (p. 653)

It is amazing that Coleman has already established that child development is well served by these primordial relationships and that family is best understood as an example of these primordial relationships. Indeed, I previously cited Coleman's question regarding how the role-segmented rational actors might be able to replace these holistic primordial relationships and the threat this poses to child welfare.

It is extremely tempting to become engaged in Coleman's angst over replacing the natural actor with the rational actor, or the angst of his predecessors over replacing *gemeinschaft* with *gesellschaft* (Tönnies), or organic solidarity with mechanical solidarity (Durkheim). However, that would miss the theoretical point. The theoretical point is that Coleman clearly moves outside of his own methodological individualism to a type of relationship not founded on nor derived from the rational actor's maximization of utility. To the degree that Coleman believes primordial relations are important explanations of norms, civility and social order, and child development, he also must believe his own theory of rational choice is inadequate. One thing is very clear in this regard: Family is a reservoir for these primordial

relations and natural actors and as such is not explainable or derivable from Coleman's brand of methodological individualism.

Conclusion

Coleman's Foundations of Social Theory must be considered as one of the most ambitious and thorough theoretical treatises in recent time. Coleman accomplishes several important theoretical goals. First, he demonstrates how social norms and organization can be consistently derived from a position of methodological individualism. Second, he answers many of the questions regarding utilitarian explanations of altruism by reconceptualizing this as a problem of "zealotry." Finally, Coleman's discussion of social capital remains one of the more detailed explanations of what is sometimes a vague and ambiguous concept.

But, I think, the major gift that Coleman has given to family theory is that in his ultimate desire for empirical truthfulness, he has argued that there are distinct limits to the rational actor explanation. Family, child, and community all provide examples for Coleman of primordial relationships. Although Coleman may have left the job of explaining and explicating these primordial relationships to other theorists, he nonetheless showed great courage and honesty in not trying to stretch the rational metaphor to phenomena that he regarded as clearly falling outside the scope of his theory.

Notes

- 1. The exception to this would be Talcott Parsons (see Parsons & Bales, 1955).
- 2. The discussion in this section owes much to the form and content of that offered by Lakoff and Johnson (1999). Although the critiques were outlined before I encountered Lakoff and Johnson, their general format and understanding is consistent with mine and that of Klein and White (1996).